

FENCELINES



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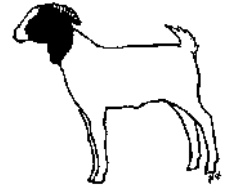
Preventing Urinary Calculi in Goats

Eileen A. Coite, Wayne County

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Why do goats get calculi or urinary stones? Part of the reason is goat anatomy. Male goats (most often wethers but sometimes also bucks) have problems with stones because their urethra (the tube that empties into the bladder) may not grow completely in diameter before castration. Delaying castration until the buck is sexually mature, four to eight months of age, will help reduce this problem but stones can also affect intact bucks and does.



Another reason goats get stones is due to a calcium:phosphorous (Ca:P) imbalance in the diet, often caused or influenced by high grain diets, or diets high in certain types of forages. To combat this, it's best to minimize concentrates (grain) in the diet and provide plenty of forages, either by grazing, hay, or a combination of the two. Having plenty of clean water available is also critical, and supplementing salt in the diet will encourage water intake. A balanced diet with a Ca:P ratio of 2:1 to 4:1 will minimize stone formation, and supplemental calcium can be offered through feed grade limestone. When formulating your herd's diet, make sure to determine the Ca and P concentration of the entire diet, including forages, not just the concentrate portion. Finally, excess urinary tract cells associated with urinary tract infections and Vitamin A deficiencies can cause urinary calculi. Supplemental Vitamin A can help if this is the problem.

Many goat feeds are formulated with added ammonium chloride, which helps to acidify the urine and reduce crystallization and stone development. Feeding ammonium chloride at .5-1% of the total ration, or at 2% of the concentrate portion of the ration will help. Another option is to administer ammonium chloride at a dose of 10 grams/head/day. In addition, gradually increasing the salt levels to 5-10% of the ration will help minimize urinary calculi.

Information for this article was compiled from the National Extension Goat Handbook, the Goat Medicine Handbook by Mary Smith, and Nutrition, Feeding Managing of Meat Goats by Jean-Marie Luginbuhl and Matt Poore, NCSU, and Bladder Stones in the Goat brochure by Dana Lewis, DVM, NCSU.

We're on the Web!
www.ces.ncsu.edu/wayne



Field Trip to see a Biovator for Animal Mortality Disposal

Patty Gabriel, District Conservationist, USDA-NRCS

Handling mortality in confined animal operations can be a costly and environmentally unfriendly process. Currently, two of the most common methods, rendering and incineration, have drawbacks. On both of these methods, rising fuel prices have been increasing the cost. On December 8th, NRCS and the Wayne Soil and Water District will be having a grower field day to see a Biovator in Sampson County. The Biovator is an in-vessel composting unit that can handle 500 lbs or more of mortalities per day. It is a low labor, low operating cost system that could be the right answer for many confined animal growers in handling their mortality. Biovators are a best management practice (BMP) that will be eligible for federal EQIP

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cost shared dollars on swine operations in 2009 and there is a strong possibility that poultry will follow in 2010. The Biovator we will visit will be on Bobcat Farms, 12 miles south of Clinton. Henry Moore has been operating the Biovator for the past year with excellent results. He will be there to answer your questions. If you are a confined animal grower, you owe it to yourself to see this innovative system for handling mortality.

Join us for the field trip to see the Biovator December 8th, 2008. We will meet at the parking lot of the Wayne Center at 8:00 am. We will have vans available to transport you to the site. Please call 734-5281 ext 3 by December 4th for reservations.

Sludge Survey Modifications

Amy Andrews, Craven & Jones Counties

This is a reminder that as of July 2008, the NRCS Standard 359 (Waste Treatment Lagoon) was modified with regard to sludge management. Prior to the change, the requirement was that the measured treatment volume below stop pump must have a minimum of four (4) feet of depth free of sludge at all times. The revised standard does not use the 4-foot depth requirement.

Sludge compliance is now based on sludge volume as a percentage of the total treatment volume. Sludge accumulation in the permanent treatment zone must be less than 50% of the planned treatment **volume**. Also, there must be a minimum of 2.5 feet of liquid above the sludge at the pump intake location. If either of these conditions is not met, then sludge must be removed or managed in accordance with an approved Plan of Action for Lagoon Sludge Reduction (POA). A new sludge survey worksheet has been devel-

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oped to calculate sludge and treatment volumes to determine compliance.

