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Livestock Update

Beef - Horse - Poultry - Sheep - Swine

March 2017

This LIVESTOCK UPDATE contains timely subject matter on beef cattle, horses, poultry, sheep, swine, and related junior work. Use this material as you see fit for local newspapers, radio programs, newsletters, and for the formulation of recommendations.

IN THIS ISSUE:

Scott P. Greiner, Extension Project Leader
Department of Animal & Poultry Sciences

Dates to Remember

Beef

March 19th- 2017 VIRGINIA BCIA SOUTHWEST BULL TEST OPEN HOUSE- Open house will be hosted at the Southwest Virginia Bull Test on Sunday afternoon, March 19th from 1:00 to 4:00 PM. The Southwest Bull Test Station is located at 1110 Black Lick Road, Wytheville, VA. **website:** http://www.bcia.apsc.vt.edu or **phone** 540-231-2257.

March 25th- 2017 VIRGINIA BCIA SOUTHWEST BULL TEST SALE- Saturday, March 25th, 12:00 noon at the sale facility just outside Wytheville, VA**-** approximately 150 bulls will sell- . **website:** http://www.bcia.apsc.vt.edu or **phone** 540-231-2257.

Youth

May 13th-2017 Virginia Tech Livestock Judging Field Day- The day will include basic judging workshops followed by practice classes. Teams can evaluate classes together followed by an official critique. Registration is $10 (children & adults) and includes lunch. **Contact: Dr. Bain Wilson: tbwilson@vt.edu**

July 17-19th- 2017 Virginia Tech Livestock Judging Camp- A 3-day, 2-night event with detailed instruction in all species and reasons. Virginia Tech campus, Blacksburg, VA. **Contact: Dr. Bain Wilson: tbwilson@vt.edu and Jessica Dotson: ejessica@vt.edu.**

March Beef Herd Management Advisor

Scott P. Greiner, T. Bain Wilson
Extension Beef Specialists, Virginia Tech
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As spring calving slows, and tax season approaches, March is an excellent time to reflect on your operation's profitability. It is easy to focus on production areas (ex. genetics, estrus synchronization, forage management) that we find most interesting when reviewing records. It is valuable to consider these major areas as links in a chain rather than singular disciplines. Profitability in your beef enterprise may be limited more by the weaker links in that chain as opposed to further strengthening your strongest links. The major factors affecting beef enterprise profitability include financial management, reproduction, nutrition/forages, genetics, and herd health. As you review 2016 and look ahead to 2017, identify your weaker areas of production and focus on improving those areas.

In addition, bull buying season is upon us. Take time before the sale to objectively assess your herd's genetic strengths and weaknesses. Which areas are strengths, and which traits could use improvement through selection? Utilize the EPDs on your last several generations of herd sires to establish benchmarks for genetic merit of new bulls you want to bring in. Do your homework prior to arriving at the sale, and find the bulls in the catalog which meet your specifications for performance traits (EPDs, frame size, pedigree, etc.). Upon arrival at the sale, you can then further evaluate the bulls which you have identified for phenotype. Limit your interest to only those bulls which work for you operation on paper, as they provide the best opportunity to achieve your genetic goals.

Spring Calving Herds (January-March)

General

- Calving season is in full swing, so check cows frequently during calving season. The optimal interval to observe calving females every four hours (heifers more frequently if possible).
- Tag and tattoo calves promptly at birth. Also record birth weight, calving ease score, teat/udder score, and mothering ability of cow.
- Utilize a calving area that is clean and well drained. Reduce exposure to pathogens that cause scours by moving 2-3 day old pairs out of the calving area to a separate paddock. Scours can also be reduced by avoiding the commingling of newborn calves with older calves. Another way to reduce exposure to scours-causing pathogens is to frequently move winter feeding sites in calving pastures.

Nutrition and Forages

- Switch source of free-choice mineral to a high-magnesium mineral to prevent grass tetany. Monitor mineral intake to insure cows are consuming the recommended amount. To insure adequate intake of high-magnesium mineral, no other source of minerals should be available.

