

In This Issue

Housing and Facilities for the Meat Goat HerdPage 1
Upcoming Events.....Page 2
Dallisgrass Poisoning Potential ...2
Southeastern Beef Cattle Marketing School Scheduled..... Page 2
Voluntary Scrapie Herd Certification Program for Sheep and Goats
Page 3
Selecting and Developing Purebred Replacement Heifers.....Page 4
MARKETING QUALITY CULL COWS
Page 5

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Housing and Facilities for the Meat Goat Herd

by: Jean-Marie Luginbuhl

Shelter

Meat goats require minimum shelter in comparison to dairy goats. Goats will seek shelter from rain, preventing them from foraging. During warmer weather, this may only cause discomfort, but in colder temperatures, goats in general should not remain cold and wet for long periods.

The goat's ability to withstand adverse weather conditions is strongly related to body condition. Goats in good condition, that is goats that have a fat layer under the skin, can withstand rain and cold weather without much problem if they have access to good quality forage. For example, at the NC State goat farm, replacement does on a small grain grazing experiment have had no shelter since early March of this year without any health problems. However, these animals are in very good body condition and have access to ample amounts of high quality forage. Young goats, on the other hand, are particularly vulnerable to respiratory infection and to hypothermia if they do not have access to shelter during rainy and cold weather. It is not uncommon that a combination of cold wind and rain and the occasional snow and sleet would cause losses of young animals. Thus, the

necessity for sheltering meat goats probably relates to the expected weather pattern in the area, the nutritional level and body condition of the herd, the physiological stage of the animals (dry does or does in early pregnancy, does in late pregnancy or lactating does) and the class of animals.

A sturdy shed, dry and open to the south, can usually provide adequate protection. Rear eave heights of 4' to 6' and front eave heights of 6' to 8' are adequate; 8 to 10 square feet per goat is desirable. Other references suggest 5 ½ square feet per goat. Goats also like to be in or near a shed during the night hours. If the facility is part of the farmstead, so much the better. Nearness to human activity plays a role in predator control. For feeding hay, grain or concentrate, 9-12 inches per goat of linear space is recommended. Troughs need to be easy to clean, prevent goats from urinating/defecating on the feed, and be accessible from both sides.

In the tropics or wetter climates, the type of goat sheltering commonly found is one with an elevated, slatted floor. This design protects goats from rain, allows air movement and reduces accumulation of urine and feces, which in turn, favors sanitation.

Kidding Facilities

Kidding during cold months may require shelter for the does and kids to

Con't to page 3 column 2

Upcoming Events...

For the year 2000

Sept. 8-17 [NC Mountain State Fair, Fletcher](#)

Oct 13-22 [NC State Fair, Raleigh](#)

Oct 22-25 [Southeastern Beef Cattle Marketing School, Clemson SC](#)

Nov 10 NC BCIP Forage Bull Test Sale

For the year 2001

Jan 6 Waynesville NC BCIP Bull Sale
Waynesville

Jan 13 Butner NC BCIP Bull Sale
Oxford

If I have left something out please let me know. Linda_Kern@ncsu.edu

Dallisgrass Poisoning Potential

by: *Dr. Matthew H Poore*

Many of you have probably noticed the large amount of Dallisgrass present in pastures throughout the Piedmont this year. I believe that this is a combination of dry weather the last several summers and the adequate rainfall this summer. Dallisgrass is a very high quality summer perennial grass which makes it a good thing, but it does have one drawback; Dallisgrass poisoning (also called Dallisgrass staggers).

When Dallisgrass gets rank old seedheads in late summer and fall there is always the chance that they will be infected with an ergot fungus, and when this is consumed by animals they can be poisoned. Affected cattle stagger around, shake and are nervous. They can go down but rarely die unless they fall in a pond and drown, or in some other way injure themselves. We usually have some cases in the fall, and this year could be a bad one because of the number of pastures that have rank growth and the amount of Dallisgrass present.

The infected seedheads have a very characteristic appearance and you should be familiar with how they look when you visit farms experiencing problems with their cattle. If infected seedheads are present they should be clipped before putting cattle in the pasture.

For more detailed information and photos of normal and infected Dallisgrass seedheads visit our web site at <http://www.ncsu.edu/forage>. The Dallisgrass publication is located at <http://www.ncsu.edu/forage/dallis.htm>.

