hope we don’t move right from winter to summer and bypass spring altogether! Maybe it is finally getting warmer and drier in your corner of the world so you and your goats can come out of the winter doldrums. Record rain is keeping soil cold and wet and setting back planting, but pastures should grow like crazy if the sun ever arrives.

The Kidding Pen is available in English and Spanish at www.animalag.wsu.edu/newsletters. We welcome input from producers! Send your announcements, comments, suggestions, recipes and educational articles to:

Dr. Susan Kerr  
kerrs@wsu.edu  
WSU Northwestern Research & Extension Center  
16650 St. Rt. 536, Mount Vernon, WA 98273-4768

IN THIS ISSUE:

1  Save These Dates!
1  The Lure of Going Online
1  Market Corner
2  A Third Hand
2  What’s Cookin’?
2  Testing for G6S Gene in Nubians Pt. 2
2  Lopez Lamb, Wool and Goat Festival
2  Floral Foes
2  2017 ADGA Linear Appraisal in PNW
2  Feeding Used Christmas Trees to Goats
2  USDA Report on Goat and Kid Death Loss
3  Put Down that Copper Bolus!
4  QA: Ten Good Production Practices
4  New Publications
4  Proper Injection Techniques

SAVE THESE DATES!

May 13  Lopez Lamb, Wool and Goat Festival, Lopez Island, WA. See article.
May 20  Goat Academy, Goldendale, WA. More info: www.columbiabasingoatguild.org/Events-and-Newsletters.html or halfcreekfarm@gmail.com.
May 20  Southwest WA Dairy Goat Association Jr. Doe/Sr. Doe show, Chehalis, WA. More info: 360-485-5210 or pat@rockyrun-farm.com
May 27  Northwest All Breed Goat Club Jr. Doe/Sr. Doe/Buck show, Monroe, WA. More info: 425-367-2639 or at_leisuretime@hotmail.com.

July 8-9  Great American Boer Goat ABGA Show, Benton County Fairgrounds, Corvallis, OR. More info: dashacresboers@yahoo.com.
Aug. 26  Annual CBGA Boer-Nanza Production Sale, Southwest WA Fairgrounds, Chehalis, WA. Preview at 10 AM, sale at noon.

THE LURE OF GOING ONLINE


https://www.gov.uk/guidance/pregnancy-advice-on-contact-with-animals-that-are-giving-birth. Just like it says: advice to pregnant women in contact with animals giving birth regarding contagious diseases.

MARKET CORNER

For Sale: Great Pyrenees puppies. Working parents on sheep ranch. Contact Max Fernandez for more info: 509-930-6056 or fernandezranch@gorge.net.
A THIRD HAND

If you have some old timers or goats with teeth problems and would like to avoid the expense of pellets, consider using a leaf grinder for hay. The fiber length is greatly reduced so there is less work for the teeth to do, but it's still long enough to stimulate rumination and normal rumen function.

WHAT’S COOKIN’?

Chevo Wraps
by Michelle and Jason Holmes, from “Kidding Around in the Kitchen: Recipes from Columbia Basin Goat Guild”

8 large flour tortillas ½ chopped onion
½ head thinly sliced cabbage 1 diced tomato
Chopped cucumber Lemon wedges
Yellow curry powder to taste 1 cup plain yogurt
1 lb thinly sliced roasted goat haunch

Stack two tortillas on a large plate. Spread top tortilla with fresh yogurt and sprinkle with curry powder as desired. Place some roast goat slices on the tortilla and cover with the vegetables. Squeeze lemon on top. Fold up the bottom and sides to make a wrap, using other tortilla as a plate liner to catch whatever falls out of wrap. Make a second one!

TESTING FOR G6S GENE IN NUBIANS Pt. 2
[Editor’s note: this helpful info came from a reader. It pertains to testing for an important heritable gene mutation called G6S, which is common in Nubian goats. More info about this disorder can be found in the April 2016 Kidding Pen.]

“UC Davis is doing a reduced rate G6S testing for ADGA members at only $25 per sample and it uses hair follicles, so no blood draw. This is information our local Nubian goat owners could really use. Once tested and loaded into the ADGA database, there is a much better way to manage the prevalence of this genetic defect.” More info at https://www.vgl.ucdavis.edu/services/goat.php, or contact ADGA: service@adga.org or 828-286-3801.

LOPEZ LAMB, WOOL, AND GOAT FESTIVAL

If you are looking for something educational, fun, and memorable to do on May 13, 2017, take a ferry to Lopez Island WA for the Lopez Lamb, Wool, and Goat Festival! This free event will have something for everyone in the family. There will be a sheep dog demo at 9 AM, then numerous classes and demonstrations on shearing, spinning, weaving, cheesemaking, felting, dyeing, etc. There will be vendors and lunch will be available. For more info, contact fibers@islandfibers.com or 360-468-2467. See you there!

