

Virginia Cooperative Extension **Animal & Poultry Sciences**

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Livestock Update

Beef - Horse - Poultry - Sheep - Swine January 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.

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



Dates to Remember

January

Sheep

• 13th-14th –Virginia Shepherds' Symposium (Pre-registration deadline Jan. 9th); Alphin-Stuart Livestock Arena-Blacksburg, Virginia. Contact: Virginia Sheep Producers Association at 540-231-9159.

Beef

- 23rd, 24th, and 25th- 2017 VCA Winter Producer Economic Outlook Discussions-5:30PM-8:00PM. Meetings held in Barboursville, VA; Abingdon, VA; Blackstone, VA. Please RSVP to VCA office at: 540-992-1009 by Jan. 20th 2017.
- 28th- Virginia Tech Beef Cattle Health Conference; 8AM-3PM; Litton Reaves Auditorium, Virginia Tech Campus. Contact: Ralph Roop at 540-231-7344 or reroop@vt.edu.

January Herd Management Advisor

Scott P. Greiner and T. Bain Wilson Extension Beef Specialists, Virginia Tech

January is one of the year's coldest months and comes with the reality that cattle producers are dealing with the dead of winter. By this time, winter feeding programs are likely in full swing as quality standing forage is limited. Winter is a great time to start making preparations for the beginning of spring grazing. Soil samples taken during winter allow nutrient deficiencies in pastures and hay fields to be identified.

Frost seeding clover is an economic tool to improve forage quality and availability in early spring. February is an optimum time to frost seed clover in Virginia because frost seeding needs to be done with 4-6 weeks of winter conditions remaining. Frost seeding tall fescue pastures is an effective way of diluting ergot alkaloids associated with fescue toxicosis in the animal's diet. If you have questions regarding winter pasture management techniques, contact your local extension agent.

Spring Calving Herds (January-March)

General

- Prepare for calving season by checking inventory of typical supplies needed at calving time (Ob equipment, tube feeder, colostrum supplement, ear tags, animal health products, calving book, etc.). Review calving assistance procedures.
- Move pregnant heifers and early-calving cows to calving area about 2 weeks before due date
- Check cows frequently during calving season. The optimal interval to check calving females is every 4 hours.
- 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.
- Tag and tattoo calves promptly at birth. Also record birth weight, calving ease score, teat/udder score, and mothering ability of cow.

Nutrition and Forages

- Evaluate the body condition of cows that you identified as being in poor condition and decide if nutritional management changes are having a positive impact.
- Cow nutrient requirements increase considerably as fetal size and growth rate increase. If low
 to average quality hay is being fed, supplementation may be warranted.
- Continue strip grazing accumulated fescue growth if available.
- Continue to manage first-calf heifers separately. They should be given higher quality forage than mature cows. Thin mature cows could also be added to this group.
- Because nutrient requirements are greatest from calving to peak lactation (about 60 days post-calving), save the highest quality forage for after cows have calved.
- Continue to feed high Se trace mineral salt to avoid white muscle disease. A forage analysis can reveal what other minerals should be supplemented.
- Nutrient requirements will increase post-calving, so be prepared to supplement forages to meet cow requirements.

 Be mindful that harsh environmental conditions (cold temperatures, wind, ice, and mud) will increase nutrient needs.

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 and D injections to newborn calves.
- Castrate commercial calves at birth.
- Monitor calves closely for scours and pneumonia, have treatment supplies on hand.

Genetics

- Make plans for spring bull-buying season. Evaluate current herd bulls for progeny performance and soundness. Establish herd genetic goals, and selection criteria for AI sires and new herd bulls.
- Schedule an ultrasound technician to collect yearling performance data (weight, height, scrotal circumference, and ultrasound measurements) in seedstock herds.

Fall Calving Herds (September-November)

General

- Calving records should be complete and up to date.
- Monitor calves for scours.
- Continue breeding season.

Nutrition and Forages

- As the breeding season continues, remember that maintaining or gaining body condition has a beneficial impact on pregnancy rate. As available forage becomes scarce and of lower quality, be prepared to supplement to meet cow requirements.
- Offer high magnesium mineral. Fall calving cows consuming rations low in energy and
 magnesium are susceptible to grass tetany; though not as much in spring. As cows transition
 from grazing to hay or silage, hi-mag minerals can be discontinued. Cows can also be
 susceptible to grass tetany when consuming cereal grain silages that are high in nitrogen and
 potassium.
- Use strip grazing as a tool to increase the efficiency of utilization of cool season pastures by cows after calving.
- Be mindful that harsh environmental conditions (cold temperatures, wind, ice, and mud) will increase nutrient needs of all cattle.

