Male goat (buck) kids that are not being kept as future herd sires are usually castrated (neutered) so that they will no longer be fertile. The exception to this is suckling kids that are slaughtered for meat before they reach puberty (become sexually mature). Fertile male goats have a strong smell during the breeding season (this is in the Fall) and do unpleasant things like urinate on their beards to impress females. In contrast, a castrated goat (a **wether**) will not gross out your friends or the general public when you take him out on a hike or in a parade even during the fall breeding season. You will also not need to worry about him accidently breeding your female goats if you house them altogether. In addition, you cannot show a mature buck in a 4-H show. For all these reasons, it is a very good idea to castrate your male goat if you plan to use him as a working goat. **Wethers** make excellent working goats.

It is less painful for the goat kid if he is castrated when very young (2 days to 3 weeks old). However, some people think that castrating a kid when he is very young can make him more likely to get a life threatening condition called **Urinary Calculi**. **Urinary calculi** occurs when the urethra (the tube that carries his urine from his bladder to the opening in his penis) gets clogged or blocked up with mineral deposits. When a kid is castrated very early, the urethra may not develop to its full size and may get “clogged up” easier. When the urethra gets blocked with mineral deposits, urine cannot pass through it. If the deposits or “stones” are not somehow passed or dissolved, the wether’s bladder will burst and he will die. Actual scientific studies indicate that although castrating at a very early age might make male kids a little more likely to develop urinary calculi as adults, there are many more important factors that cause a male goat to develop urinary calculi. Diet, exercise and the quality and amount of water your wether drinks all **have much more influence** on whether he will develop urinary calculi.

**Important preventions for urinary calculi** that you should practice on your wether include:

1) **feed him a ration that contains about twice as much Calcium as Phosphorous**. Grain such as corn, oats, wheat, etc. usually contain lots of Phosphorous. Limestone and other supplements high in Calcium are added to the grain mix to better balance the diet. Try to feed a grain that says on the feed label that it contains twice as much Calcium as Phosphorous. Make sure that the label on the mineral salt you feed also says that the mineral mix contains about twice as much Calcium as Phosphorous. Do not feed grain to your wether if he no longer needs it. Growing kids are usually fed grain to make sure they grow well. Just like children, they need a higher percentage of energy and protein in the diet that adults do. However, once your wether is mature he may not need to even be fed any grain unless you are working him very hard or the forage he is eating (hay, pasture, etc.) is poor quality... Instead, you can give him treats such as pieces of carrot or apple when rewarding him for a good day’s work.

2) **check the feed label on your wether’s grain and make sure it contains ammonium chloride**. Ammonium chloride is usually added by the feed mill at a rate of about 15 lbs. per ton of feed. If the grain you feed does not contain ammonium chloride, you can top-dress his grain with about 1 teaspoon of ammonium chloride for each pound of grain he is fed but no more than 1 tablespoon of ammonium chloride per day. Check with your veterinarian when deciding how much ammonium chloride to use,

3) **make sure your wether gets plenty of exercise and drinks lots of water**. Keep his water in the shade
if the weather is hot. In winter make sure he has access to unfrozen or even warm water several times a
day. Make sure he always has access to a mineral mix with lots of salt in it. The salt helps encourage him
to drink lots of water.

4) check daily to make sure that your wether is urinating easily without straining. Usually your
wether will stretch and then urinate right after he stands up from sleeping or chewing his cud.

**Castrating your goat kid**

There are many ways to castrate a goat. **Make sure your kid is protected against tetanus** before you
castrate him (remember those vaccines you need to be sure he gets!) and castrate him at least a month
before you plan to show him. Talk to your veterinarian about what sort of pain medication may or may
not be recommended depending on the age of your kid. Here are some common methods of castration:

**Use an elastrator** to cut off blood to the scrotum (the loose sac of skin that holds the testicles). Place a
special rubber ring (designed to use on the elastrator) over the 4 prongs of the elastrator. Next, push both
testicles down into the scrotum. Pass the testicles and the scrotum (but not the teats!) through the rubber
ring by opening the “prongs”. Make sure both testicles are descended through the ring before you close
the prongs. After closing the prongs, double check that both testicles are still in the scrotum. Then pull
the ring off of the prongs so that it squeezes down on the scrotum. The scrotum will “die” from lack of
blood and fall off in about 2 weeks. An elastrator is relatively light weight and cheap and easy for a
young person to use. It should be done while the scrotum is still small, i.e. from 3 days to 3 weeks of age
depending on breed size.