FLORAL FOES

Switchgrass (*Panicum virgatum*) is a common cover crop and pasture forage in some areas of the country. It has gained popularity due to its tremendous production of biomass and potential as a biofuel. A research feeding trial was conducted on hamsters, sheep, goats and horses. They were fed fresh switchgrass, switchgrass hay, or ground switchgrass. Animals fed switchgrass lost weight. Goats fed green switchgrass with green alfalfa developed liver lesions and sunburn (photosensitivity). The results suggest switchgrass can be toxic to animals and goats may be the most susceptible. The moral of the story: know what your animals are eating, and use caution if you graze your goats on unusual plants. More info at https://www.ars.usda.gov/research/publications/publication/?seqNo115=186737.

Photo credit: John Guretzky, University of Nebraska-Lincoln

2017 ADGA LINEAR APPRAISAL IN PNW

American Dairy Goat Association linear appraisers will be conducting on-farm appraisals in Washington between June 11-22 and in Oregon from June 19-July 1. What is linear appraisal and why should you be interested? To learn more, go to https://adga.org/seeing-a-dairy-goat-by-the-numbers.

FEEDING USED CHRISTMAS TREES TO GOATS

Although many goats love to eat Christmas trees that have served their purpose, it is safest to only do so if you know how the tree was grown and how it was treated after it was cut. Chemicals sometimes applied by growers include pesticides, growth regulators, and fertilizers. After cutting, sellers or even homeowners might apply chemicals to decrease flammability, color the tree, or help preserve it. The effects of these chemicals are unknown, so it is best to avoid feeding them to your animals. Also, Christmas trees should never be the sole source of nutrition for a goat—they just don’t have enough energy to sustain an animal. They are a great treat, though!
USDA REPORT ON GOAT & KID DEATH LOSS

The USDA’s National Animal Health Monitoring System (NAHMS) has issued *Goat and Kid Predator and Nonpredator Death Loss in the United States, 2015*, a comprehensive report on the causes of goat deaths in all 50 states. The report marks the first time that NAHMS has reported on goat deaths by specific predator and nonpredator causes.

Data for the study were collected by the USDA’s National Agriculture Statistics Service from a randomly selected sample of U.S. goat and kid producers throughout the nation. Approximately 26,000 goat producers were contacted during the first half of January 2016 by mail, telephone, and/or face-to-face interviews. Response information from 63% of these producers was used in this report.

Here are a few highlights from the NAHMS *Goat and Kid Predator and Nonpredator Death Loss in the United States, 2015* report:

- In 2015, about 500,000 adult and kid goats were lost to all causes (nonpredator and predator) in the United States, which represented 9.8% of U.S. adult goat inventory and 19.4% of kids born in 2015. About one-third of operations (34.2%) had any kid losses, and a slightly lower percentage (28.2%) had any adult goat losses. The total value of goat and kid losses was $69.6 million.

- Nonpredator causes accounted for three-fourths of all adult goat and kid death losses in the U.S. in 2015. Undetermined causes (found dead or unknown) accounted for the highest number of nonpredator losses in goats and kids. Of known losses due to nonpredator causes, internal parasites were the primary causes of loss, resulting in almost 87,000 goat and kid deaths in 2015. Weather-related causes and kidding problems were also important causes of loss.

- For losses due to predators, coyotes and dogs accounted for the highest percentages of goat and kid death losses in 2015. Overall, coyotes and dogs accounted for almost 80,000 goat and kid deaths, or about 65% of all losses due to predators. There was also a smaller number of goats and kids (about 14,500) that were injured but not killed by predators.

- Overall, 7.7% of operations that had goats at any time during the year quit raising goats during 2015.


PUT DOWN THAT COPPER BOLUS!

“Thanks” to the Internet, veterinarians are seeing cases of copper toxicity in goats. That’s right, toxicity. Goat owners are going online and reading claims about how copper oxide wire particles (COWPs) are “the cure for internal parasites.” To be sure, research has shown the effectiveness of COWPs in controlling the barber pole worm (*Haemonchus contortus*); study results on the topic are available at [www.wormx.info/copper-oxide-wire-particles](http://www.wormx.info/copper-oxide-wire-particles). HOWEVER, additional copper should never be given to a goat without knowledge of its current copper status.

Goats can ingest copper from commercial grains and supplements, local forages, soil, and copper water pipes. The copper content of local soils and forages can vary greatly, sometimes related to previous uses of the land and/or other minerals in the soil. For example, high molybdenum levels can interfere with copper absorption and create a de facto deficiency. If a producer is raising goats on low molybdenum soil and gets copper supplementation advice from another goat owner who farms on high molybdenum soils, that advice could prove to be deadly. Also, there is variation for copper tolerance between goat breeds.

