

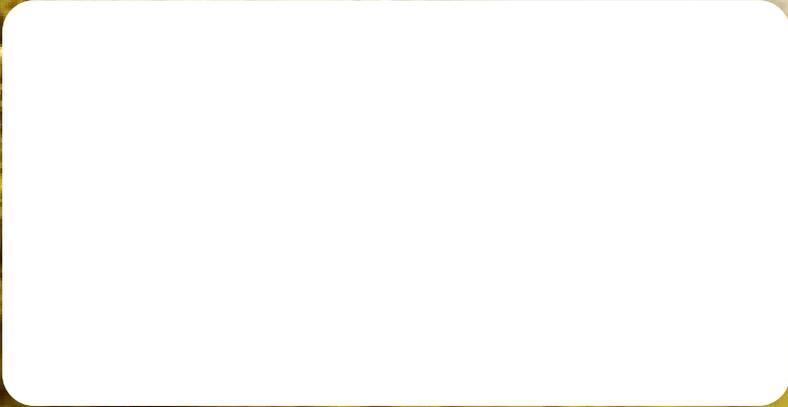
SINCE



1929

PRST STD  
U.S. Postage  
**PAID**  
Permit No. 80  
Staunton, VA

**AUGUSTA COOPERATIVE FARM BUREAU, INC.**  
1205B RICHMOND RD.  
STAUNTON, VA 24401



AUGUSTACOOP.COM / AUGUSTACOOPERATIVEFARMBUREAU / AUGUSTACOOPFB



**SMALL RUMINANT EDITOR**  
August 2022



1929



SINCE

# GET GOATS STARTED ON FEED FASTER AT THE FEEDLOT

It's off to the races as soon as newly weaned kids arrive at the feedlot. But any bumps in the road – big or small – during those first few days can put animals behind.

The biggest challenge goat feedlot operations face is getting animals in and getting them on feed. If you can get them eating right away and address any health issues, you can see a faster finish with more efficient growth and more pounds at market time.

**Start strong to finish strong by brushing up your receiving protocols with these tips:**

## SLOWLY RAMP UP ENERGY

The most important thing is getting newly arrived goats started on feed quickly, without disrupting their rumens and causing acidosis. The number one reason for acidosis in goats is by eating too much high-energy ration to start with.

If you're seeing problems with acidosis (indicated by diarrhea and loss of appetite), work with your nutritionist to adjust your receiving ration. Start with a low-energy, high-roughage diet with 80-90% forage for 7-10 days. Gradually increase energy until animals are on a high-energy diet that can maximize growth and get them to market weight as rapidly as possible.

Most animals haven't been exposed to any kind of supplemental diet other than forage before coming to the feedlot. Taking the time to get their rumen right from the beginning will pay off with more efficient growth later on.

## WATER, HAY...AND MORE WATER

Kids entering the feedlot don't know how to eat large quantities yet, and if the ration is too high in energy, they may not eat at all.

If animals are without feed long enough, their rumens can begin to shut down, and you could see higher death loss. One foolproof way to encourage eating is by providing hay and fresh, clean water immediately when animals arrive. Consuming hay will encourage animals to start searching for water, which in turn will encourage more feed intake.

To further support hydration, ensure multiple water sources are available and add an electrolyte to the water for the first several days.

## STOP COCCIDIOSIS IN ITS TRACKS

Animals arriving at the feedlot are at risk for the perfect storm of conditions that encourage coccidiosis in goats. The most common time for a coccidiosis outbreak is shortly after weaning. Compound that with the stress of transportation, warm temperatures and a new environment at the feedlot, and an outbreak is likely to happen.

Heading off coccidiosis before you see any visible symptoms is critical. Once symptoms show, the damage to the digestive tract is already done, resulting in reduced feed consumption, feed conversion and growth performance. And most cases of coccidiosis in goats are subclinical, with animals never showing outward signs of disease.