Producers who were out of compliance with the previous standard may now be in compliance with the revised standard. Producers may use the new sludge survey worksheet to determine compliance. Producers who were out of compliance on the basis of the previous 359 standard and are now in compliance should submit both sludge survey worksheets, OLD and NEW, to DWQ. DWQ staff will review the information and notify the producer of their decision with regard to compliance.

Copies of the revised Waste Treatment Lagoon Standard and sludge survey worksheets can be obtained from your local Extension Office. Now is a good time to contact your local Extension Agent and get new copies to use on your next sludge survey. It may be to your advantage!

What does "MCOOL" mean for Beef Producers?

Eve H. Honeycutt, Lenoir and Greene Counties

If you are a beef producer, chances are you have probably heard of MCOOL that will be affecting the industry. MCOOL stands for Mandatory Country Of Origin Labeling. If you are an observant shopper, chances are you have noticed some changes in your local grocery store.

MCOOL legislation is basically a marketing gimmick aimed to provide consumers with origin information on meat and produce. This label law states that all meat and produce must be clearly labeled with the country that the product was produced in. October 1, 2008, this law came into effect, although you could have seen some labels out before that.

MCOOL is not intended to be a food safety tool, only a marketing guarantee from the government that all consumers should know where their food comes from.

So how does this affect you as a beef producer? When you sell your cattle at the local stockyard, you must sign an affidavit verifying your cattle were produced in the United States. If you sell cattle off your farm to another individual, or you sell meat off your farm from your animals, you must also provide this signed affidavit to your customer. The affidavit is available on the NC Cattlemen's website at www.nccattle.com or you can ask your local Extension office for help finding it.

You must also keep records on animals you sell to verify their country of origin should it come into question. I went to the MCOOL website (www.countryoforiginlabel.org) and found the following information on Recordkeeping for this legislation:

Any person engaged in the business of supplying a covered commodity to a retailer, directly or indirectly, must maintain records to establish and identify the immediate previous source (if applicable) and immediate subsequent recipient of the product. Such records must identify the product unique to that transaction by means of a lot number or other unique identifier, for a period of one (1) year from the date of the transaction.

Establishments that slaughter livestock are con-

sidered initiating suppliers of a covered commodity. The Agricultural Marketing Service (AMS), the agency that will administer the law, has indicated that the initiating supplier (packer) either must have the records in its possession or have access to records of the livestock supplier that substantiate the country of origin of the meat product at issue.

At retail, records and other documentary evidence relied upon at the point of sale to establish a product's country(ies) of origin must be available during normal business hours to USDA representatives for so long as the product is on hand. For

pre-labeled products, the label itself is sufficient evidence on which the retailer may rely to establish a product's origin.

Below are some Frequently Asked Questions- and their answers- from the COOL website that should help you understand the law a little better:

Will country-of-origin labels raise the cost of meat?

USDA estimated the cost to implement mandatory country-of-origin labeling in the first year alone will be about \$2.5 billion. Given the costs associated with record-keeping and the necessary segregation of livestock and meat in plants based on their origin that will be critical in ensuring label accuracy, that number could be too low. How these costs will be spread across meat products and how much prices will rise is yet to be determined.

How do these labels benefit consumers?

Congress has determined that country-of-origin labels are important to consumers. Whether consumers will pay more and if so how much more they will pay at a time when prices are hitting record levels due to spiking livestock feed prices remains in question.

Don't these labels already exist?

Currently, finished products in consumer packaging that are imported from other countries, such as Danish hams or Canadian pork loins, for example, say "Product of Denmark" or "Product of Canada."

When you sell your cattle at the local stockyard, you must sign an affidavit verifying your cattle were produced in the United States.

What does “MCOOL” mean for Beef Producers? Continued

Before September 30, 2008, if meat was processed in the U.S., it was considered a U.S. product and no labeling was required detailing its geographic history.

Why doesn't this labeling rule apply to food-service or processed meat products?

Congress determined that products intended for foodservice and processed meat products should be exempt from the law.

How much meat is imported from Mexico?

Very little. However, many young cattle are imported from Mexico and are subsequently raised and processed in the U.S. If you see a beef product bearing the label "Product of U.S. and Mexico," that label reflects the fact that the animal was born in Mexico, but raised from an early age in the U.S. and then processed.

Are imported meat products as safe as U.S. products?