Southeastern Beef Cattle Marketing School Scheduled

by: *Roger McCraw*

Livestock agents may wish to inform certain producers about the following educational opportunity.

The Southeastern Beef Cattle Marketing School has been scheduled for Sunday, October 22 through Wednesday, October 25, 2000. It is coordinated by Dr. Jim Rathwell of Clemson University and will be conducted at the Madren Center located in Clemson, SC. Enrollment is limited to 25 students. Registration is required by October 9, 2000. Tuition fee is \$250. Please contact Linda Kern (919-515-2761; Linda_Kern@ncsu.edu) if you need brochures and registration forms. For more information about the program, please contact Dr. Rathwell at 864-656-3475 or jrthwll@clemson.edu. Visit their website at: <http://cherokee.agecon.clemson.edu/school/>

1) Purpose

Southeastern Beef Cattle Marketing School is for beef producers who want a written marketing plan. The seminar's focus is market analyses and the development of an individualized marketing plan.

The seminar provides over 20 hours of hands-on instruction, including problem-solving approaches to case studies. Participants will develop a written marketing plan for their farm operation in 2000.

2) Seminar Topics

Target Price Analysis: - Developing marketing goals and objectives

Fundamental Analysis: - Using supply/demand estimates to develop market outlook/expectations

Voluntary Scrapie Herd Certification Program for Sheep and Goats

Jean-Marie Luginbuhl,
NC State University
Cheryl Jackson,
NCDA & CS, Veterinary Division

The APHIS section of the USDA, maintained by the Veterinary Division of the NCDA, offers a program to monitor herds and certify the scrapie status of the animals enrolled in the program. Any sheep or goat owner or manager may apply to participate. The program is designed as a cooperative effort established and maintained to:

- Reduce scrapie's occurrence and spread
- Identify herds that have been free of evidence of scrapie over specified time periods
- Contribute to the eventual eradication of scrapie

APHIS will perform inspections, provide guidance and education, collect and submit diagnostic samples in cooperation with NCDA, and maintain a records database. Producers will maintain their own records, make the animals and premises available for inspection, report scrapie-suspect animals to the officials and ensure that tissue samples are collected and submitted to the diagnostic labs.

The advantages of such a program include free testing, improved herd health and ability to sell your stock. ■



[Past EAH e-Newsletters](#)

Con't from page 1

assure kid survival. Temporary kidding pens 4 feet x 4 feet have been used by goat producers with much success. Does are placed in these jugs during kidding and for 3-5 days after kidding. This practice increases the bonding between doe and the new born, especially for the first-kidding does. In addition, it allows the producer to provide assistance if there are kidding complications. It also allows the producer to ensure that weak newborn kids get a sufficient amount of colostrum during the first 12 to 24 hours of life. After the kidding season, these pens can be taken apart and stored.

Working Facilities

A working facility will help operations like ear-tagging, vaccinations, medication (anthelmintics, etc.), counting, sorting, hoof trimming, etc.

Small operations can make do with a small pen, with some means of getting the goats into the pen. The pen should be sturdy, preferably solid-sided, and at least 5 to 6 feet tall. As goat numbers increase, the need for more elaborate working facilities arises. A basic working facility to handle larger numbers of goats is composed of a catch or crowding pen, a working chute, a "squeeze chute" or headgate, and a sorting (or cutting) arrangement of alleys, gates and pens used to separate the goats. The crowding pen should be half as long as the working chute and up to 12 feet wide at the open end. The working chute should be about ten feet long, 5 to 6 feet high, and 12 to 15 inches wide. Longer chutes tend to cause crowding and trampling at the forward end, and should be divided into sections with sliding gates. An adjustable chute will be advantageous to handle from small goats and kids to large bucks. Also, a series of canvas flaps suspended about halfway down into the chute keeps the goats' heads

down and eliminates riding. The sides of the chute should be smooth and solid. Ideally, for horned goats the chute should be tapered, with the top nearly twice the width of the bottom.

Goats should be handled quietly during working operations. Excess noise creates agitation, and may well cause goats to go over, under, or through whatever stands in the way, including the goats' owner. Women generally are better than men in handling goats, and will perform the jobs at hand in a manner that creates less stress. Goats do not flow as smoothly as cattle, tending to rush toward an actual or expected opening. Goats readily drop to the ground under crowding pressure and are at greater risk from trampling and smothering. ■

Con't from page 2...