Adding a coccidiostat like Rumensin® or Deccox®, along with proper sanitation, is your first line of defense. If animals break with coccidiosis, work with your veterinarian to treat immediately and follow with B Vitamins, a probiotic and lots of roughage to help reactivate the rumen.

## SUPPORT HIGH-RISK KIDS

While most feedlots opt for a commodity blend ration, consider using a pre-made ration for high-risk kids. A pre-made ration can support faster growth and help address health issues, which can add more value at market and help offset the higher feed cost.

Pre-made receiving rations can be top-dressed on hay or mixed with commodity feeds to get weaned kids started quicker. And pre-made rations are usually pelleted to prevent sorting, which is especially important with medicated feeds where it's critical for animals to eat a full portion to get the right dosage.

A pre-made receiving ration can be fed for up to a month and slowly phased out as a more concentrated grain ration is introduced.

Set yourself up for success at market with a dialed-in receiving protocol that encourages feed consumption and supports optimal health.

*Clay Elliott, Ph.D.*

# CAPRINE ARTHRITIS ENCEPHALITIS IN GOATS: A DEVASTATING DISEASE

## WHAT CAUSES CAE IN GOATS?

Caprine arthritis-encephalitis (CAE) is now considered one of the most significant diseases affecting the goat industry in the United States. It is caused by a lentivirus, a type of retrovirus, which is a family of pathogens responsible for many immunodeficiency diseases in many species, and most breeds of goats are susceptible. CAE causes multiple diseases in goats: arthritis, pneumonia, mastitis and weight loss in adults, and encephalitis (inflammation of the brain and brain stem) in kids.

## HOW IS CAE TRANSMITTED IN GOATS?

The CAE virus is transmitted naturally in the neonatal period from an infected adult doe to the kid through consumption of colostrum and milk. Transmission from the pregnant doe to the fetus is a possibility, and there is evidence to suggest that CAE can also be transmitted directly from goat to goat, possibly through saliva and nasal secretions. Other suspected routes include urine and feces, semen, milking machines and failure to use clean instruments on each animal for tattooing, vaccinating, drenching, etc.

## WHAT ARE THE SYMPTOMS OF CAE IN GOATS?

The encephalitis form of CAE virus is most common in kids 2 to 4 months of age and is characterized by paralysis that may or may not progress to seizures or death. A common symptom of the disease is “head-pressing,” when the animal stands with its head pressed against a wall or other object. The arthritic form is most common and is seen in adult goats 1 to 2 years of age. Affected goats gradually lose weight and develop a poor hair coat and enlarged joints.

Early in the course of the disease, affected animals may show progressive and sometimes shifting leg lameness. However, as the disease advances, affected goats may walk on their knees and refuse to rise. A presumptive diagnosis can be made based on the history and clinical findings, taking into consideration the age of the animal and disease pattern. Serological tests are available for diagnosis and screening of herds.

## HOW TO MANAGE CAE

There are no known treatments for any of the clinical forms of CAE, and animals will not recover. Animals with mild cases of the arthritic form can be made more comfortable by providing regular, correct hoof trimming, providing easily accessible feed and water, and by long-term veterinary care. Animals with more severe cases should be considered for euthanization. All affected goats may be shedding the virus, and females will undoubtedly pass the disease to their offspring if bred, so serious consideration should be given to any decision to keep infected animals.

Before a control program can be instituted, the incidence of infection in the herd should be established using the serological test. If a herd is negative for CAE, it can be kept free of CAE by managing it as a closed herd and only introducing new genetic stock that have been tested free of CAE. Periodic herd testing for CAE should be performed to monitor the herd’s status.

In an infected herd, culling should be considered, as it is the only truly effective method of control. Kids should be removed from their dams before they are able to stand and suckle, and should be fed pasteurized goat colostrum and raised on pasteurized milk or milk replacer. Kids should also be kept separate to avoid contact with adults. Avoid densely stocking animals, keep all feed and water sources clean and uncontaminated, and keep premises as dry as possible.

Attention to the details of excellent management will help your herd avoid becoming a victim of CAE.

