



Goat Management

KIDDING SEASON

Ken Andries, Ph.D., Animal Science Specialist, Cooperative Extension Program, Kentucky State University

Kidding season is a very exciting time for most goat producers. It is also a very stressful time for everyone including the animals. Producers need to prepare well in advance to be ready for kidding. Most of the activities are standard regardless of what time of year you kid. There are some special preparations that are needed for kidding in cold and/or wet conditions. Proper preparation and management will increase the survival rate of kids and reduce the stress levels during this critical time.

Facilities Preparation:

It is important that you prepare the facilities you are going to utilize for kidding in advance of the first kid being born. This should include a good cleaning of the barn or shelter the new kids will have access to. Build your kidding pens and select a pasture for the new kids and does to be placed on after kidding. This pasture should be un-grazed for 60 days or as long as possible to reduce parasite larva and other disease issues on the pasture.

When cleaning facilities and equipment it is important to disinfect as you go. In barns you can wash with a disinfecting solution or treat the floor with lime before putting down clean bedding. This practice helps remove bacteria and other pathogens from the facilities. Placing portable pens in the sun for a couple of days will also be beneficial. Make sure the shelter you plan to use is protected from drafts but has good vitalization.

You should check heat lamps to make sure they are working and place them where needed if you are kidding in winter or early spring. The construction



of kid incubators should be done at this time. A kid incubator is a structure that will hold a heat lamp that will allow the kids to enter but keep the doe close but out. This can be done with an old plastic barrel or be made of wood. This helps keep the heat lamps clear of hay and prevents the doe from getting her horns into the bulb.

This is also the time to prepare your kidding kit. This kit should include the following items:

- Identification tags
- Feeding tube and syringe
- Record sheet
- Selenium shot
- Kid/lamb puller
- Towel to dry kids if necessary
- Latex gloves
- Emergency phone numbers
- Iodine
- Scale for taking birth weights

The kit should be checked before every kidding season and updated as needed. This is only a basic list and some producers will find other items helpful. Be sure to clean items you use and replace as necessary during the kidding season. Placing all these items in a central location, a tool box or bucket, helps keep track of them during this hectic time.

Health Issues:

At kidding time the health of the doe is very important to prevent problems with the kids. Because this is a stressful time for the doe, her immune system is generally weaker. Working goats that are heavy with kids is a risk because does tend to get aggressive with each other when placed in close confinement. It is recommended that you not work your goats during the last three weeks of pregnancy unless specific illness or other conditions dictate it. If you have to handle them, make sure to provide extra room in holding pens and work as slowly and calmly as possible.

Does should be vaccinated four weeks before kidding is expected to start for Clostridium type C&D and tetanus (CD&T). This is the only vaccination that is recommended for all herds; you should work with your veterinarian for a specific vaccination program for your herd. This shot will protect the does and increase the level of antibodies, for these diseases, in the colostrum helping protect the kids before they are vaccinated. At the time the shots are given, check and deworm with a safe dewormer if necessary. As always it is recommended that you use a selective deworming program, such as FAMACHA, to treat animals. You should check the feet of the does and trim as needed and treat individuals for foot scald.



When treating does during this time make sure the product you use is safe for pregnant animals. Some vaccines, antibiotics, and dewormers are very hard on the animals and can cause abortions, embryonic

death, or birth defects if used late in pregnancy. These issues will be listed on the label of the product so check for warnings before using any product. Also, remember that you need a veterinarian prescription to legally use any product differently than the label directions or for types of animals not listed on the label.

Nutrition Issues:

Nutrition is very critical for goats during this time of year. The nutritional demands of the doe almost double during the last 4 to 6 weeks of pregnancy. This issue is complicated by the fetal growth limiting the volume of feed she can consume. Because of this it is a good time to plan on supplementing your does. The nutritional requirements of a doe increase again after kidding for milk production. Table 1 lists nutritional requirements of a 110 pound Boer cross doe of average milking ability.

Table 1. Nutrient Requirements of a 110 pound Boer Cross Doe in different stages of pregnancy.

Nutrient	< 95 Days Pregnant	> 95 Days Pregnant	2 Week Lactation
Mcal of Met. Energy	2.99	3.63	5.78
Pounds of Met. Protein	0.13	0.20	0.38
Pounds of Dry Mater	2.77	2.77	4.93
Grams of Calcium	5.45	7.45	12.16
Grams of Phosphorus	4.36	5.76	9.06

As you can see in Table 1 her protein requirement goes from 0.13 pounds to 0.2 pounds after 95 days of pregnancy. Energy needs are also close to double, going from 2.99 to 3.63 mega calories of metabolizable energy. Because of this the nutrient density of the feed needs to be increased rather than simply the volume of the feed provided. Forage based diets are very bulky per pound, as fed, making it difficult for a late bred doe to meet her needs on forage alone. If the forage is of high enough

quality, for example high quality alfalfa hay, you may be able to meet the doe's needs. However, in many cases forage needs to be supplemented during this time.

Does that are not fed adequately during this time can have several problems. The most serious is known as pregnancy toxemia or ketosis. This is a condition that occurs when does are on a negative nutrition balance and they start to metabolize their fat and muscle to provide the needed energy and protein. This condition is more often seen in does that are over weight because people are trying to reduce their condition before kidding. However, any doe can suffer from this condition if not properly fed.

Over feeding can also cause problems. When the doe is over fed, the extra nutrition goes into kid growth. This can result in large kids that can cause kidding problems. It can also result in fat deposits in the birth canal, again causing kidding problems. Does should be in good condition (BCS 2 to 3 on a 5 point scale) for kidding to reduce the chance of problems.