Herd Health

- Monitor calves closely for health issues, particularly scours and respiratory disease.
- Consult with veterinarian concerning vaccination protocol for calf crop.
- Evaluate lice control program and consult your veterinarian for recommendations.

Reproduction

- Remove bulls from replacement heifers after 45 day breeding season.
- Make plans to pregnancy check heifers as soon as possible after bull removal. This will allow for marketing of open heifers.

Manage bulls properly during the breeding season. Observe frequently to confirm breeding
activity and soundness, and monitor cows for repeat estrus. Avoid commingling mature and
young bulls, as older bulls will dominate younger bulls. As rule of thumb, yearling bulls should
be exposed to a number of cows equal to their age in months (i.e. run an 18 month old bull
with approximately18 cows).

Genetics

 Make plans for spring bull-buying season. Evaluate current herd bulls for progeny performance and soundness. Establish herd genetic goals, and selection criteria for AI sires and new herd bulls.

VIRGINIA SHEPHERDS' SYMPOSIUM PRE-REGISTRATION

DEADLINE - JANUARY 9, 2017

Complete separate form for each participant only if different addresses.

NAME	
ADDRESS	
CITY	
	ZIP
DAYTIME PHON	E
E-MAIL	
FAX	
ADDITIONAL AT	TENDEE NAMES (please list):

Name Adult/ Youth Beginner/Advanced

+ Credit cards are not accepted this year +

Please return with payment for registration (make check payable to VSPA) no later than January 9 to:

> Virginia Sheep Producers Association Dept of Animal & Poultry Sciences 362 Litton Reaves Hall (MC 0306) Blacksburg, VA 24061 Phone: (540) 231-9159

Fax: (540) 231-3010

LOCATION:

Alphin-Stuart Livestock Arena Plantation Road Blacksburg, VA

The Virginia Shepherds' Symposium is open to all sheep producers from the Mid-Atlantic Region. It provides in-service training opportunities for extension personnel, educators and other professionals in sheep and related agribusiness industries. Youth are an important segment of the sheep industry and are invited to attend.

MOTEL RESERVATIONS:

Holiday Inn Express & Suites – (540) 382-6500 2725 Roanoke Road, Christiansburg, VA ~12 miles (Right off I-81, Exit 118C) Rate: \$99 plus Tax

Rooms have been reserved at the hotel listed above. These rooms will be <u>held until January</u> 6, 2017.

Please state you are with the **Shepherds Symposium** when making reservations.

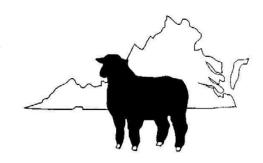
MOTEL RESERVATIONS ON YOUR OWN

Virginia Cooperative Extension programs and employment are open to all, regardless of age, color, disability, gender, gender identity, gender expression, national origin, political affiliation, race, religion, sexual orientation, genetic information, veteran status, or any other basis protected by law. An equal opportunity/affirmative action employer. Issued in furtherance of Cooperative Extension work, Virginia Polytechnic Institute and State University, Virginia State University, and the U.S. Department of Agriculture cooperating. Edwin J. Jones, Director, Virginia Cooperative Extension, Virginia Tech, Blacksburg, M. Ray McKinnie, Interim Administrator, 1890 Extension Program, Virginia State University, Petersburg.

If you are a person with a disability and desire any assistive devices, services or other accommodations to participate in this activity, please contact Dr. Scott Greiner, APSC at 540-231-9159 during business hours of 8:30 a.m. and 5:00 p.m. to discuss accommodations 5 days prior to the event.

*TDD number is (800) 828-1120.

VIRGINIA SHEPHERDS' SYMPOSIUM



January 13 - 14, 2017

Alphin-Stuart Livestock Arena Plantation Road Blacksburg, Virginia

> Pre-Registration Deadline January 9, 2017

> > Sponsored by:



Friday, January 13

- PM Alphin-Stuart Livestock Arena
- 3:00 Virginia Sheep Industry Board Meeting (Open to the public)
- 6:00 Virginia Sheep Producers Association Board Meeting (Open to the public)

Saturday, January 14

ADULT SESSION

- AM Alphin-Stuart Livestock Arena
- 8:30 Registration and Commercial Exhibits
- 9:30 Morning Session
 - "Making the Most of Your Forages" Dr. John Fike, Crop & Soil Evironmental Sciences, Virginia Tech
 - "Feeding Strategies for the Ewe Flock"
 Dr. Dan Morrical, Iowa State
 - "Dealing With Parasites: Where Are We Headed?"

