

A PUBLICATION OF THE WSU GOAT PRODUCTION EDUCATION TEAM

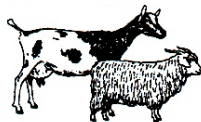
Woo-hoo! Do we have a treat for you! We have several articles in this issue written by and for goat producers just like you! We'll replace several of our usual features with these practical and useful articles. THANKS for sending in these great educational pieces, readers! A few editorial comments have been added here and there, but generally speaking, there's no one better to learn about goats from than another successful goat producer.

Check out the upcoming events listed below. There are a good variety of program topics coming up all around our area.

The Kidding Pen is available as a free hard copy in English and Spanish. Current and archived copies are also available online at:
<http://extension.oregonstate.edu/wasco/smallfarms/Kidding%20Pen/index.html>.

Send your comments, suggestions, newsletter articles and event announcements to:

Dr. Susan R. Kerr
228 W. Main St, MS-CH-12
Goldendale, WA 98620
kerrs@wsu.edu 509-773-5817
509-773-5707 (fax)



Extension programs and policies are consistent with Federal and state laws & regulations on non-discrimination regarding race, color, gender, national origin, religion, age, disability, and sexual orientation. Evidence of non-compliance may be reported through your local Extension Office. The information herein is supplied for educational or reference purposes only, and with the understanding that no discrimination is intended. Listing of commercial products implies no endorsement by WSU Extension. Criticism of products or equipment not listed is neither implied nor intended.

IN THIS ISSUE:

- 1 Welcome
- 1 In This Issue:
- 1 Save These Dates!
- 1 Research Review: Copper oxide and parasites
- 2 Kidding Time!
- 3 Goat Info 101

SAVE THESE DATES!

- **Dec. 18** Butchering seminar, 11 AM.
For more info contact Manda at manda@tri-r-ranch.com or 541-832-3349
- **Feb. ??** Goat Info Day, Sunnyside High School from 9 to 5. Contact Judy Wolfe at 509-965-0132 or wolfeju@aol.com for more info
- **April 26** Washington State Dairy Farm and Specialty Cheese Processing Risk Management Seminar, Yakima. 8:00 AM to 5:30 PM. Repeated on **April 28** in Arlington, WA. For more info, contact Michelle Lucero at MLucero@agr.wa.gov or (360) 902-1875

RESEARCH REVIEW: COPPER OXIDE EFFECTIVE AGAINST NEMATODES IN SMALL RUMINANTS

Adapted from an article by Jim Core

According to a study by the Agricultural Research Service, Louisiana State University, Fort Valley State University in Georgia and other participants in the Southern Consortium for Small Ruminant Parasite Control, using copper oxide wire particles to control internal parasites of sheep and goats is safe and effective when two grams or less are used.

The researchers are studying alternatives to conventional treatments for nematode infections because of growing parasite resistance to chemical de-wormers. Animal scientists want to determine optimal strategies to reduce nematode infection in sheep and goats. Copper oxide wire particles are used overseas in sheep and goats to alleviate mineral deficiencies. However, the researchers theorized that copper supplements could improve the immune system, creating a less desirable environment for parasites.

The scientists used copper wire to find the optimal doses for controlling infections of *Haemonchus contortus* in hair sheep. The treatments had to be restricted to avoid copper toxicity. They found no signs of copper toxicity at any dose tested, up to 6 grams. Other researchers found success with as little as one-half gram of wire particles for at least a four-week period, resulting in a 60 to 90 percent nematode reduction. Such a small dosage may allow more frequent treatments, especially during the infestation season.

The USDA Cooperative State Research, Education and Extension Service's Sustainable Agriculture Research and Education (SARE) program provided partial funding for this research. Future studies will include doses of two grams or less. In the meantime, producers should consult a veterinarian for de-worming advice.

KIDDING TIME!

*Adapted from an article by Manda Doffing
Oregon Meat Goat Producers*

These articles are not meant to replace your vet or your good judgment. Please get other opinions and read, read, read. There are as many ways of doing things as there are goat ranchers. My ranch and my goats are not the same as yours. If you do not have Internet access, check at your local library. The library has Internet access and people to help you get started with it.

The following information is to help you generate your own way of doing things. I am not a vet; I do not claim to know everything. This is just my

experience. That said, **LET'S GET ON WITH THIS.**

Get a working relationship with a vet that knows goats. If your vet has little knowledge about goats, ask around for another vet that will be able to help you. A goat is not "just like a sheep or a small cow." Goats have their own peculiarities. You may need a vet for emergencies and to purchase certain medications for the health of your goats. It is wise to have a working relationship with a vet before an emergency at 3 am on a rainy night.

This is your first kidding. You are scared, excited, and WAITING...When will she have her kids? Relax, enjoy--when the kids are ready, they will be born. If you know the breeding date, you can figure 150 days (+/-5) from that date. I will try to give you a few things to help tell when the time is near. If you have been here before, I hope you gain a tidbit or two of new info.

