



Weaning kids

Derryn Nash

Surveys conducted in the communal areas of KwaZulu-Natal indicate that up to 60% of goat kids do not survive to adulthood. This rate of mortality is not acceptable if rural goat production is to become commercialised. It would appear that there are a few main causes of mortality in young livestock; these include predation/dog attacks, pneumonia (pasturella), diarrhoea and internal parasites. Animals are more susceptible to disease when their levels of nutrition are inadequate. It appears that a large number of deaths of kids occur at or shortly after weaning.



FIGURE 1: Pre-weaned kid

Predator/dog attack

Adequate fencing, having a stockman out with the herd during grazing and well-cared for and habituated dogs should address the problem. The SPCA is always prepared to intervene and assist with the removal of problem dogs.

Pneumonia or pasturella

All young stock are susceptible to this disease in much the same way that young children are, however, if the mother has been vaccinated against pasturella, the immunity should pass to the kid for the first few months

of life. Kids are more prone to the disease during periods of stress and unsettled weather. Kids should not be weaned when the weather is cold and/or wet. Livestock should have access to draught free, dry shelter when it is wet. The unsettled weather and fluctuating temperatures in spring can cause havoc with the health of livestock. Well-fed livestock with access to shelter will be more resistant to pasturella. Livestock can be treated with antibiotics, e.g. Tetracycline, and supportive therapy (i.e., kept warm and dry with access to good quality food and clean water) when ill. Treatment must not be delayed but should start as soon as it is noted that the animal is ill.

Diarrhoea (runny tummy)

There are a large number of bacteria, viruses and protozoa that can cause diarrhoea, which can lead to severe dehydration and death in livestock. It is often difficult to identify the culprit, however, a clean yard and fresh clean drinking water go a long way in reducing the problem.

A common problem in young stock is *Escherichia coli*. This is a bacterium that thrives in dirty environments and contaminated water. *E. coli* is characterised by yellow, watery faeces and can be treated with the appropriate (sulphur-based) antibiotic (e.g. Norotrim or oral Sulphazine 33%) and electrolytes.

The protozoan parasite *Coccidia* causes the disease Coccidiosis. It normally attacks slightly older kids, sometimes at or around weaning. Faeces are dark, loose and sometimes flecked with blood. Sulphur-based antibiotics can be effective in treating the disease.

Viral diarrhoea can only be treated symptomatically, i.e., by keeping the goat **warm, dry and well-hydrated** with electrolytes. Dosing with gastropect or smecta from the chemist can help to slow the diarrhoea. Make sure that good quality food and clean water is available at all times.

Internal parasites can also cause diarrhoea (the treatment for internal parasites is discussed below). Kids suckling off healthy, well-nourished mothers and living in a clean, dry environment will be more resistant to all causes of diarrhoea. Clean, fresh water should always be provided.



FIGURE 2: Indigenous goat kids

Internal parasites

Internal parasites include a number of different species of worms. Whilst still suckling, the kid will be most exposed to milk tapeworm (*Moniezia spp*). A routine oral dose of the appropriate anthelmintic (containing the active ingredient Praziquantal) before a month of age, and thereafter monthly until weaning should be sufficient to deal with milk tapeworm in kids.

Goats of all ages can be susceptible to tapeworm and should be treated if they are not coping with the worm load. Signs of tapeworm infestation may be tapeworm segments in the dung, looking like grains of rice or strings of spaghetti. Goats can have a dull coat, pot belly and runny tummy. Adult goats can be treated with a dual-purpose dewormer, which targets both tapeworm and roundworm (e.g. those with active ingredients Praziquantal and Levamisol).

Of greater concern are the worms which attach to the stomach or intestines, causing blood loss and anaemia (very pale mucous membranes), e.g. *Haemonchus* spp. Goats can also get a bottle jaw, diarrhoea and very poor body condition with ongoing worm infestations. A system of scoring the degree of anaemia in a goat's eyelid has been developed and this aids greatly in targeting and treating those goats at risk. This system is called FAMACHA. All goats, including kids older than a month should be assessed every two weeks. Cedara runs a short course annually which includes training on FAMACHA. Queries regarding the Goat Production short course, or to register for it, should be directed to the FET section (033 3559318).

There are a number of dewormers on the market. It is important to ensure that the product is targeting the right worms affecting the flock. Fresh dung samples can be taken to Allerton **Provincial Veterinary Laboratory in Pietermaritzburg**, where the species of worm can be identified. Resistance to certain products can build up over time. If animals stay ill and anaemic after being treated for worms it may be time to change to a different product. Goats are most susceptible to internal parasites during times of physical stress (cold and wet, walking very far, too little food) or physiological stress (pregnant, feeding kids, weaning). It is a good idea to deworm heavily pregnant and newly kidded mothers and to deworm kids before weaning. **Always** ensure that the animal has been vaccinated against pulpy kidney before deworming.

Nutrition

Many people keep the kid behind in the kraal when the mother goes out to graze. Unless an effort is made to supplement the kid with forage during this time, its rumen will not be properly developed at weaning and it will starve and possibly die when removed from its mother. Kids left in the kraal when the flock is out should either be fed a manufactured supplemental feed (e.g. lamb creep feed or Ram, lamb and ewe) or else a creep should be built for them, where they can eat food away from the flock. This system has been introduced

with great success in the Msinga area. Locally-available feed ingredients can also be sourced, milled, mixed and fed to the kids, e.g. a mixture of milled *Vachelia tortilis* with bean and maize straw.

Managing the weaning phase successfully

- Ensure kids have been vaccinated against pulpy kidney before weaning. If possible, vaccinate with Multivax P, which covers a number of serious diseases. At the very least vaccinate for pulpy kidney (e.g. Pulpykidney or Prondivax).
- Deworm the kids just before weaning.
- Do not castrate at weaning. When castrating make sure the animal is protected against tetanus, either through its mother's vaccinations or its own vaccination (included in Multivax P).
- Ensure kids know how to feed on forage before weaning.
- Continue to feed them during weaning. Only wean when there is adequate forage for the kids to eat.
- Provide fresh clean water.
- Provide adequate shelter.
- Never wean in cold or wet weather.
- Only change one situation at a time, i.e. do not wean and move/sell the kid on the same day. One stressful event at a time is enough.

All of the above is also relevant for weaning lambs.



FIGURE 3: Weaned kid

Recommended additional reading

Indigenous Goat Production Manual.

www.gapkzn.co.za or www.hpsa.org.za

Contact

Derryn Nash

Professional Scientist

Tel: 033 355 9256

Derryn.Nash@kzndard.gov.za

KZN Department of Agriculture & Rural Development

Directorate: Agricultural Livestock Research Services

Sub-directorate: Grass & Forage Scientific Research Services, Cedara

Published September 2018