Dr. Anne Zajac, VA-MD Regional College of Veterinary Medicine

Roy Meek Outstanding Sheep Producer Award Presentation

Virginia Sheep Producers Association Annual Meeting

12:15 Lamb Lunch

<u>PM</u>

1:00 "Update from ASI"

Mr. Bob Leer – ASI Executive Board-Region II Director, Kentucky

"What is the VFD and What Does It Mean for Sheep Producers?" Dr. John Currin, VA-MD Regional College of Veterinary Medicine

"Evaluation of Terminal Sires in Hair Sheep Production Systems"

Mr. Andrew Weaver, Animal & Poultry Sciences, Virginia Tech

"Economic Impact of Selection for Parasite Resistance and Growth"

Mr. Tom Stanley, Virginia Cooperative Extension, Rockbridge Co.

"Lambing Season Tips" Producer Panel

YOUNG SHEPHERD SYMPOSIUM

Youth Session will be concurrent with adult session. We will feature two concurrent youth sessions — <u>beginner and advanced</u>. All activities will be handson and interactive. 4H and FFA youth of all experience levels are welcome.

AM Alphin-Stuart Livestock Arena

9:00 Registration

9:30 Morning Session -

Animal Health Genetics Marketing Nutrition

12:15 Lunch – will be provided

 \underline{PM}

1:00 Selection and Evaluation

Mock Stockmen's Contest

3:00 Adjourn

Please denote if you plan on attending the youth beginner or youth advanced track on your registration form.

PRE-REGISTRATION INFORMATION

Received by January 9, 2017

SATURDAY SYMPOSIUM

-	\$25.00 FULL REGISTRATION (includes lunch, breaks, and
	proceedings)

 \$10.00 YOUTH FULL
REGISTRATION (includes lunch,
breaks, and materials)

TOTAL



ON-SITE REGISTRATION

After January 9, 2017

SATURDAY SYMPOSIUM

	\$30.00 FULL REGISTRATION
-	(includes lunch, breaks, and materials)
	_ \$10.00 YOUTH FULL
95	REGISTRATION (includes lunch,
	breaks, and materials)

_____ TOTAL

2017 VCA WINTER PRODUCER ECONOMIC OUTLOOK DISCUSSIONS

All Meetings are FREE to attend and include supper



Virginia Cattlemen's Association and Virginia Cooperative Extension, with support of Farm Credit, are pleased to sponsor meetings for cattle producers to hear a discussion of the economic situation in the beef cattle industry, supply/demand influencer price outlook for 2017.



Dr. Ron Plain, Professor Emeritus of Agricultural Economics with the University of Missouri, is a nationally and internationally renowned speaker and livestock marketing expert. He has long been a resource of the food animal industry and USDA for economic outlook, marketing strategy, and demand influencer planning.



5:30-8:00PM*

*Registration 5:00pm

Program: Dr. Ron Plain-Market Outlook, Supper, VCA Update, Cattle Price Forecast

<u>January 23</u> in Barboursville, VA at the Barboursville Fire Hall

January 24 in Abingdon, VA at the Southwest VA Higher Education Center

January 25 in Blackstone, VA at the Southern Piedmont Ag Research Center

Please <u>RSVP</u> to VCA office at: 540-992-1009 By January 20, 2016





Virginia Tech Beef Cattle Health Conference

Saturday January 28, 2017 8:00 am – 3:00 pm

Sponsored by the



and Virginia Cooperative Extension



- **8:15 8:45** Registration
- 8:45 9:00 Welcome
- 9:00 9:20 Dr. John Currin Veterinary Feed Directive (VFD)
- 9:20 9:40 Dr. Sierra Guynn Fly Control
- 9:40 10:00 Dr. Kevin Pelzer Pinkeve
- 10:00 10:15 Break
- 10:15 11:15 Andrew Griffith Beef Outlook
- 11:15 11:35 Morgan Paulette NRV VQA Program
- 11:35 1:00 Travel to Alphin-Stuart Arena for Lunch and Labs
- 1:00-3:00 Labs (20 minute rotations)
 - Dr. Terry Swecker Veterinary Feed Directive
 - Dr. John Currin Beef Cow Ration Balancing
 - Dr. Sherrie Clark Dystocia
 - Dr. Hollie Schramm Newborn/Cold Calf

Location: This course is being held at the Litton-Reaves Auditorium on the campus of Virginia Tech. The registration will be in the Litton-Reaves fover.

