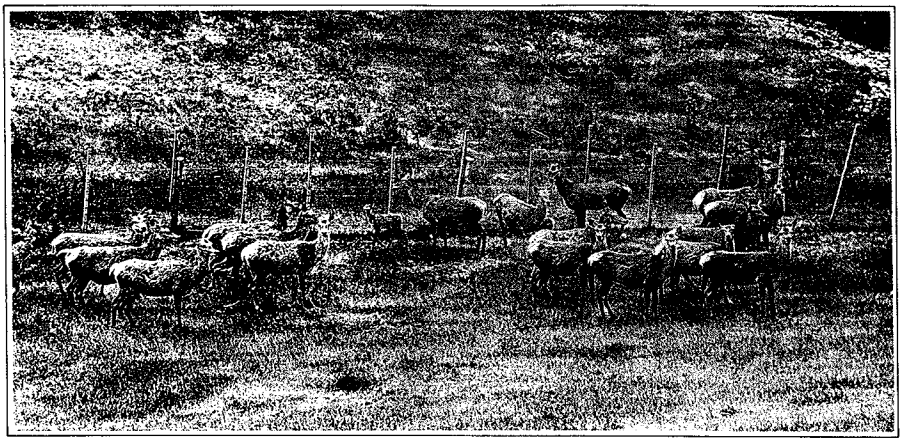

Red hinds and newly-born fawns:
Mismothering is always a risk during the first 48 hours, before fawn-mother bonding occurs. Generally, first-fawners are more prone to mismothering than older hinds.

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REDUCING LOSSES THROUGH BETTER calving management

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THERE IS still much to be learnt about the causes of mortality in new-born deer calves, particularly the causes of stillbirths where a difficult calving was not involved.

Disease can be a factor in calf losses, however, it is not usually the major cause of calf mortality in herds which have been vaccinated against clostridial diseases. The most common causes of calf losses are calving difficulties, starvation due to mismothering and misadventure. This wastage can be reduced by reviewing management practices for calving.

Some suggestions are offered here in the hope that some calf deaths can be prevented in the future.

Calving difficulties

Hinds can be predisposed to having difficulties calving through a number of factors. These include overfatness, lack of fitness, presentation of the calf, size of the calf and possibly the amount of rumen or gutfill present at calving.

Overfat hinds have large amounts of fat in and around the birth canal which impedes passage of the calf. Lack of fitness often means the hind has less chance of successfully completing a prolonged calving of an oversized calf. Abnormal presentation of the calf, such as one foreleg back or over the neck, causes the calf to become jammed through an increase in the circumference of the calf around the shoulder region.

The likelihood of difficulties can be greatly reduced by controlled feeding of hinds and avoiding the mating of small hinds to heavyweight sires such as Wapiti-type bulls.

Overfatness in dry hinds can readily develop when they are run with lactating hinds on good quality pasture over summer. While hinds need to be well fed in winter before and over periods of bad weather, there is the opportunity to reduce overfatness in hinds during milder weather.

During the last 2½ months of pregnancy the weight of the calf trebles from about 3 kg to 9 kg. It is during this last third of pregnancy that controlled feeding has the biggest influence on the size of the calf at birth.

Controlled grazing as opposed to ad lib feeding is of particular importance on intensive deer farms and when hinds have been mated to heavyweight sires such as Wapiti-type bulls.

Strip grazing hinds using temporary electric fencing or rotating them behind young stock are two ways to control pasture offered to the hinds. Caution is required in the spring grazing of old gummy hinds as grazing them too hard can result in light calves with lower viability.

Calving difficulties tend to become more common in late calving adult ▷

hinds run on good pasture with the main calving herds. It can be worthwhile on intensive farms to separate the late calving hinds and dry hinds when set stocking the main herds for calving and to keep them longer on controlled grazing.

Late calving or dry adult hinds can be identified through lack of udder development. A simple way to record udder size in hinds is to put them one at a time through a weighing crate and use a torch to check the hinds through the back door. This overcomes problems of upsetting hinds by physically groping them to determine udder size.

First-calvers are difficult to sort into early and late calvers as udder development occurs closer to parturition and is less marked than in adult hinds. Hence they are best set stocked for calving as one lot.

Gut or rumen fill may be the cause of some calving difficulties as a distended stomach reduces the room available in the abdomen for the calf to turn around for a normal presentation. Normally, hinds appear to reduce grazing before calving and become restless and fence-pacing.