*Mikelle Roeder, Ph.D.*



# SELECTING AND RAISING REPLACEMENT EWES

## WHAT'S THE BEST WAY TO ESTABLISH A RETURN ON INVESTMENT FROM YOUR SHEEP OPERATION? START WITH STRONG, HEALTHY REPLACEMENT EWES.

But choosing and developing the right replacement females isn't an easy task – there are a lot of factors to consider that could impact the future productivity of your flock.

Set your flock up for long-term success with this advice for selecting and raising replacements:

### CHOOSING THE RIGHT REPLACEMENTS

Most operations begin selecting replacements at weaning. Weaning times may be different for different flocks, but keep in mind that the more time you give animals to develop, the easier it will be to spot a good replacement.

Consider these factors when selecting your replacements:

- Ewe and ram's pedigree and history
- Overall health and condition
- Easy-keeping animals
- Body structure (level top, level dock, sound mouth, correct set of feet and legs)
- Teat quality
- Weaning weights

Also consider your operation goals and where you want your flock to be in the future. Evaluate traits for both performance and profitability and consider any adjustments based on market demand.

### FEEDING REPLACEMENT EWE LAMBS

If you're going to invest money in supplemental nutrition for one area of your flock, we recommend focusing on replacements – they are the future of your flock. Following weaning, separate replacements from those going to market and implement a replacement feeding program designed to develop them into ideal breeding stock.

You want to provide enough energy and protein to keep them growing without getting over-conditioned. Feed a high-fiber, 16% protein diet to support lamb growth, maintain efficient feed conversion and body condition and avoid developing fat in the udders.

And, offer free-choice mineral, designed to support skeletal growth in replacement ewe lambs.

### PREPARING FOR BREEDING

Yearlings are often kept on a replacement feeding program until about ten months of age before turning back out to pasture and bred at around a year or year and a half. These animals are more accustomed to forage conditions, have reached nearly their mature size and are easier to breed. Continue offering free-choice mineral while on pasture to prepare animals for breeding.

For ewe lambs, timelines are much shorter. Ideally, ewe lambs would receive a few months on a replacement feeding program before moving back out to pasture to get bred at around 6-7 months of age. For those keeping ewe lambs on pasture at all times, provide additional supplementation a few times a day to prepare them for carrying lambs.

Body condition and overall size should be considered when identifying when ewe lambs are ready for breeding. If animals lack maturity, they won't cycle, and breeding may be delayed. Replacement ewe lambs should be 40% of their mature body weight at breeding.

### MANAGEMENT BASICS

Replacement ewes are set up to perform when implementing proper management practices. Remember the following when developing replacements:

- Follow a flock health plan under the guidance of a veterinarian. Adhere to label requirements for the proper timing of vaccinations and dewormers.
- Cover the basics, like shearing, trimming hooves and providing shelter against the heat and other inclement weather conditions.
- Keep a close eye on the flock and be ready to intervene if they show any signs of common diseases like coccidiosis.
- If purchasing replacements, make sure you know the health and management history. Quarantine new flock members for a minimum 7 days to avoid spreading disease.

Selecting replacements is a make-or-break moment for the future of your flock. But with a combination of sound selection practices, quality nutrition and proper management, your flock will be set up for long-term success.

# RESEEDING PASTURES

## INTRODUCTION

A productive pasture is contingent upon a good plan, careful management, and clear goals. Reseeding can be necessary to increase nutritional value, eradicate weeds, fill in bare spots, and improve the stand after disease problems or poor management. It is important to determine the reason behind the need for reseeding. For example, if perennial weeds caused a significant reduction in the stand then the weeds must be controlled before reseeding. Similarly, if soil pH or nutrient status is low then these need to be corrected. Successful reseeding depends on several factors; field characteristics, soil fertility, time of seeding, plant species selection, animal species being grazed, and grazing management style. A plant's adaptation to the pasture depends on winter hardiness as well as soil type, drainage, fertility, and pH. If all of these factors are considered and managed accordingly, then your pasture forage can provide all nutritional requirements for your grazing animals. A healthy pasture means healthier animals with better nutrition and fewer diseases and parasites.

