



## **A GUIDE TO SUCCESSFUL GOAT OWNERSHIP**

Goats are increasing in popularity as pets and although most principles of sheep husbandry apply to goats there are some things that are species specific. Here are some notes for goat owners as to how to keep your new arrivals happy and healthy!

### **Sourcing**

It is important to try to see the animals on their farm of origin if possible – the state of the farm and herd surroundings can tell you a lot about the herd's probable disease status. When on the farm ask for as much information as possible about the health and disease history of the herd making notes on any vaccination history and previous parasite control programmes. When you get your new stock home it is important to quarantine them before adding them to your existing flock– in other words keep them in a separate building or field with no nose-nose contact for at least 4 weeks, with worming and treatment for fluke, any blood tests and/or vaccinations to be completed in this time. If your herd is accredited for any diseases make sure you only buy from other accredited herds.

### **Housing**

A shelter is advisable especially in the winter. If goats are being kept in full time then it is important to make sure the shed is well ventilated to prevent respiratory problems. It is also important to make sure that there is enough trough/hay rack space to allow all animals to feed at the same time. Bedding needs changing regularly or fresh bedding added frequently.

### **Nutrition**

Goats, like sheep and cattle, are ruminants and therefore most of their diet should be made up of forage – either grass or hay/silage. Grass will generally be sufficient in spring/summer but in winter when grazing is limited then this is usually substituted or supplemented with conserved forage (e.g. silage or hay). A plentiful supply of fresh clean water is always required.

Silage and hay can vary a lot in their quality due to the variation in weather during the growing and harvesting stages. Once cut silage needs to be stored in an airtight manner, to allow anaerobic fermentation which preserves the crop at an acid pH. Badly stored silage which has had contact with air during storage will become more alkaline and contain more ammonia, goats will turn their noses up at it and it is more likely to contain *Listeria* bacteria, which cause (usually fatal) encephalitis and meningitis.

The requirement for concentrate feeding in pet goats is low. Overfeeding concentrates changes the pH of the digestive tract leading to diarrhoea. Due to this change in pH it can allow overgrowth of clostridial bacteria that live in small numbers naturally in the gut leading to septicaemia and death. It is also important to make sure your grazing is free of poisonous plants – remember goats are very inquisitive and are happy to stand on fences to reach things especially if grass is in short supply! Rhododendron, azaleas, laurels and evergreens are common garden plants that are poisonous but always keep grazing free of yew, ragwort and foxglove.

### **Foot care**

Goats like sheep are prone to foot problems and need routine trimming of overgrown feet. Any lame goats will also need therapeutic trimming and treatment for any underlying condition. If you have never done this ask an experienced friend for help or seek veterinary advice.

### **Skin conditions**

Goats are susceptible to many skin parasites including lice, mites and ticks. Check itchy goats carefully for any signs - lice and ticks will be visible to the naked eye.

Flystrike is a summer problem caused when blowflies lay eggs in faecal matter on sheep. These then hatch and maggots begin to digest the faecal matter and tissue beneath it. To prevent this dirty areas of fleece need clipping. It is also advisable to use a product designed to prevent fly-strike. Making sure sheep are free of footrot and worms will prevent fleeces providing a site for maggots to survive.

Goats can also get bacterial infections including orf, infection of the skin around the mouth and nose, in kids. This is zoonotic so take hygiene precautions are essential when treating the problem.

### **Parasites**

Goats are more susceptible to the same gut parasites as sheep and so a control programme is essential. This can either take the form of regular worming or monitoring faecal worm egg counts. This should help prevent clinical disease which generally manifests as ill thrift and diarrhoea. Whereas adult sheep develop a degree of immunity to these parasites adult goats do not and so any worming plans need to include goats of all ages rather than just young animals. Goats can be wormed with the same products as sheep but require different doses – please ring the surgery where we will be happy to advise.

Worm resistance is becoming a large problem in farm animals so the responsible use of the wormers we have available is essential. Faecal worm egg counts can be used throughout the year to guide when treatment is required. This can usually be done at the surgery and allows you to treat only when needed to minimise the use of wormers and to prevent the spread of resistant worms. The type of drug used to worm the flock if required should also be rotated yearly to minimise resistance problems.

Kids should also be monitored for coccidiosis, another type of parasite that affects the intestinal tract leading to scour and again in extreme cases sudden death. Disease is seen where egg numbers have built up over years, often when paddocks are not rested and are mostly seen in lambs 4-8 weeks old. Worm egg counts monthly during the grazing season will help identify when treatment is required.

Liver fluke is another parasite that can cause severe disease. This disease presents in different ways depending on which stage of fluke is present. Immature fluke migrating through the liver in the Autumn can cause fatal haemorrhage whereas the presence of adult fluke in the bile ducts in Spring can lead to poor body condition. Treatment needs to be targeted to the stage present with different drugs being effective against the different stages. Treatment in the Autumn should be followed up by egg counts especially in wet years as the lifecycle relies on water living snails.

## **Vaccination**

There are no vaccines specifically licensed for goats but the following diseases can be protected against using sheep vaccines:

### *Clostridial disease*

Goats appear less susceptible to most of the clostridial diseases that affect sheep however the strain that can affect them causes sudden death or severe diarrhoea. This strain lives naturally in the goat's gut. Sudden introduction of high carbohydrate diets – lush pasture or concentrates can cause over proliferation of these bacteria leading to disease. Goats unlike sheep need vaccinating every 6 months after an initial course of two injections and goats do not develop complete immunity so disease can still occur. However vaccination and dietary management together will help reduce the risks.