However, shifting hinds shortly before they are due to calve from very restricted feeding or poor quality feed to good quality pasture, may induce over-eating with rumen overfill causing mal-presentation of the calf for birth. We have taken this possibility into account with the calving management of Red deer hinds mated to Canadian Wapiti bulls by restricting feed intake until the hinds have calved.

While the feed requirements of hinds in late pregnancy have not been properly researched yet, underfeeding as well as overfeeding can cause problems at calving.

Calving of hinds mated to Canadian Wapiti bulls

Where Red hinds have been mated to Canadian Wapiti bulls, serious losses may result if feeding of hinds is not controlled. To minimise calving difficulties, we select only heavier hinds averaging 110 kg for mating and closely control feeding right through to calving.

About 10 days before the onset of calving (gestation length of these hybrid calves is about 240 days compared to 233 days for Red calves) the hinds are set stocked in a paddock which has been grazed down rather than on to lush pasture.

This is to avoid the possibility that rumen overfill will affect the normal presentation of the calf. The hinds are fed some deer nuts to tame them and to ensure they are fed adequately. Once hinds have calved and their calves are two to three days old, they are shed off into an adjacent paddock for feeding ad lib on pasture.

This system has worked well over the last two seasons. In 1984, 24 hinds had F1 calves, and although two hinds had to be assisted, all calves survived. This past season, 21 hinds had F1 calves, three were assisted – one with a dead calf and one hind slipped her calf after having been yarded – but still a satisfactory survival rate of 19 out of 21 calves.

Misadventures

Calves, like other young animals, can be lost through misadventure – falling into holes, becoming bogged or drowning, run over by vehicles or becoming hooked up by their legs in deer netting or fallen branches.

Fallow deer fawns push through 15 cm stay netting with ease and as such are particularly prone to getting their hind legs hooked over the fourth wire from the bottom. This problem can be significantly reduced by running two single wires around the fence to effectively halve the third and fourth gaps above the ground wire in the netting. Most effective but more costly is to attach 45 cm rabbit netting to the deer netting.

Gaps under gates and fences can also lead to calves going out of their calving paddocks and becoming mismothered. Calf proofing calving paddocks before calving and trying to avoid calving in paddocks with more natural hazards for calves reduces these losses.

Mismothering

Mismothering can easily occur through disturbances of hinds over calving, before calf-dam bonding has occurred 24 to 48 hours after birth or when calves go through the netting into another paddock. Generally, first calvers are more prone to mismother than older hinds and benefit from calving in paddocks where they are least likely to be disturbed.

Calving paddocks which allow the hinds full view of the entire paddock are ideal because if a new-born calf gets up it will be noticed by the hinds and its dam will join it quickly. In paddocks where parts are obscured, a new calf may get up from its hide and if unattended, can try and poke through fences or try to associate with or suckle hinds other than its dam. Sometimes a severe beating is the outcome.

Shifting hinds and new-born calves into a new paddock can result in mismothering, particularly when new-born calves are transported into the new paddock and not moved on foot with their dams. Hinds tend to know where their new-born calves are hidden and keep a watchful eye on the area. If the calf is shifted unnoticed by the hind she is likely to try and go back to find it rather than look for it in the new paddock.

Hides

On intensive deer farms where paddocks have short pasture and no natural cover, the provision of artificial hides for calves is worth considering. The new-born calf is initially a hider rather than a follower and after its first suck of milk it will wander off in search of somewhere to hide.

Characteristically, the calf will lower its head at intervals to see if certain places are suitable – this is typically seen in calves wandering along open fencelines.

The hind does not plant her new-born calf as was commonly thought, the site where she chooses to calve, however, does influence the area in which the calf will try and find its first hide.

From our observations on the behaviour of new-born calves we believe that the provision of hides is important in reducing calf losses on intensive farms.

A new-born calf that has ready access to a place to hide is less likely to become mismothered through pushing through a fence in search of a hide or wandering into the presence of hinds and receiving a beating. The incidence of calf beating may well be related to the temperament of a deer with regard to handling at a later age in the yards.

Hides can be easily enough provided for calves. Electric outriggers round fences will allow grass to grow tall along the fencelines but the power should be turned off over calving to avoid calves being shocked. Strips of long grass can also be left when topping or making silage. Pine branches tied to fencelines can also be used for hides. Hides also have the benefit of providing shelter for calves during bad weather. ○