## SITE SELECTION

The topography of the land, such as terraces or sloped and shallow areas and soil water holding capacity, greatly affects the success of seeding by limiting equipment access, and the application of amendments. Soil characteristics often differ with the contour of the land, greatly affecting the growth habits of the plant species in the pasture.

## SOIL FERTILITY

Soil should be tested to determine pH and fertility.

In pastures, the optimal pH range is 6.5-7.0. Add lime according to your soil test prior to seeding. Incorporation of lime is better for the reaction of lime in soil since time is needed for a significant change. It is recommended that lime be added 6 months to a year before the desired change in soil pH. Exploration of the soil for nutrients is confined mostly to the root zone in the surface one foot of soil depth. Certain nutrients (P and Ca) do not move much in soil and correction of these nutrients with fertilizer, manure and lime is best done before tillage.

## CHOOSING THE BEST MIXTURE

The most productive and highest quality pastures are those that contain a mixture of grass species with one or more legume species. When selecting species for pasture, it is important to understand both grass and legume growths habits and match them to the soil characteristics and climate. Fields have differing soil types, thus planting the same mixture in each field is not advised.

The following factors will influence your choice in forage species:

- The type and age of livestock to be grazed
- The time of year desired for pasture availability
- The seasonal distribution of pasture growth
- Soil type, drainage, water holding capacity, fertility, and pH

**Legumes-** provide much protein and compliment grasses improving the quality of the pasture. Legumes also add nitrogen to the soil nitrogen fixing bacteria making it indirectly available to grasses. Clover can add 90-140 lbs N/ac/yr, while alfalfa is capable of adding considerably more. In order for N fixation to occur, the legume seed must be inoculated with the correct bacteria, or it must be seeded into a previously inoculated field. Legumes may cause bloat in ruminants, so they should not be seeded alone for grazing.

**Grasses-** provide roughage for the animals, increasing their fiber intake. Adequate fiber is needed by grazing animals, however, if grasses are permitted to grow for long periods especially in spring they may become fibrous resulting in reduced animal intake and growth. Grasses, are either sod forming or bunch types. Sod forming and those that form many tillers compete better with weeds.

## CLIMATE CONSIDERATIONS

There are two categories of forage species: cool season and warm season species. Cool season pasture species include, but are not limited to, tall fescue, orchardgrass, perennial ryegrass, Kentucky bluegrass, white clover, red clover, and alfalfa. Some cool season species, such as alfalfa, red clover and reed canarygrass are active in the summer, except on hot dry days.

## METHODS OF PLANTING

Consider the erosion potential on every field. Different methods may be more appropriate for some fields than others.

**Till-** Sometimes referred to as conventional seeding, due to the specific tillage practices implemented such as plowing, disking, harrowing, etc. Tilling of soil allows for aeration, alleviation of compaction, elimination of existing vegetation and residues, incorporation of lime and fertilizer into the soil, and to provide a smooth surface for seeding and the occasional harvest. Take care not to destroy the soil structure by overworking the seedbed.

**No-till-** Helps to reduce soil erosion, conserve soil moisture, and reduces fuel and labor requirements. A specialized planter is required to assure good seed to soil. No-till performs best on sandy or silt loam soils. Planting in both directions in a grid can increase the stand density.

**"Frost Seeding"** can be utilized from February till late March. The alternate thawing and freezing of the soil with the addition of rain will help incorporate the seed into the soil. Red clover works well but grasses are not suited to frost seedlings.

## SEEDING RATE

The rate at which you seed depends on the species being planted, method and time of planting, climate conditions, type and number of grazing animals and intent of reseeding. Check with your agronomist for specific recommendations.

## TIME OF SEEDING

### Seeding legume into an existing grass pasture

Late winter/early spring- is the best time to seed legumes into an existing stand of grass that is productive. Seeding should take place in mid March to mid April depending on soil conditions and method of planting. An early seeding will aid in the competition with weeds and grasses. No-till and frost seeding are options.

