

# Essential Teaching Newsletter

## April 2015



### Urinary Calculi in Sheep and Goats

Urinary Calculi, commonly called known as "Water Belly," is a urinary-tract disease in sheep and goats that prevents both urination and breeding in males. Females seldom contract Urinary Calculi because of the straightness and shortness of their urethra. The twists and turns of the longer male urethra make passing solid particles difficult at best and impossible at worst. It causes solid particles to develop in the urine; these solid particles block the flow of urine out of the goat's body causing great pain, discomfort and often time's death.

Urinary Calculi can be contributed to improper calcium to phosphorus ratios, too high of phosphorus, and low water consumption. Feeding a high level of grain that isn't properly balanced is often the culprit for these stones. Young wethers (castrated sheep and goats) are especially at risk. The lack of testosterone doesn't allow the urethra diameter to increase to the normal size; making it harder for stones to pass.

### How can we prevent it?

The key to preventing urinary calculi is feeding a proper diet. We need their overall diet to have calcium to phosphorus ratio of 2 to 1 (ideally 2.5 to 1 is better). Additionally, you don't want the phosphorus ratio to be very high as well – less than 0.35% is ideal. Remember, corn is very high in phosphorus with very little calcium. Occasionally (very rare) the source of these minerals is coming from the water source, so if all else fails, get the mineral content of the drinking water checked.

Additionally, ammonium chloride can be fed to the animals. It acidifies the urine, which will help to prevent the formation of urinary calculi. The recommended level to effectively help acidify the urine is 10 lbs per ton with a maximum of 20 lbs per ton allowed.

Finally the last step in prevention is the consumption of water. However, do not increase the water consumption if the urethra is already blocked with stones. There will be no way for the animal to excrete the extra fluid. But in terms of prevention, the increased water consumption will continuously flush urethra so that larger stones do not have time to develop. You can increase water consumption by increasing the salt intake of the animal.

## Featured Show Winners!



**Grand Champion Hampshire**  
2015 Oklahoma Youth Expo



**Grand Champion Market Hog**  
2015 Oklahoma Youth Expo



**Grand Champion Duroc Barrow**  
2015 Houston Livestock Show

## Zilmax and Optafexx for Cattle

What are major differences between these products?

Generally, Zilmax™ is a more potent beta agonist than Optaflexx™. However, both produce and increase in weight gain, increased ribeye area and improved feed efficiency. The optimal feeding time for optaflexx is considered to be 8-15 days longer (28 – 35 days vs. 20 days) to get these same results.

Are there any negative consequences to feeding?

Research has not observed any negative affects on animal conformation. However, cattle with poor skeletal structure (post legged, straight fronted), the added muscle could cause these problems to become more evident.

Why are these products only labeled for use in the final days of the finishing period?

Market cattle become inefficient during the last month of the finishing period, because they are depositing less muscle and more fat. Beta agonists redirect energy to more protein synthesis rather than fat synthesis. This allows the animal to be more efficient during this period when fed than its counterparts. When these products are fed to younger cattle these products demonstrate little or no response in muscle deposition or efficiency.



### Youth Spotlight - Seth Trimble - Seminole FFA

Seth was introduced to goats when his great-grandfather purchased Boer goats right after they were imported to America. He bought the first full blood Boer buck that Seth had ever seen. He paid a lot of money for this buck & they all thought that someone had just taken him for his money! Whenever they first laid eyes on this buck, they knew that this was the type of animal that we would enjoy as a family. His parents built a new home in 2000 & needed something to clean up the land, so his grandfather suggested that we buy just some commercial goats. They did & after several years, he decided that he wanted to show goats.

Seth attended Seminole Public Schools since 1st grade. Seminole Schools had not had an FFA program in 39 years – Seminole is a huge football town with very little interest in an ag program. Seth and his parents had been pushing for an ag program since 2007. Finally, last year, when Seth was a senior, the ag program was reinstated after 39 years. He was appointed the new FFA president & his parents were inducted as the first honorary members of the Seminole FFA. Seth also was the recipient of a long running award in our school system--the Academic Excellence Awards and was the first to receive Excellence in Ag Education for Seminole Schools. I feel like that I somewhat paved the way for future FFA members.

Seth has won the grand champion & reserve grand champion doe & showmanship for the past 6 years in Seminole County. All of our animals were/still are raised on Essential Feeds! He has had numerous grand & reserves in the American Boer Goat Association (ABGA) ring also. Seth won the Junior American Boer Goat Association National Bred & Owned Fullblood 12-16 month buck this past summer in Grand Island, NE. This buck also won the Yearling Division Grand Fullblood Bred & Owned Buck at the JABGA Nationals in Grand Island, NE. He has been a finalist in the National Junior American Boer Goat Association Showmanship for the past 4 years. Recently, Seth won the Oklahoma State Fair 2014 Overall Grand Buck in the ABGA sanctioned Show #1. This same buck won the Overall Reserve Grand Buck at the Tulsa State Fair 2014 & this buck also won Overall Reserve Grand Buck at the Oklahoma Boer Goat Association Fall Show #1. This buck was bred & raised here on their farm and has been fed Essential Feeds since he was old enough to eat. Both, his sire & dam were also raised on Essential Feeds. There are numerous wins throughout the years with goats that were raised on Essential Feeds.

**April Special** - Use code “**AprilNew**” to get 10% off your next order  
*expires May 1st*