- Evaluate growth of yearling heifers with the goal of them reaching 60 to 65% of mature body weight by breeding. Supplementation may be needed to meet weight gain target depending on forage quality.
- Feed high quality hay to minimize supplementation and cow weight loss.
- Although pasture green up is beginning and nutrient content of new forage growth is high, cows cannot consume enough to meet their nutritional needs. Restricting cows to smaller hay feeding and sacrifice areas will allow new pasture growth to get a faster start.
- Fertilize hay areas with K and P according to soil test recommendations. Add nitrogen at the rate of 40 to 70lbs/acre.

Herd Health

- Ensure colostrum intake in the first 6 hours of life in newborn calves. Provide supplemental colostrum if necessary. Newborn calves need 10% of body weight in colostrum first 24 hours of life.
- Provide selenium and vitamin A & D injections to newborn calves
- Castrate commercial calves at birth
- Monitor calf health closely, particularly for signs of scours and pneumonia, have treatment supplies on hand.
- Consult with your veterinarian to develop a pre-breeding vaccination schedule for the cow herd and yearling heifers. Plan early to allow 30-day vaccination window prior to breeding season.

Reproduction

- Plan AI and estrus synchronization schedules to be used during the breeding season. Order breeding supplies and semen.
- Schedule and conduct breeding soundness exams on herd sires, including annual vaccinations. This should be done before spring bull sales to allow time to secure replacements as necessary.

Genetics

- Closely examine herd genetic goals and selection criteria for both AI and natural service sires. Establish what herd strengths and weaknesses are from a genetic standpoint, and benchmark EPD criteria to meet herd goals. Make plans for the spring bull-buying season.
- Schedule and collect remaining yearling performance data (weight, hip height, scrotal circumference, and ultrasound measurements) in seedstock herds.

Fall Calving Herds (September-November)

General

- Pull bulls to maintain a 60 to 90 day calving season. Monitor body condition and soundness of bulls.
- Schedule and conduct pregnancy diagnosis with a veterinarian 45 to 60 days following the breeding season. Make plans to pregnancy check heifers as soon

as possible after bull removal. This will for decisions to be made regarding the marketing of open heifers.
- Evaluate potential options for marketing the calf crop, including time of weaning, and backgrounding strategy.

Nutrition and Forages

- Begin creep feeding or creep grazing calves if desired.
- Cows are entering the latter portion of lactation. Thus, average to good quality hay should meet cow nutritional requirements.
- Although pasture green-up is beginning, hay should still be offered to cows until consumption declines significantly.
- Reserve high quality hay and pasture areas for calves after weaning.
- Fertilize hay areas with K and P according to soil test recommendations. Add nitrogen at the rate of 40 to 70lbs/acre.

Herd Health

- Consult with a veterinarian on pre-weaning vaccination protocol for the calf crop. Monitor calves closely for health issues, particularly respiratory disease.

Genetics

- Make plans for remaining spring bull sales. Closely examine herd genetic goals and selection criteria for both AI and natural service sires. Establish herd strengths and weaknesses from genetic standpoint, and benchmark EPD criteria accordingly.
- Collect 205-day weights on calf crop at appropriate time (BIF age range is between 160 and 250 days of age), along with cow weights, hip heights and body condition scores (cow mature size to be data taken within 45 days of calf weaning measurements).

NEW LOCATION FOR 2017 VIRGINIA BCIA SOUTHWEST BULL TEST OPEN HOUSE MARCH 19, SALE MARCH 25

by Scott P. Greiner
Extension Animal Scientist, Beef
Virginia Tech

The Virginia BCIA Southwest Bull Test program is celebrating its 38th year of serving the beef industry in Virginia. The program now resides at Mountain Spring Farm, operated by Brian and Kayla Umberger of Wytheville, Virginia. Their operation is located between Wytheville and Rural Retreat, at 1110 Black Lick Road, Wytheville. Virginia BCIA is excited to have the opportunity to collaborate with the Umbergers to carry on the great tradition and history the Southwest program has established over the years. Virginia BCIA would like to extend a special thanks to the Tim Sutphin family and the crew at Hillwinds Farm for their dedication and service over the past several years to the bull evaluation program.

An open house will be hosted at the Southwest Virginia Bull Test on Sunday afternoon, March 19th from 1:00 to 4:00 PM. Cattle producers and others interested are invited to attend. The Southwest Bull Test Station, owned and operated by Brian Umberger, is located at 1110 Black Lick Road, Wytheville, VA.