Exporting meat products to the U.S. is not easy

because the U.S. government requires that these products meet the same high standards as U.S. products. To be eligible to export to the U.S., a foreign country's inspection system has to be found by USDA to be equivalent to the U.S. system. In addition, meat plants in other countries that wish to export must document that they are following U.S. food safety standards or standards that are equivalent to U.S. standards. These plants must be certified by the USDA. When the meat products arrive at the U.S. border, they are subject to more safety inspections. Finally, if the imported meat is further processed in the U.S., it is subject again to the inspection requirements administered by USDA.

Only a limited number of plants within a limited number of nations meet these tough standards. U.S. meat companies wouldn't buy these products, use them in production, and apply the U.S. company label if they weren't confident in the imported product's safety.

Reduce Input Costs By Soil Testing

Emily Adams Walton, Onslow County

Anyone who has purchased fertilizer recently has seen how expensive it has become and has experienced the burden that it can place on the input costs of any farm operation. Because of the expense, it's even more important to be sure that fertilizer is being applied correctly to the soil or you might as well be flushing your dollar bills down the toilet.

The results of a soil test can give you a snapshot of the nutrient needs of a particular field. By applying nutrients to the soil based on the recommendations of the soil test report, you can be sure that your soil is receiving just what it needs. There will be no nutrients (or dollars!) wasted because of excessive fertilization. Not only is this a financial bonus, it is great for the environment too. Excessive nutrients in the soil that are not taken up by crops are more likely to run off or leach into water sources which can degrade water quality. On the other hand, by applying just the right amount of nutrients to the soil, there is a lesser chance of lost yield (or dollars!) due to a nutrient deficiency in the soil that may ultimately affect crop performance.

While all nutrients such as potassium, phosphorous, magnesium or calcium are critical to crop growth, one of the most important and often forgotten aspects of soil fertility is the pH of the soil. Soil pH can affect the transfer and availability of nutrients in the soil. Even if there is an adequate level of certain nutrients in the soil after your fertilizer applications, the wrong pH level can keep these nutrients from being available to the crop roots. The effectiveness of certain herbicides can also be altered by an incorrect soil pH. So if soil can be thought of as the “gateway” between crops and nutrients, then soil pH is most definitely the “gatekeeper”. Follow the lime recommendations on your soil test report to keep the gatekeeper happy.

For pastures, the use of legumes can serve as another source of savings on fertilizer costs. Clover, lespedeza, and other legumes fix nitrogen from the atmosphere and add it back into the soil, therefore reducing the total amount of nitrogen that needs to be applied to that field. For more information about soil testing or reducing on-farm costs, contact your local Extension office.

Calendar of Events



- **November 13th - 2008 Farm Bill Regional Meeting** - McKimmon Center, NCSU, Raleigh NC
- **November 11th - Carolina Swine Nutrition Conference** - Sheraton Imperial Hotel, Research Triangle, NC
- **November 20th - Southeast Regional Pork Conference** - Lenoir County Cooperative Extension, \$5 registration fee to register call (252) 527-2191
- **November 25th - Wilson Regional Pork Conference**
- **December 8th - Field Trip to see a Biovator for Animal Mortality Disposal** - Sampson County, to register call (919) 734-5281 ext 3 by December 4th.

For more information about any of these events, please call Kim Davis at 731-1520

Forage Management Tips

November

- To improve feeding efficiency, test forages before winter feeding begins.
- As winter feeding begins, separate the herd into lactating and dry cows so the best quality pastures and hay can be fed to the cows with nursing calves.
- Do not graze fall-planted perennial pastures, such as tall fescue/ladino clover, until growth reaches 6 to 8 inches.
- Winter annual pastures that were planted early (September) may be responsive to an additional application of nitrogen (30 to 50 lbs per acre).
- Bermudagrass should have 3 to 4 inches of growth to serve as an insulation against winter damage.

December

- Avoid overgrazing by feeding hay on pasture or restricting acres available to animals.
- Feed hay stored outside before using hay that is stored inside.



The use of brand names in this publication does not imply endorsement by the North Carolina Cooperative Extension Service of the products or services named nor discrimination against similar products or services not mentioned.

Fencelines is a bimonthly newsletter written by a team of Southeast District Agricultural Agents for livestock producers of Southeastern North Carolina. For more information on material and events presented in this newsletter, contact your local agent and Cooperative Extension office at:

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