### Seeding both legumes and grasses to eliminate existing species

Late summer/early fall- is considered the best time to seed if a blend of species will be planted. When seeding late in the summer, soil moisture tends to become an issue but weeds are less competitive. Time your seeding accordingly so that soil moisture is available.

## MANAGEMENT DURING ESTABLISHMENT

A strong root system must be established prior to grazing. The roots systems in perennial forages are where food reserves are stored. If the roots are not strong enough, then there are not enough reserves for the plant to survive winter. Therefore, animals should only be allowed to graze on well-established plants.

- Never graze new stands during wet periods, especially on tilled seedbeds.
- Test for root development by grasping a handful of desired plant material and tugging on it. If it is easily uprooted, then the root system is not sufficient established and another cycle of mowing and regrowth should be allowed.
- Do not graze plants lower than 3-4 inches.
- Graze only when soil surface is firm and dry.
- Implement rotational or intensive grazing management practices for efficient use of pastures.
- After grazing, pastures should rest for a period of 24- 30 days.

## WEED CONTROL

Controlling weeds in newly seeded pastures is one of the most important aspects of pasture establishment.

- Grow a companion crop such as oat to help prevent weed growth in spring.
- Increase seeding rate if weeds are expected.
- Apply broad spectrum herbicides, prior to no-till seeding.
- Rotationally graze and mow or clip pastures if needed to remove seedheads and ungrazed excessive growth. Never let weeds go to seed.
- Mowing- is a good weed management practice because it helps develop hardy root systems, suppress weeds, promotes uniform grazing, and removes pasture plants of low palatability. Take care not to mow too early. If preformed too early, only the tops of the weeds will be eradicated, leaving the active buds, which will produce new growth. Mow pastures at a height of at least 3-4 inches.

## CONCLUSION

Evaluate all pastures on a consistent basis to ensure proper management. Adopting practical and environmental management techniques will ensure productive and healthy pastures for a long time.

---

## EVENTS / CALENDAR

### FEED, ANIMAL HEALTH & FARM SUPPLY FALL BOOKING SALE

**AUGUST 15 - SEPTEMBER 3, 2022**

Take advantage of the huge selection and best prices of the season on all of your feed, animal health and farm supply products!

Contact your sales representative, store manager or feed mill to place your order.

Visit [AugustaCoop.com](http://AugustaCoop.com) for more details.

### BACK TO SCHOOL SALE SEPTEMBER 12-17, 2022

Staunton location only.

Great deals on the top brands on clothing, boots and accessories.

Visit [AugustaCoop.com/events](http://AugustaCoop.com/events) for details!

### CUSTOMER APPRECIATION OCTOBER 10-15, 2022

All store locations.

Visit [AugustaCoop.com/events](http://AugustaCoop.com/events) for details!

### SMALL ENGINE SALE & OPEN HOUSE

**AUGUST 26 & 27, 2022 | 8 AM – 5 PM**

Augusta Co-op Small Engine Shop  
(1205B Richmond Road, Staunton, VA - across from Sheetz)

Huge deals on SCAG, Husqvarna, STIHL and Oregon power equipment. Call or order ahead, or stop by to talk to our knowledgeable staff about all of your fall and winter needs. Vendors on-site.

### ROAD TO THE RING

**OCTOBER 8, 2022 | 8 AM – 5 PM**

Augusta Expo Coffey Pavilion (277 Expo Rd, Fishersville, VA 22939)

A hands-on experience designed for all 4-H/FFA Livestock Showmen. Presenters will inspire you to obtain the skills & techniques needed for success in the show ring! Become a better livestock showman, marketer, herdsman and learn the latest in nutrition and overall animal health.

**RSVP required at [AugustaCoop.com/events](http://AugustaCoop.com/events)**



**Exclusive**  
Ask for your Frequent Purchase Card at the register!



Augusta Co-op offers the industry's best quality water systems and replacement parts.