Approximately 150 bulls will sell at the Virginia BCIA Southwest Bull Test Sale on Saturday, March 25th, 12:00 noon at the sale facility just outside Wytheville. These bulls will represent the top end of the 95 fall-born senior bulls and 128 spring-born junior bulls currently being developed. Breeds include Angus, Charolais, Gelbvieh & Gelbvieh Balancers, Polled & Horned Hereford, Simmental and SimAngus. Only bulls which meet stringent BCIA criteria will sell. This includes complete breeding soundness exams (including semen evaluation) on fall-born bulls, volume buyer discounts, and an enhanced soundness and fertility guarantee on all bulls selling.

The BCIA-Influenced Bred Heifer Sale will be held in conjunction with the bull sale. A select group of approximately 40 fall-calving bred heifers from leading producers will be offered immediately following the bulls. All heifers will be certified through the Virginia Premium Assured Heifer Program, which verifies health, genetics, and management procedures. Service sires for the heifers will feature highly proven, AI sires selected for calving ease and performance.

For complete details and progress reports visit the Virginia BCIA website http://www.bcia.apsc.vt.edu or phone 540-231-2257. Video clips of the bulls and an online catalog will also be posted.

The Importance of Managed Grazing for Soil Health and Pasture productivity: *Observations from the 2017 NCBA Cattlemen's College*

Dr. Bain Wilson
Extension Animal Scientist
Virginia Tech

Each year, the NCBA Cattle Industry Convention is prefaced by its Cattlemen's College program which features speakers from throughout the country on a variety of topics that are relevant to the beef industry. This year, a morning long session was devoted to how grazing management impacts soil health and pasture productivity. Much of the content presented was especially pertinent to beef production and grazing systems in Virginia and the Southeastern U.S.

Many producers spend much of their time managing livestock and forages and less time thinking about what is occurring in the soil below their feet. In reality, much of what we do above ground to manage forage impacts soil health; which then has long term effects on pasture productivity. Dr. Steven Shafer of the Soil Health Institute spoke on the importance of soil health to increase organic carbon in soil. Soil organic carbon can be increased by not overgrazing forages, allowing for adequate growth of plant root mass, and by leaving enough pant organic matter that can be decomposed and returned to the soil. In other words, organic carbon is produced by the green, growing plant and then incorporated into the soil by laying that plant over. Adequate soil organic carbon is crucial to maintenance of soil structure, which in turn improves the water holding capacity of soil. Organic carbon serves as the glue that holds soil particles together to form soil aggregates that contribute to soil structure. Better soil structure leaves more room for the soil to capture water and moisture. Dr. Shafer had the memorable quote that with good soil health "you can't make it rain, but you can keep what you have". Essentially, maintenance of soil structure and health serves as insurance against drought.

A constant theme of the session was that pastures that are continuously grazed have poorer soil health than those that are rotationally grazed. This is because many areas in continuously grazed pastures are not given adequate rest to maintain plant root mass. Areas that are heavily grazed with no rest also experience increased hoof action; resulting in increased soil compaction in the top 4 to 6 inches of top soil. This compaction inhibits soil and water penetration, but can be reversed with sufficient rest to pastures. Virginia Cooperative Extension has several publications that cover the benefits of implementing rotational grazing (*Controlled Grazing of Virginia's Pastures*, Publication 418-012) and how rotational grazing systems can be implemented in your operation (*Planning Fencing Systems for Controlled Grazing*, Publication 442-130). It should be remembered that rotational grazing is best able to maximize animal gain per acre and allows for stocking rates to be matched to available forage throughout the grazing season.

Johnny Rogers of NC State's Amazing Grazing Program provided several considerations for managing forages for improved pasture productivity. The use of

single-strand, electrified polywire to implement rotational and strip-grazing systems improve manure distribution was discussed at length. Many producers feel that the construction of elaborate and expensive interior fencing is cost-prohibitive for adopting many intensive grazing systems. But once cattle are trained to electric fencing, single-strand temporary fencing can be used in many of these grazing systems. Stockpiling fescue was mentioned as effective strategy to improve soil health and pasture productivity. Strip-grazing stockpiled fescue has the benefit of resting pastures, managing cattle movement with a single wire, and uniformly depositing manure across the pasture. It is understood that manure is often the cheapest form of fertilizer; however, if manure is not uniformly deposited, there will be areas that go unfertilized.