**Use a burdizzo clamp (emasculatome)** to rupture the spermatic cords - Do one cord at a time. Push the
cord to one side of the scrotum and clamp the burdizzo over it being careful to leave the teats above the
crushing point. Close the burdizzo and count to 25. You should hear a crunch as you do it. Open the
burdizzo and slide it down about a ½ inch to a different location on the same cord (i.e. move it farther
away from the goat’s body). Shut the burdizzo on the cord again and count to 25. Now repeat the same
procedure on the other side of the scrotum. Never apply the burdizzo over the entire scrotum to attempt
to break both cords at one time. You do not want the entire scrotum to gangrene. Instead, crushing the
two cords separately will cause the testicles to “atrophy” and gradually shrink and your wether will be left
with a small empty scrotum sac. This method is the best one to use during fly season because it leaves no
big open wound. Goats must be between 4 weeks to 4 months of age with 8 to 12 weeks being ideal.
Burdizzos are very heavy (order the one for small ruminants rather than the one for calves) and may be
difficult for a young person to use. It is not as reliable as the other methods because you cannot tell for
sure if the cords have been crushed. **“How-to” Slide Show, “How To” Video**

**Using a disinfected knife or scalpel** - Push the testicles high up into the scrotum. Rinse the scrotum with
rubbing alcohol and dry. Cut off the bottom third of the scrotum with a sharp knife. Grasp the testicles and
pull them down. Do not let them slip out of your hands and back into the scrotum as this can cause
infections. Scrape the cords of the testicles with the flat of your knife or scalpel to gradually cut them or
stretch them between two hands until they break. You can also tie them off with fishing line or dental
floss and then cut them below the tie off point. You want to avoid cutting the cords abruptly because this
will cause more blood loss. Spray the wound with a disinfectant. This method can be done by an
experienced goat farmer when the kid is just a few days old. It is best done by a veterinarian if the kid is
older than 3 months. It should not be done during fly season as maggots can get in the open wound.

Whatever method you use, you will probably need two people, one person to hold the goat while the other
one castrates. The person holding the goat sets the goat on its tail and then stands or kneels behind it.
They should then grasp the front legs of the goat and bend them around the back legs at the knees. Hold
on to the legs at this joining point and let the other person know when you are ready for them to castrate
the goat.
After castrating, spray the scrotum with an antibacterial spray that also repels or kills flies. The kid may be unhappy or depressed for a few minutes or hours depending on how old it is and the method used. Exercise will help keep any swelling down and hastens recovery so try to avoid confining your goat in a small area. However, be sure to keep him out of the mud and rain.

**Suggested Activities**

1) Learn to identify bucks, wethers and does.* This is also a good time to also talk to older youth about hermaphrodites or intersexes and why they occur and their common appearances. When two naturally polled goats are bred together there is a good chance that some of their offspring will be intersexes. Intersexes may also occur occasionally in some goat breeds when there are a lot of male goat kids in a litter and only one female (for example 3 male kids and 1 female kid). Intersexes usually look like does but have a pea to marble sized round structure protruding from their vagina. They may act “bucky” and may have shaggy thick hair on their topline like a buck. A veterinarian can help confirm that a doe is actually a hermaphrodite or intersex. Although these does are not fertile, they often make excellent working goats.

2) Draw the reproductive organs of a male goat and label them.

3) Learn how to castrate goats with your 4-H group and then do your own buck kid, or watch your veterinarian castrate a goat.

4) Find out at your local feed stores which feeds contain ammonium chloride.

5) Calculate the Calcium to Phosphorous ratio of your goat’s diet.

6) Measure your goat’s water consumption daily for a week by marking off quarts and gallons on his plastic water bucket and compare it to other goats in your 4-H group. Discuss the results with your group.

* Activity is suitable for Cloverbuds