**NEW!**  
FLAVOR & GUT HEALTH ENHANCEMENT





**BEEF SHEEP**      **SWINE GOAT**





**FEEDING YOUR PASSION SINCE 1929**  
AUGUSTA COOPERATIVE FARM BUREAU, INC.

**PRODUCT**

Augusta Show Feeds have a strong tradition of building champions. From market steers and barrows, to goats and lambs, our award winning formulations add just the right amount of bloom and finish to your show animal.

Augusta Show Feed is produced from only the highest quality ingredients. Additionally, quality control remains at the forefront of our manufacturing excellence. Bringing together science and proven success is the foundation of our show feeds.

Augusta Show Feed – Feeding Your Passion Since 1929.

**RESULTS**

Science is everything. Our team of experienced nutritionists and industry experts closely evaluate each formulation providing you with nutritional perfection in each bag of Augusta Show Feed. Our brand delivers consistent, superior performance that will lead you directly into the winner's circle.

	PROTEIN %	FAT %	FIBER %
<b>BEEF FEED</b>			
SHOWPRO	13.0	4.5	9.0
SHOWPROH (NEW ITEM)	14.0	3.5	14.0
<b>SHEEP FEED</b>			
SHOWLAMB	18.0	3.5	12.0
SHOWLAMBPLUS	16.0	2.5	12.0
<b>GOAT FEED</b>			
SHOWGOAT	16.5	4.0	10.0
SHOWGOATPLAIN	16.5	4.0	10.0
<b>HOG FEED</b>			
SHOWPIG	19.5	6.0	40
SHOWPIG2	16.5	6.0	40

WWW.AUGUSTACOOP.COM

Augusta Cooperative Farm Bureau, Inc. • 1205B Richmond Rd. • Staunton, VA 24401  
p: (540) 885-1265 • f: (540) 885-5582 • augustawebadmin@augustacoop.com

# AUGUSTA CO-OP SPRAYING SERVICES

Focusing on large residential lawns, commercial property & small pasture applications.



## SERVICES

### WEED CONTROL

Regular applications of herbicides will help keep volatile weeds under control. Fence row spraying is also available.

### TOTAL VEGETATION CONTROL

Commercial or residential applications to remove all vegetation.

### SOIL SAMPLING

Test and monitor pH levels, soil moisture and soil quality.

### FEATURED CERTIFICATIONS

VA Dept of Agriculture & Consumer Services 1A Commercial Pesticide License  
Virginia Certified Crop Advisor



GET YOUR  
FREE QUOTE  
TODAY

Augusta Co-op Farm Bureau, Inc.  
Stephanie Cash - 540-885-1265 x 222 or  
Staci Alger - 540-885-1265 x 224  
AugustaCoop.com

ELITE



Buy 10  
Get 1  
FREE

## HORSE FEED

### Nutrition & Technology You Can Trust

#### BALANCED NUTRITION

with high quality feed ingredients to support overall horse health

#### FORMULATED BY EQUINE NUTRITIONISTS

with consistency and accuracy in every bag

### BUY 10 GET 1 FREE

Ask for a frequent purchaser card at checkout.  
Mix & match allowed.  
Earn now through December 2022.  
Valid at all store locations.



## 4<sup>TH</sup> ANNUAL

# AUGUSTA CO-OP 'ROAD TO THE RING'

A hands on experience designed for all 4-H / FFA Livestock Showmen. Presenters will inspire you to obtain the skills and techniques needed for success in the show ring! Become a better livestock showman, marketer, herdsman and learn the latest in nutrition and overall animal health.

## SATURDAY, OCTOBER 8, 2022

8 AM - 12 PM - HOGS & CATTLE

12 PM - 1 PM - LUNCH

1 PM - 5 PM - SHEEP & GOATS

## AUGUSTA EXPO COFFEY PAVILION - FISHERSVILLE, VA

RSVP REQUIRED - [www.AugustaCoop.com/events](http://www.AugustaCoop.com/events)