Mr. Rogers discussed how he frequently moves his winter feeding areas to areas that aren't getting enough nutrients deposited through his normal grazing distribution. He has gone as far as selecting where to feed his cattle based on analysis of pasture soil samples. He also discussed how he reverses the compaction and bare soil of heavily used winter feeding areas by planting *Brassicas* (turnips) and interseeding these areas with crabgrass.

Managing our grazing activities with the goal of simultaneously improving soil health is likely a new concept for many. The development of effective grazing strategies that maximizes pasture productivity is undoubtedly a process that involves trial and error and no operation is perfect in every facet of management. However, it may be that several of the underappreciated aspects of land management may be areas we can improve in the most.

Sheep Management Tips - Winter

Scott P. Greiner, Extension Sheep Specialist Virginia Tech

4-6 Weeks Before Lambing

1. Provide supplemental energy (TDN) to ewes the last month of gestation. The majority of fetal growth occurs during the last 4-6 weeks of gestation. The increased energy requirement if often met by supplementing 1-2 pounds of grain ration per day in addition to hay. Provide calcium and selenium fortified trace mineral salt, or provide these mineral through a complete feed.

2. Supplementation of tetracycline pre-lambing has been shown to reduce the incidence of abortions. Consult with your veterinarian on a flock health management protocol.

3. Make sure there is plenty of feed trough space so that ewes do not crowd each other at feeding time.

4. Shear the wool from around the head, udder and dock of pregnant ewes. If covered facilities are available, shear the ewes completely. Sheared ewes are more likely to lamb inside, the inside of the barn stays drier because less moisture is carried in by the ewes, more ewes can be kept inside, and it creates a cleaner environment for the lambs and the shepherd. Sheared ewes must have access to a barn during cold, freezing rains, and they must receive additional feed during periods of extremely cold temperatures.

2-4 Weeks Before Lambing

1. Vaccinate ewes for overeating disease and tetanus. These vaccines provide passive immunity to baby lambs through the ewes' colostrum until they can be vaccinated at 4 to 6 weeks of age. Work with your veterinarian regarding feeding of antibiotics for prevention of abortion diseases.

2. Check and separate all ewes that are developing udders or showing signs of lambing. Check and remove heavy ewes once a week during the lambing season. Increase the grain on all ewes showing signs of lambing to 1 lb daily, and feed all the good quality grass/legume hay they will clean up.

3. Observe ewes closely. Ewes that are sluggish or hang back at feeding may be showing early signs of pregnancy disease.

4. Shelter heavy ewes from bad weather.

5. Get lambing pens and lambing equipment ready. There should be one lambing pen for every ten ewes expected to lamb.

6. Stock lambing supplies such as iodine, antibiotics, frozen colostrum, stomach tube, selenium and Vitamin E, OB lube, lamb puller, ear tags, etc.

At Lambing Time

1. Check ewes on a frequent basis (every 3 to 4 hours), as feasible.

2. After lambs are born, move the ewe and her lambs to a lambing pen with a minimum dimension of 5' X 5'. Check the ewe's udder to see that she has milk, strip each teat to remove the waxy plug that may be present at the end of the teat, and make sure lambs nurse within 30 minutes.

3. Colostrum is critical for baby lamb survival. For ewes without milk or for lambs that fail to nurse, lambs must be given colostrum via a stomach tube. If sheep colostrum is not available, cow or goat colostrum should be used. Colostrum can be frozen in ice cube trays or stored in plastic storage bags. Colostrum should be thawed using indirect heat. Thawing by direct heat destroys the antibodies that are present. Lambs should receive 20 ml (cc) of colostrum per pound of body weight. It works best if feedings can be 4 hours apart.

4. Only use a heat lamp if lambs are weak and chilled. Avoid danger of fire by hanging heat lamps 3' above the bedding and in the corner of the lambing pen. Block off the corner so that the ewe cannot get under the lamp.

5. Check on the health of the ewe and her lambs at least twice daily. Lambs that are lying down should be made to get up. Those that fail to stretch after getting up may have a problem that requires further examination. The biggest cause of baby lamb mortality is starvation.