Does that are not fed properly also generally produce lower quality colostrum. This first milk is critical to the health of the kids because it contains immunoglobins that provide protection for the kids from disease until their immune systems can develop properly. Poor quality colostrum will not provide as much protection for the kids. This milk is also very important in keeping the new born kids alive because it is very high in fat as well. This provides them the energy they need to get started.

Kidding Time:

When does are expected to kid it is important to start watching closely to help prevent major problems. The doe herd needs to be checked more frequently during this time and care must be taken to insure that does are not accidentally separated from their kids.

The length of time between checks will depend somewhat on the time of year. In warmer weather

you may not need to check but every 4 to 6 hours, while when it is cold checks every 2 to 3 hours may be necessary. It is important to remember that new born kids are wet and weak at birth. If the weather is cold, windy, and/or wet the doe may not be able to get them dry and moving before hypothermia starts to take effect. Because of this you need to check more often and provide better shelter.

The basic signs of labor can vary and not all does will exhibit all signs. The first sign is that the udder will fill with milk and become stiff. Most does will separate from the herd at the start of labor and begin what is known as nest building. This is where they try to make a depression in the soil or bedding to have their kids. They will also be seen standing and laying back down frequently as if they are not able to get comfortable. Some does have been known to kick or bite at their sides. Some even appear to "talk" to their side in low bleats during early labor. Shortly before the water sack appears does may produce a mucus "string" on their tail. This is an indication that they are dilating and labor is starting. You may also see their hips appear to relax somewhat at the start of labor.

There are three basic stages of labor: start of labor, birth process, and cleaning out. The whole process should be completed within 12 to 14 hours. Once the water sack is presented the doe should deliver a kid within 1 hour. If this does not occur or the doe delivers but continues to show signs of labor, you may need to assist her in delivery. Remember that if you are going to assist with birthing of a kid, you should use protective gloves and give the doe an antibiotic shot to help prevent infections after kidding.

Assisting at Kidding:

Birthing difficulty is most often the result of a kid not being presented, entering the birth canal, properly. Most often one of the front legs will be back; however, more serious cases do occur. These can include both front feet back, the head back, or the tail first situation. On rare occasions, multiple kids may be presented at the same time. The size of the kid is rarely the problem in most commercial herds;

however, if does are over fed this may be more common.

If you have a leg back or head back situation, simply pull the leg or head up and into position. You may need to push the kid back somewhat to achieve this. To do this, reach in and cup the nose or hoof with your hand and bring it up into position. Once the kid is positioned properly, pull by hand on the legs to assist when the doe contracts. If this does not work, check again that you only have one kid and apply more pressure, use the snare if necessary. If two kids are entering the birth canal at once, simply push one back. Then treat the situation as a kid with a leg or head back.

If you have a kid being born rear first, breach, you may need to turn the kid around. To do this, push the kid back into the doe and pull the front feet and head up into the birth canal. Passing a kid backwards is more difficult because the rib cage tends to catch in the birth canal.

If you pull a kid, you need to help clear its air passages. This is most easily achieved by holding the kid by the rear legs and swinging it a few times. Make sure your grip is good on the legs so you don't drop the kid. In the normal birth process the airway is cleared during delivery; this may not occur if you pull the kid. Make sure the kid is breathing and place the kid where the doe can lick it dry.

The next step in assisting at birth is to make sure all kids are out of the doe. To do this, allow the doe, and yourself, a chance to recover and watch the doe. If she continues to have contractions watch to make sure she delivers the remainder of her kids without assistance. If you have had to reposition a kid or the doe appears tired or weak, go in and check the uterus for additional kids. This may not only save a kid but may also save the doe.

The final step is to give the doe a shot of antibiotics and oxytocin to help prevent uterine infections and pass any remaining placental material. As always check with your veterinarian for proper dosing and

administration methods of all drugs and hormones. Follow label directions and meat withdraw times. Milk withdraw time applies to dairy operations, the milk will be safe for the kids to nurse.

Kid Processing:

Proper care for the newborn is important in keeping it healthy and growing. The first thing is to make sure it is dried off and has a chance to nurse. Check the doe to make sure milk is available from both teats by stripping a little out. If the kid appears to be weak or not standing within an hour of birth, you need to tube it with colostrum. The best colostrum is from its dam, but other does from your herd would be good as well. A kid needs 2 oz of colostrum within 6 hours of birth and 4 to 6 oz within 24 hours of birth. The timing is critical because the kid's ability to absorb the immunoglobins decreases over time. If the doe has milk and the kid is nursing within 1 hour of birth it generally will not need any additional feeding.



Another important thing is to dip or spray the navel with iodine shortly after birth. This helps dry the navel cord and prevents bacteria from entering through the cord. Once the cord dries this route for infection is closed.

At this time you need to also identify the kid by ear tag or other method and take a birth weight. Record this information along with the date, type of birth, dam ID, and sex in your kidding records. Later reference your breeding records to assign the sire of each kid. You should take birth weights and sex of all kids even if they are born dead. This allows you to give credit to the doe for the weight of kids she delivered. It is also a part of your records that can be useful when culling does.

Final Doe and Kid care:

Research has indicated that fecal egg counts rise shortly after kidding so deworming at kidding is a good way to help reduce contamination of pasture where the young and most susceptible animals are located. It is also a good time to trim feet on the does because you are able to handle them a few at a time.

Pasture for does with kids should have been prepared. Start moving does on this pasture a couple of



days after they kid. The does will need good nutrition and should receive the highest quality hay you have if green pasture is not available.

Keep a close watch on the does and kids for any problems. Kids that show signs of illness or do not appear to be as active need to be checked. Use your records to identify the doe for these and check her milk supply. Kids will go from looking healthy to near death quickly so it is important to treat them as quickly as possible.



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