DO YOU HAVE YOUR SUPPLIES??

Well before the doe's due date, you need to gather up some stuff.

Essential Supplies: stainless scissors for cutting the cord; strong iodine to dry and disinfect the cord; bulb syringe to suck out fluid from the nose and throat; a light source.

Other Good Stuff: newspapers to get birth gunk off kids; towels to dry kids with; bucket of warm water with a disinfectant for washing hands and udders; note pad and pencil to record things; hanging scale to weigh kids; hair dryer to dry and warm kids; intercom or baby monitor between barn and house.

THINGS YOU CAN LOOK FOR

11 to 12 weeks after breeding. If you put your hand under the doe's belly on her right side just in front of the udder, you should start to feel the kids moving around inside her. You may not feel them every time you try, but within a few weeks you'll feel them moving most of the time.

13 to 14 weeks after breeding. Around this time the vulva will start to get bigger and longer and skin around this area will become smoother.

15 to 18 weeks after breeding. If this is the doe's first kidding, you may start to see the udder develop.

18 to 20 weeks after breeding. The udder will start to fill out but usually won't get tight until it's close to kidding time. Towards the end of pregnancy, the tail bone will appear to rise above the rump and will be more pronounced as kidding approaches.

GETTING CLOSE

12 to 24 hours before kidding, the ligaments between the tailbone and rump seem to disappear. This has been a pretty good indicator for me and I haven't missed a delivery if I checked tails that day.

LABOR HAS BEGUN

- Mucousy, white, bloody or cloudy brown discharge appears at vulva
- Frequency of urination increases, amount decreases
- Doe becomes uneasy, restless and may paw
- Doe may start "baby talk," a low cooing up to two days ahead
- Doe may grind her teeth, stop eating or go off by herself
- Doe may lick or bite at her sides and look behind her
- Doe may become very friendly or standoffish
- Doe's breathing will become faster

DELIVERY

- Uterine contractions get closer together
- Doe may lie down and stand back up often
- Water sac may appear up to 30 minutes prior to the arrival of the first kid

If you are nervous and wanting to interfere, go boil water. Don't just jump in and take charge, boil the water first! This gives you time to calm down and watch what is happening and what might be needed. You really don't need

boiled water for the birthing; it just gives you something to do!!

NORMAL DELIVERY

- The head is between the two front legs
- Contractions of the uterus send the kid through the birth canal
- It should not take your doe more than 60 minutes from the start of delivery to deliver the first kid
- Even though we have the urge to step in and help out, Mother Nature has done this a few more times than we have!
- If you have two feet or one foot and a head, the kid will probably slide out of there pretty easily
- Siblings are usually born five to 30 minutes apart
- Don't let the appearance of the afterbirth fool you. Does can expel a placenta after each kid

HELP OR GET HELP

if the doe pushes hard then stands, stops labor and doesn't return to labor; if she has been in hard labor for 30 minutes and you see no change or progress; if you see discharge that is abnormal color or smells bad; if you see large quantities of blood; if you see hind feet and the kid is hung up.

OK, I SEE KIDS. NOW WHAT?! As the kid's head appears, I wipe off the nose and mouth with my clean hand. If the sack hasn't broken, I break it and wipe the face. I feel better not having a chance for that fluid to get to the lungs. The kid is going to gasp for air as the cord breaks and can suck in fluid.

Use newspapers to wipe the majority of the birthing gunk off the kids. Mom is helping you of course. I am just making for a cleaner kid sooner and because I like to do something! *[Editor's note: minimal interference at this point will help the mother and kid bond more strongly. With too much human interference and removal of the birth gunk, some does will reject the kid.]*

I use the hand washing water with a small rag and clean off the udder before the kids get there. While I am at it I squirt milk out of each teat once or twice. This removes that little wax plug

from the orifice and I can see if the doe has colostrum. If the kids aren't there yet they soon will be. If you want to help, you can direct the kids a bit. Assign teats. A kid will drink from the same side of the udder most of the time. Put the doelings on the best side with the best teat. Bucklings tend to drink their side faster than the doelings and then push the doelings out of the way when their side is done.

I have found if you grasp the kid's head the kid pulls back on you, so what works for me is to have one hand under the kid's chest (fingers pointing forward, hand between front legs) and my other hand guides the udder (not the teat) so that the teat and kid's mouth meet.

Now that kids have eaten, it's time to "clip-and-dip." Use your clean stainless scissors and clip the umbilical cord to an inch and disinfect with iodine. *[Editor's note: you can also clip and dip before the kid rises or nurses.]*

Measuring birth weight is very important information, so make this part of your newborn protocol, along with giving BoSe[®]. Have epinephrine ready in case the kid goes into shock from the injection. Put the kid in your lap, head to your left, legs dangling down. Tuck the head behind your left arm and give the shot subQ in the folds behind the right front leg. Give the doe BoSe[®] now, too, if she needs a booster.