6. Virginia is a selenium deficient state. If selenium deficiency has been a problem, lambs should be given an injection of 0.25 mg selenium per 10 lb of body weight immediately after birth. A good quality mineral provided to the ewe flock on a year-round basis has been shown to be the best way to prevent selenium deficiency.

7. A general rule of thumb is for the ewe and her lambs to stay in the lambing pen one day for each lamb. Weak or small lambs may require a longer stay.

8. Ewes should receive fresh water and high quality hay the day of lambing. Don't feed grain until the second day. One pound of grain plus 5 lbs of good quality hay will take care of their needs until moving to a mixing pen.

9. If ewes were not treated for internal parasites within 3 weeks of lambing, they should be treated prior to removal from the lambing pen.

10. Keep records on all ewes, noting those that had problems. Individually identify lambs so they can be matched with the ewe. The ability to match ewes and

lambs is important to monitor performance, and individual identification is critical for making selection and culling decisions.

11. All lambs should be docked and castrated by the time they are 2 weeks old.

Virginia Tech Livestock Judging Field Day

Make plans to attend the 2nd annual VT Livestock Judging Field Day on May 13, 2017 at the Alphin-Stuart Arena in Blacksburg VA. The day will include basic judging workshops followed by practice classes. Teams can evaluate classes together followed by an official critique.

Registration is $10 (children & adults) and includes lunch. Teams may register as a group if desired. If you have specific questions please feel free to contact Bain Wilson, tbwilson@vt.edu.

To register, please detach the registration form below and return along with your registration fee.

Tentative Schedule

9:30-10:00 Registration

10:00 Species Workshops

12:00-1:00 Lunch

1:00-3:00 Practice Classes

3:00-4:00 Official Placings

4:00 Adjourn

If you are a person with a disability and desire assistance or accommodation, please notify Bain Wilson, 378 Litton Reaves at 540-231-5253/ TDD*) during business hours of 8 AM and 5 PM

Registration Form

Virginia Cooperative Extension
Virginia Tech
Virginia State University

County/Chapter _____

Name(s) & Age(s) _____

_____

_____

Coaches/Adults _____

_____

Address, City, State, Zip code _____

_____

Email address _____ Phone number _____

Return forms to: Bain Wilson, 378 Litton Reaves Hall, Blacksburg, VA 24061
Registration deadline: May 1, 2017

By registering, the above listed person(s) acknowledge that media images may be used for promotional purposes.

Virginia Tech Livestock Judging Camp

July 17-19, 2017
VT Campus
Blacksburg, VA

VirginiaTech
Invent the Future®

Join us for the 2nd annual VT Livestock Judging Camp. A 3-day, 2-night event with detailed instruction in all species and reasons.

Campers will be housed on the VT campus and the $250 camp registration fee includes housing, meals, materials, t-shirt, and activity fees.

Camp is open to youth entering the 6th grade to High School Seniors.

To register, fill out the attached form and return along with registration fee. Camp is limited to the fist 60 youth registrations.

Campers do not have to be accompanied by a chaperone. However, two male & female chaperones are required for the entire camp. Please indicate your willingness to serve this role. Registration fee for adult attendees is $175 to cover meals, lodging, and t-shirt.

For more information contact:
Bain Wilson: tbwilson@vt.edu
Jessica Dotson: ejessica@vt.edu

Virginia Cooperative Extension
Virginia Tech • Virginia State University
www.ext.vt.edu

VT Livestock Judging Camp Registration Form

Name_____

Parent Chaperone ____Yes ____No

Youth Age____ Adult_____ Gender____

Address_____

City, State, Zip_____

_____

Email address_____

Phone #_____

Roommate preference_____

T-shirt size_____

If attending with team, list members:

_____

_____

_____

_____

Registration Deadline: June 15, 2016

Return form and Payment to:
VT Livestock Judging Camp
C/O Bain Wilson
378 Litton Reaves (0306)
Blacksburg VA 24061

If you are a person with a disability and desire assistance or accommodation, please notify Bain Wilson, 378 Litton Reaves at 540-231-5253/TDD*) during business hours of 8a.m. and 5 p.m.
***TDD number is (800) 828-1120.**