Another problem with COWPs is mistakes last a long time—the particles will remain in the goat for months. Excess copper is stored in the liver and if the animal is stressed by kidding, transportation, illness, predators, showing, etc., stored copper can suddenly be released from the liver into the bloodstream, where it causes red blood cell rupture. Animals in such a crisis have anemia, jaundice, dark urine, and exercise intolerance; they may collapse and die suddenly. Animals in an affected herd can die from the effects of copper poisoning over a period of days, months, or even years.

As mentioned in a previous issue, a trace mineral screen (laboratory test) of the liver of a butchered animal can give insight on a herd’s trace mineral status. Liver and kidney samples should be submitted for testing if copper toxicity is suspected. If you want to learn more about supplementing copper safely, discuss your herd’s copper status with your veterinarian and read the article at [www.wormx.info/cowp-safety](http://www.wormx.info/cowp-safety) first.

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.
QA: TEN GOOD PRODUCTION PRACTICES
adapted from National Pork Producers’ Council

If your goats produce meat, milk, or fiber for yourself, your family, or your customers, ensuring quality should be at the forefront of your mind every day. Here is a reminder of the quality assurance actions to make part of your routine.

Provide proper animal care. A no-brainer. Healthy animals produce the highest quality products. Give them the nutrition, housing, sanitation, vaccinations, and protection they need to be safe and healthy.

Establish an effective herd health management plan. A written management plan will address all aspects of production and animal well being. It will also help you become more efficient and reduce labor and medicine costs. Your veterinarian can help you develop a management plan for your herd.

Establish a valid veterinary/client/patient relationship. Developing this legal relationship with your local licensed veterinarian will pay dividends through problem prevention. A veterinarian can look at your farm as a whole and notice concerns you may overlook. This relationship is needed for legal extra-label use of medications in food animals, too.

Follow appropriate feed processing and handling procedures. If you mix and grind feeds, follow best practices regarding feed handling, processing, and storage. Do NOT mix antibiotics or other antimicrobials covered by the Veterinary Feed Directive (VFD) into feed unless you are a licensed mill, are registered with the FDA, and have a specific and valid VFD from a veterinarian.

Identify and track all animals. All animals must have ID, be it ear tags, neck chains, tattoos, etc.

Maintain medication and treatment records. Again, critical! Record data on animal treatments (ID, product, amount given, location, who administered, route) and be sure to record and abide by milk and meat withholding times.

Properly store, use, label, and account for all medications and medicated feed. Follow medication storage instructions on labels. Pay attention to expiration dates. Some medicated feeds will require a VFD; consult your veterinarian about this. Keep medicated feed away from animals not intended for it and abide by milk and meat withholding times. Give medications properly: see the next article.

Educate all family member and employees about quality assurance. It only takes one person to make a mistake that can result in personal harm to a consumer and legal harm to a farm.

Use drug residue testing when appropriate. Meat and milk samples can be tested for medication residues; your veterinarian can advise you when and how to do this.

Complete a quality assurance checklist annually. Review your farm health management plan with your veterinarian, replace medications as needed, and revisit the above steps with family members and workers at least annually.

NEW PUBLICATIONS

“Practical Biosecurity Recommendations for Farm Tour Hosts” (FS257E) is a new publications available from Washington State University publications. It is free and only available online. It can be downloaded from http://cru.cahe.wsu.edu/CEPublications/FS257E/FS257E.pdf. It was written for people who would like to conduct farm tours on their property, yet minimize the risk of bringing in or transmitting disease-causing agents.

Also, “Goat Project: 4-H Leader Guide” (EM4425E) has been extensively revised and can be downloaded from http://cru.cahe.wsu.edu/CEPublications/em4425E/em4425E.pdf.

PROPER INJECTION TECHNIQUES

- Clean off bottle top with alcohol before inserting needle.
- If injecting multiple animals, insert a “nurse needle” into the bottle, leave it there, and use it for each withdrawal, but use a new sterile needle to inject each animal. Cover the nurse needle with something sterile between uses.
- Use subcutaneous (SQ) route if label or veterinary instructions allow.
- Give all medications in front of shoulder (if SQ injection is likely to cause a permanent lump, can give in armpit).
- Divide large injections into multiple sites.
- Clean and prep injection site if possible.
- Use new sterile needle for each injection.
- Use smallest gauge needle possible for the medication (22 ga. for vaccines, 20 ga. for penicillin and thick medications).
- Restrain animal well to prevent needle breakage or excessive tissue damage.

Give all injections in front of the shoulder. Give intramuscular injections in the neck. Give subcutaneous injections under loose skin of neck or armpit. If label indicates a choice, use subcutaneous injections.