### *Bluetongue*

Goats are susceptible to bluetongue like sheep and cattle. Vaccination with one dose of bluetongue vaccine in the Spring will protect your flock in the event of an outbreak. However the risk posed to British livestock from this disease is diminished – we will inform you if vaccination is recommended.

## **Breeding**

The breeding season for goats is similar to sheep running from September to February. Goats are pregnant for on average 150 days and can be scanned as sheep between 50 and 100 days post service – this has the advantage of being able to determine multiple pregnancies and also to detect false pregnancies. Goats are particularly prone to false pregnancies – the abdomen will enlarge and the udder will develop as if pregnant but the doe will not be carrying a foetus. A blood test is also available which can be used from 50days post service and can differentiate between actual and false pregnancy.

If moving animals around for breeding then remember to ensure they only move onto premises where you know the health status of the herd and it would be advisable to quarantine them on their return.

Pregnant does will need extra feed in the run up to kidding, especially in the last 6 weeks to help meet their requirements. Forage and fresh clean water should also be freely available. Remember not to overfeed though as this will increase the chance of problems at birth.

## **Kidding problems**

Due to does having multiple kids the jumble of limbs and heads can lead to problems at birth. If you are going to assist plenty of lubricant, strict cleanliness and gentle manipulation should be practiced, goats are more sensitive to rough handling than sheep. Gloves and Lube gel can be bought from the practice.

If you are having problems or are unsure how to deal with the problem please call the surgery for advice or assistance, the sooner the problem is corrected the less stress is placed on both doe and kids and the quicker they will recover.

Does should be assisted if:

Kidding exceeds 120 mins

The head alone appears

When fluids escape with no further progress

When a tail appears alone or with one/both legs

After assisting with a birth ensure the kid is breathing, clear any mucus from its nose and mouth and place by the doe's head so she can lick it and bond with her kid. It is often advisable putting new mothers and babies in a small pen together for 24 hours to encourage bonding.

### **Kid Care**

Colostrum (the first milk a doe produces) is essential in giving a kid a good start in life as it contains antibodies that will protect the kid from infections during its first few weeks of life. If a kid is not sucking then you will need to milk the doe or using commercially produced lamb colostrum to top them up.

Kids need 50mls/kg/feed and it is important to give them 3 feeds in the first 24 hours when the antibodies can still be absorbed by the gut. After this the kid can move onto milk, again commercial lamb milk or milked from the doe at the same rate. As a doe is only designed to have two kids (she only has two teats) triplets will need extra help and the third kid may need to be hand-reared completely. Kids that are outside will have higher requirements for colostrum due to the increased demand on them to deal with any inclement weather.

Kids can be fed from baby's bottles but if they are too weak to suck may need to be stomach tubed. If you are unsure how to do this please ask for assistance from the practice or an experienced friend as there is a risk of pneumonia or drowning if done incorrectly.

Very weak kids at risk of hypothermia may require more urgent veterinary attention. If warmed while glucose levels are low they will not have any reserves to support an increase in metabolism and may die. Giving glucose by injection into the abdomen is required before warming and feeding. All kids should have their navels treated with iodine as soon as possible after birth to prevent infection. Kidding areas should be kept as clean as possible with pens disinfected between animals to prevent infection.

### **Castration/Disbudding**

Young male goats can be castrated by ringing using elastically rings as long as it is performed within the first week of life. After this they will have to be surgically castrated. If you are unsure of how to ring your billy goats please contact the surgery for advice.

Goats can also have their horns removed – this is not the same as in cattle and requires a short acting general anaesthetic and can easily be done between 2 and 7 days old, please ring the surgery to arrange this.

### **Abortion**

There are many causes of abortion in goats as in sheep and there is the possibility of cross infection if the two species are kept together. In the event of an abortion:

1. Isolate any aborting does
2. Observe strict hygiene when dealing with aborting animals/abortion products

***MANY OF THE CAUSES OF ABORTION CAN AFFECT PEOPLE – PREGNANT WOMEN ESPECIALLY SHOULD HAVE NO CONTACT WITH KIDDING DOES.***

3. Contact the surgery regarding investigation. We will need aborted fetuses complete with placenta to be sent to VLA Luddington for analysis so keep any fresh samples. Dispose of any other abortion products by incineration
4. Take appropriate action if a specific agent is identified. This may involve treatment with antibiotics or the use of vaccines – none are licensed in goats but may be used if required.

### **Health schemes**

Caprine Arthritis Encephalitis (CAE) is a viral disease of goat that most commonly causes a severe lameness due to arthritis. Hindlimb paralysis in kids, mastitis and pneumonia have also been reported though often goats show no symptoms. The virus is spread most commonly through milk and at mating. It is sometimes difficult to detect as antibody levels can fluctuate but can spread rapidly through the herd during the time it takes for repeat sampling to detect it. The British Goat Society offers an accreditation scheme through the SAC (Scottish Agricultural College) to establish freedom from the disease. Goats from non-accredited herds cannot enter the premises of an accredited herd so testing can be required for breeding purposes and can also increase the value of animals within the herd.

Please note that goats need to be ear tagged though new regulations involving electronic tagging for sheep are different for goats. Please see the DEFRA website for more information

**For any further information regarding your herd please contact us. The practice is always happy to produce herd health plans tailored to your own system or to provide further information on any aspect of herd health.**