Now you can go to some Web sites for more about kidding:

- www.jackmauldin.com/management/detecting_lab_or.htm
- <http://fiascofarm.com/goats/index.htm#doeskidding>
- www.tennesseemeatgoats.com/articles/kiddingbegin.html

GOAT INFO 101

Adapted from an article by Manda Doffing,
Oregon Meat Goat Producers

[Editor's note: We are thrilled to include this article from the OMGP newsletter with their permission. A disclaimer: the author mentions the use of many medications that are not approved for use in goats. HOWEVER, very few medications are actually approved for use in goats, so goat producers depend on each other to share helpful information, such as in this article. The CDT vaccination schedule I recommend is much different from that mentioned below, but we can always learn from what is working for someone else. Discuss the use of all medications with your veterinarian before using them on your animals and follow all meat and milk withholding times!]

A very basic overview of some very important aspects of raising goats. This information comes from my experience, both good and bad, over the years. The suggestions below are what I prefer. There are other opinions, but this is what works for me.

Some Supplies

Needles

Size 20 X 3/4 inch. You can use this needle subQ without coming out the other side of the skin you picked up. Goats can take all their shots subQ, no IM needed. IM is bad for the meat.



Syringes

1cc syringe for kid Bo-Se[®] shots
3cc syringe for CDT shots, Banamine[®], etc. that will fit in 3 ccs; can sometimes get them with the 20 X 3/4 needles attached
6cc for antibiotics, etc.
30cc drench gun for giving anything oral. The tube goes over the back of the tongue and saves a lot of trouble and medication. Give medication slowly so it is swallowed, not inhaled.

Epinephrine (adrenaline)

Don't forget epinephrine. If goats collapse soon after an injection, it could be anaphylactic shock. Give one ml for each 100 lbs of goat IM and ASAP!



Vaccinations

CDT for Clostridium C and D and Tetanus protection. Vaccinate once a year after their initial two-shot set up. This is an important shot! Clostridia bacteria can cause death in short order, especially animals on high grain diets. Tetanus is always fatal.

- Bucks get one every year, subQ
- Does a shot three days after kidding, subQ
- Kids that are going for meat get one at three days, one month and two months, subQ
- Kids that are to stay as breeders get one at three days, one month, two months and another at three months, subQ, which makes them good for their first year

Some breeders give the doe her shot four to six weeks prior to kidding; I do not have accurate kidding dates because I pasture breed, so vaccinating after kidding makes more sense for me.

Minerals

Goats need minerals formulated for goats - I can't say enough about the goat's need of minerals. Yes the cow formula is very similar to the goats' BUT the rate of consumption is so very different.

The mineral blocks sold in the feed stores for horses or cattle are not sufficient for goats. They are not formulated for the rate of consumption a goat can achieve by licking a block. If the goat has to chew the block it will damage his teeth - use loose mineral for goats or the pressed protein block made for goats to chew on.

Feed goats minerals free choice. This means having minerals available at all times, protected from the elements of weather. This is a challenge in the winter, but don't give up--find a way.

Goat mineral mixes have the necessary amount of salt. There is a local mix touted as a 'mineral mix' that is mainly salt with some selenium added. This is too much salt and is not a mineral mix--goats need more than selenium in the mineral department.

In the past we had the full range of problems with our goats. Since changing to a loose mineral for goats and adding kelp to our feeding program, the birthing process has been a joy, not a nightmare. Contractions are better (shorter labors), placentas are expelled (no more antibiotics), kids are up on their feet (no more splints for the first few days), less mastitis. A dairy doe who is used to having her udder messed with is bad enough to treat for mastitis, but to treat a Boer doe (who considers such things the work of the devil) is right next to impossible!

Bo-Se[®] is Selenium with Vitamin E for prevention of white muscle disease and various immune system and reproductive problems. It's a prescription product, so visit your vet for purchase and advice on the amount to give for the area you live in. Here we are very low in Selenium and our feed stuffs come from the same type area.

- Kids - at 3 days old, subQ
- Does - 3 days after kidding, subQ
- Bucks - once a year, subQ

SweetLix Meat Maker[®] is a loose mineral for goats. This is the best we can get here. Give this a try; see if it works for you. Feed loose, keep dry.

Baking soda helps prevent or treat acidosis (upset stomach). Let goats eat as much as they need whenever they need it. Feed loose, keep dry.

Kelp provides iodine for better contractions and no goiters in kids. Feed loose, keep dry.

Wormers

It is most common to give goats their wormers by mouth. Most goat wormers are given "off label" (they are not labeled for goats) but are used safely and routinely by many producers.

Cydecten (pour-on for cattle) is given at a rate of one cc for 20 lbs of animal. GIVE ORALLY, use the 30cc drench gun.