For more program information contact: Ralph Roop at 540-231-7344 or email at reroop@vt.edu

If you are a person with a disability and desire any assistive devices, services or other accommodations to participate in this activity, please, VMRCVM at 540-231-9041 during business hours of 8:00 a.m. to 5:00 p.m. to discuss accommodations 5 days prior to the event. *TDD number is (800) 828-1120.

Registration Form: Fee: \$10.00 per person, free to anyone under 18 **ALL attendees must register**
Registration includes lectures, laboratories, proceedings, and lunch on Saturday.

Attendance will meet the requirement for BQA recertification for those already certified in the Virginia Beef Quality Assurance program.

Please print or type – complete a se	eparate form for each participan	t
Name		
Address		
City		
State		
Daytime Phone Number	Email	
Amount Enclosed		

Make check payable to: <u>Treasurer of Virginia Tech</u>. Return form with payment by January 20, 2017 to: Ralph Roop

College of Veterinary Medicine 245 Duck Pond Drive Blacksburg, VA 24061



Lambing Management Tips

Scott P. Greiner Extension Animal Scientist, Virginia Tech

Investment of time and sound management practices pay dividends for producers during lambing time. The profitability of a sheep operation is largely dependent upon maximizing the number of lambs marketed per ewe exposed, while minimizing costs of production. Since most lamb deaths occur at or shortly after birth, lambing time is critical. The three primary causes of death of lambs around lambing time are difficulty during the birthing process, starvation, and hypothermia. Management practices at lambing time are essential for the economic viability of the sheep operation.

Dystocia (lambing problems) has been shown to be a significant cause of lamb mortality. Losses due to stillbirths and dystocia can be reduced by frequent visits to the lambing barn and timely assistance of ewes. Pregnant ewes should be checked every 3-4 hours. If ewes are checked at 11 p.m. or midnight it is not necessary to check again before 5 or 6 a.m. Ewes that will lamb between these times usually show signs at the late night observation. Ewes close to lambing will be restless and may try to claim other newborn lambs. Ewes in labor will normally separate themselves, and frequently choose a corner or area along a wall or feedbunk to nest and deliver. The lambing area should be dry and well bedded, and sources of cold drafts that will chill newborn lambs should be eliminated. It is not necessary to have a heated lambing barn- a dry, draft-free area is more important. The lambing process can vary considerably between ewes. Ewes in labor should be left undisturbed. However, once the ewe begins forceful straining and the water bags are passed, delivery should normally take place within 45-60 minutes. Once the front legs are visible, lambs should be born within 30-45 minutes. After the first lamb is born, subsequent lambs are normally delivered within 30 minutes. Prolonged delivery beyond these times may indicate lambing difficulty, and the ewe should be examined and assisted if necessary. Prior to assisting the ewe, the examiner should wash the ewe's vulva with mild soap and water. Likewise, the shepherd should thoroughly wash their hands and arms and wear an OB sleeve when assisting or examining a ewe. When assistance is required to deliver one lamb, the uterus should be examined for additional lambs. For lambs that are pulled, a piece of straw may be gently inserted into the nostril as an irritant to help stimulate breathing. Lambs that are delivered rear legs first should be gently shaken upside-down by holding the rear legs to allow fluid to drain from the lungs.

When possible, ewes should be allowed to give birth where they initially bed down. Moving ewes to individual pens when they start lambing may prolong the birthing process and cause other complications. Additionally, allowing ewes to complete the lambing process before moving them to jugs will keep the jugs drier and help prevent injury to lambs in multiple birth situations. Lambing jugs should measure at least 5 ft. x 5 ft., with a maximum slat spacing of 3 in. Large breeds and multiple births may require larger jugs. The environment of the jug is critical to newborn lamb health and survival. The jugs should be kept well bedded, dry, and free of drafts. For facilities with cement floors, a base of lime or sawdust/shavings is recommended under straw. Cement floors can be cold and damp, and therefore a source of chilling and pneumonia in newborn lambs. When feasible, lambing jugs should be cleaned between ewes. Feed troughs and water bucket should be suspended out of the reach of newborn lambs.

The first 24-48 hours after birth are a critical time for the ewe and her lambs. During this time, bonding occurs between the ewe and her lambs. The jugs also assist the shepherd in keeping a close eye on the ewe and lambs during this time. Upon moving the ewe into the jug, the lambs'

navels should be immersed in a 7% iodine solution. Iodine helps prevent infection and promotes drying of the navel.

