

Kid survival and health

Close supervision at kidding time can pay handsome dividends to kid survival, especially with maiden does. Any does with difficulties can be spotted early and appropriate assistance given. Kids which are born weak or fail to get early colostrum from the mother can be nursed or supplemented. Colostrum collection from one of the early kidding does can be kept frozen for such occurrences.

Besides the profit in having more kids, there is satisfaction in knowing that every doe kidding and all kids that reached full-term had every possible chance of survival to join the ranks of your herd.

High survival rates are essential for the economic viability of a flock and for its longer term genetic improvement. It is of concern, therefore, that the advantage of high fertility in goats is put at risk by losses that occur during the first two weeks of a kid's life. Awareness of major factors affecting kid survival will avoid unnecessary loss.

Climatic Conditions

Wind and rain affect survival of the newborn kid – any wind above 8km/hour is life-threatening. Fortunately wind speed can be moderated by the availability of paddock shelter and there is ample evidence to suggest that does will kid near shelter. Together with the characteristic 'kid planting' behaviour of the doe, this reduces the chill factor. Where possible, kidding paddocks should have a favourable aspect (for example, north-easterly), good drainage and strategically located. There should be no exposed ridges.

Other considerations include selecting a milder time of the year for kidding and the provision of natural or artificial shelter in the paddocks. Of particular value here are perennial grasses that reduce wind speed at ground level.

Shearing increases the feed maintenance requirements of a pregnant doe by 20 percent. While winter shearing during pregnancy is not easily avoided, breeders can minimise any adverse effects by ensuring that natural wind shelter and adequate quality forage are available.

Kidding sheds appear to provide a solution to most survival problems – kids that are not mothered can be artificially reared in the shed. Sheds provide an element of control unlike the open-range nature of a paddock kidding. It should be borne in mind, however, that this may provide no more than a short term answer for flock goats. In the longer term housing is capital expensive, labour expensive, demanding of management skills and possible a disease risk. Some goats are temperamentally unsuited to sheds.

Predation

Common predators include eagles, pigs, crows, foxes and dogs. Kid losses range from individual animals to the

entire drop. Often the losses are not immediately apparent and for this reason anticipatory action is recommended. This may involve choice of paddock, electric fencing to exclude predators, arranging kidding to coincide with lambing, trapping, poisoning or providing alternative feed for the predator.

Doe behaviour

The behaviour of the doe at kidding and in the first few days after kidding is critical, particularly when multiple births are common. This behaviour includes selection of shelter, cleaning and grooming of the kid, suckling, protection from predators, planting, overlooking safety and nursing. Poor behaviour can lead to hypothermia and the likelihood of early death or mismothering and subsequent starvation.

To ensure a good behaviour pattern, well fed does should be paced in undisturbed, non-crowded, sheltered paddocks containing ample quality forage. This situation requires a stocking rate of 10 does/ha, a target not readily achievable. Supplementary forage may have to be provided, the aim of which is to complement the pasture so as to provide the high quality ration needed for kidding and lactation. Grain legumes should be considered because of the high protein, palatability and ease of handling.

If supplementary feeding is necessary or any inspection it may be less disruptive if this takes place in mid-afternoon when the weather is warmer. By then the kids born overnight or in the morning will have been bonded with their mothers.

Some producers inspect the udder and vulva or does immediately prior to kidding and identify does that are not obviously pregnant and does that are pregnant but not close to kidding. When drafted into separate groups, differential management can be applied.

Doe health

Damaged teats, deformed teats and mastitis-affected udders can result in the failure of kids to obtain milk. Poor body condition resulting from undernourishment, internal parasites or both, also affect milk production and kid birthweight.

Miscellaneous factors

Accidental deaths include situation where kids get trapped in self-feeders, fences, troughs and logs. Losses can be reduced by avoiding fabricated wire netting with 15cm verticals and by preventing kids from getting below self-feeders. A weldmesh barrier is of value here to prevent kids from camping underneath.

The risk of clostridial infection necessitates pre-kidding vaccination of kids.

Kid survival and health

Deficiencies of trace elements such as iodine and selenium occur in some areas and are usually associated with wet years.

The Normal Kid

It is necessary to know the temperature, respiratory rate, pulse rate and general appearance of a healthy kid. Marked change from the normal is an early sign of sickness. Disease usually causes increases in body temperature, respiratory rate and pulse rate and causes a change in the appearance and behaviour of kids.

Temperature: normally ranges from 38.8°C to 39.9°C. Body temperature is highest late in the afternoon. It can be raised by vigorous exercise or when kids lie in the hot sun. Body temperature can be measured by inserting an ordinary clinical thermometer into the rectum with the bulb touching the lining membrane.

Respiratory rate: is usually between 35 to 45 breaths per minute but this increases in hot weather or after moderate exercise. Panting is only normal in young kids after very vigorous exercise or after moderate exercise in hot weather. The respiratory rate can be counted by observing the number of movements of the chest wall or, if kids are lying down, counting the rising and falling of the abdominal region.

Pulse rate: should be about 60 to 80 beats per minute. This is most easily counted by feeling the heart beats through the chest wall close to the attachment of the shoulder behind the elbow.

Appearance: the coat should be soft, shiny and pliable. The droppings are normally soft and pasty. Healthy kids normally sleep for several hours each day. When awake they should be alert and bright-eyed. They should walk and run freely and have a well-filled abdomen.

Prevention of Disease

Special care and attention to kids pays off in prevention and control of disease.

Kids require warm, dry conditions in cold or wet weather and adequate shade in hot weather. If they are housed in sheds these must be warm, dry and well ventilated. Raised slatted floors – either wooden or woven wire mesh – are recommended. Overcrowding must be avoided as it increases the risk of infection and spread of disease.

Small permanent kids pens accumulate a high concentration of infectious organisms, particularly when occupied for long periods, so rotation of kid pens is recommended. Good drainage is essential.

Poor nutrition, inadequate shelter, poor hygiene and internal or external parasites all greatly increase susceptibility to disease.

Dirty feeding utensils and permanent feeding sites can be spread infection. Feeding equipment and areas should be thoroughly cleansed and washed after each use.

Where feeding is carried out with buckets on the ground, new feeding areas should be used daily.

Remember it is more important that kids get colostrum for at least the first 24 hours and preferably the first two days of life.

Many diseases can be controlled and treated if they are diagnosed early and proper treatment is commenced at once. A correct diagnosis is more important and veterinary advice should be obtained as soon as disease is suspected.

Sick kids should always be isolated from the main group. Nursing care, good shelter and dry bedding are essential.

Scours

Scours is probably the most common ailment affecting goat kids. The recommendations given above for prevention of disease will help to control scours. However, if outbreaks do occur, veterinary advice should be obtained as correct diagnosis and treatment are essential.

The importance of correct diagnosis is emphasised by the fact that scours can be caused by any one or a combination of the following:

- dietary mismanagement
- white scours
- viral scours
- Salmonella scours
- toxins and poisons
- coccidiosis
- parasitic scours.

Summary

When feeding and management of kids is good, disease outbreaks do not usually cause problems. In fact, the presence of disease may indicate a fault in management. Although drugs may cure disease, they are a very poor substitute for proper care and management. Nevertheless, most diseases can be treated satisfactorily. So, if disease is suspected, veterinary advice should be obtained as soon as possible.

**Extracts from articles by
Robert North**

District Veterinarian
Kempsey Rural Lands Protection Board
and

P J Holst
Senior Research Scientist
Agricultural Research Station
Cowra Division of Animal Products.

Article from Issue 11 of Boer Briefs
(Articles may not be re-produced without the written
permission of the editor)