Colostrum is the milk produced by the ewe up to 18 hours after birth. It has important nutritional value for the newborn lamb. Colostrum also contains essential antibodies that provide protection against certain diseases for the newborn lamb, and provides energy to keep the lamb warm. Newborn lambs are susceptible to hypothermia due to their large body surface area in relation to body weight, and relatively low energy reserves.

Lambs should receive adequate intakes of colostrum within 30-60 minutes after birth. To help insure this, the ewe's teats should be stripped to remove the wax plugs that frequently obstruct the teat. In some cases, lambs that appear to be nursing may not be getting milk due to these plugs. Stripping the teats will also confirm the ewe has milk. Lambs should be monitored closely to make sure they nurse. Lambs that have nursed will have a full stomach upon palpation. Crutching ewes prior to lambing will enhance the lamb's ability to access the udder, particularly with long-fleeced ewes. Lambs that have not nursed should be assisted. Most lambs have a strong suckling reflex shortly after birth, and will nurse when presented a teat. It may be necessary to close the lamb's mouth on the teat and/or squirt milk in the lamb's mouth to initiate suckling. An effort should be made to help the lamb nurse the ewe before other methods are used to get colostrum into the lamb.

In some cases, the lamb is unable to nurse the ewe even with assistance. These lambs may be small, weak, chilled, rejected by the ewe, or injured. In these cases, stomach tube feeding is necessary to get colostrum into the lamb. Lamb stomach tubes that attach to syringes are available commercially, and should be on hand for all shepherds. Lambs should receive 20 cc colostrum per pound of body weight. As a reference, 30 cc equals approximately 1 oz. Therefore, a 10 lb. lamb should receive 200 cc or about 7 oz. of colostrum in the first 30 minutes after birth. After the initial tube feeding, many lambs will respond and begin to nurse on their own. If not, the lamb may need to be tube fed 2-3 hr. after the initial feeding.

Source of colostrum for these cases is another important consideration. The first choice would be from the lamb's mother. If colostrum is not available from the ewe, another ewe that has just lambed may be a source. It is a good idea to freeze colostrum for future use from ewes that lose their lambs or ewes with singles that are heavy milkers. Colostrum should be pre-measured and frozen using ice cube trays or freezer bags. Frozen colostrum should be thawed with indirect heat (water bath), and not a microwave or direct heat as antibodies will be destroyed. In an emergency, goat or cow colostrum may be used. There are also artificial colostrum substitutes available commercially.

The ewe and her lambs need to be monitored closely the first few days after birth. Healthy lambs are content, and will stretch when getting up and wag their tails when nursing. A gant and weak appearance may be indicative of starvation. Check the ewe to be sure she has milk. In the case of multiple births, the smallest lamb may not be able to compete for the milk supply. Constipation can be a problem in newborn lambs if feces dry and mat down on the tail. Cleaning the area with a damp rag will alleviate this problem.

Time spent in the jug will depend largely on the number of jugs available and rate at which ewes are lambing. Strong, healthy singles may be removed from the jugs in 24-36 hr. after birth, and twins 48 hr. Triplets and ewes with weak lambs may need to stay in the jug for 3 days or more. Ewes and lambs should be removed from the jug as quickly as possible, as chances of pneumonia and diarrhea are greater the longer they are kept confined to the jugs. Labor requirements are also much greater when ewes are confined to the jugs.

Before turning out of jugs, pertinent information on the ewes and lambs should be recorded. Appropriate identification of the lambs (ear tags, paint brands, ear notches, etc.) should also be done at this time. The ability to match a ewe with her lambs can be very beneficial as a management tool. Thin, poor-doing lambs may indicate a health problem in the ewe (mastitis) or inferior milking ability.

Virginia is largely a Selenium deficient state. Deficiency of Selenium and/or Vitamin E causes white muscle disease in lambs. For prevention of this disease and all-around flock health and performance, the ewe flock should be provided a high-selenium complete mineral mix specifically formulated for sheep during gestation (fed free-choice). Additionally, lambs should receive supplemental Vitamin E and Selenium in the first few days after birth.

Upon removal from the jugs, ewes and lambs should be put into a mixing pen with 3-4 other ewes and their lambs. This will help acclimate them, and they should be closely observed to identify abandoned and rejected lambs. After a day or two, the ewes can then be put into larger groups. Lambing jugs should be cleaned and rebedded after each ewe and her lambs are removed. Even though the area may look clean, urine and manure in the pen will release ammonia, which is harmful to the newborn lamb's lungs and can lead to pneumonia.