A Look At Risk Management

Alternatives: - For livestock operations

Marketing Evaluating Tools:

- Understanding basis in the SE Forward contracting Futures/Options

Alliances and You: - A review of alliances and what they can do for beef production

Understand What We Produce: - An in-depth analysis of new feeder calf and live cattle grades

Analyzing Marketing Strategies for 2001

Putting the Plan on Paper

3) Faculty

The faculty consists of leading professors from Clemson University, Texas A&M University, Auburn University, University of Georgia, North Carolina State University,

University of Tennessee, and the University of Florida. Industry representatives and Federal cattle graders also are included on the faculty and involved in the development of the program.

The Faculty teaches livestock economics and fundamental market analysis and strategy development to agricultural producers in the southeast. These teachers are the best in the southeast. Their beef cattle research and extension programs have received many awards throughout the country. ■

Selecting and Developing Purebred Replacement Heifers

Roger L. McCraw
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Introduction

Selecting and developing replacement heifers is an important part of any successful purebred operation. Although 87% of the genetic improvement that occurs in a herd over five generations is due to the sires used, the remaining 13% that is due to female selection cannot be overlooked in an increasingly competitive seedstock industry. These proportions are calculated on a herd basis. It is elementary, but important to remember, that on an individual basis every great sire that had a huge impact on a breed received half his genetic makeup from his dam.

In discussing some of the many factors involved in selecting and developing replacement females that produce great progeny, the first step is to understand what is expected from the selected heifer. Next, focus on the desirable physical characteristics to look for in heifers. Then, consider how heifers should be fed and managed to maximize their contribution to the objectives or goals set for the herd.

Job Description for Replacement Heifers

There are certain expectations we should have for replacement females regardless of the goals of the herd they will go into—purebred or commercial. An efficient brood cow must begin her productive life by calving the first time by two years of age. She will calve each subsequent year within the calving season established for the herd. She will wean a calf that has at least an adjusted weaning ratio of 90 and fits within the other market criteria set for the herd. She will fit the environment in which she is expected to produce. Finally, she is expected to be productive for eight to ten years or more. The accuracy of selecting heifers at weaning time for this job is not very high, but careful selection does improve the chances of success. Nevertheless, female selection is an on-going process throughout the lifetime of the animal.

Weight

Generally, producers select the largest and heaviest heifer calves at weaning as potential replacements. Heifers must possess the genetic potential for growth and be out of heavier milking dams to reach heavier weights. Also, both weight and age are factors involved in determining when heifers reach puberty. The targeted breeding weight for heifers is 65% of their mature weight. The average weight of your mature cowherd is a good estimate of the mature weight for the heifer. Obviously, if your cows average weighing 1200 pounds, the target breeding weight for the heifers will be 780 pounds. Cautions in

continually selecting for heavier weaning weights are that birth weight, weaning weight, yearling weight, mature weight, and frame size are all positively correlated. Increasing mature size of cows increases maintenance costs and reduces stocking rate.

Each herd should have a set of criteria describing the type of cow considered ideal. With the tremendous rate of genetic change made possible by genetic evaluation, extensive use of AI, and embryo transfer, producers can quickly get cattle to the optimum size. Consequently, in many cases, they should try to maintain current levels of weight and size traits rather than continuing to increase. Often they are breeding for “average” performance. “Average” is considered bad, but perhaps we should de-stigmatize the term.

The ideal may be to select for the heaviest weaning and yearling weights possible within the constraints of a maximum frame size and mature weight. This method emphasizes rapid early growth.

Milk

“Average” level of production probably fits milk production more than any other trait in beef production today. In deciding on the optimum level of milk production, keep in mind that cows producing 20 lb/d versus those producing 10 lb/d require 30% more protein, 25% more energy, 40% more calcium, and 25% more phosphorus. A given set of resources will support 13% fewer cows that weigh 1,320 lb and produce 24 lb/d of milk at peak yield than 1,170 lb cows producing 18 lb/d.

Once you set the level desired, selection should be aimed at maintaining that level of milk production—not trying to increase it.

Carcass Traits

Producers of most breeds of cattle now have genetic evaluation data to permit selection for carcass traits. Due to the importance of these traits on the quality of product produced by

con't to page 5...

commercial cattlemen, purebred breeders should consider them. In most cases, the appropriate approach will be to cull from the replacement group those heifers that have the lowest evaluations for carcass traits but are acceptable otherwise. Given the fact that 50 to 60% of the heifers selected at weaning will be culled later for fertility or other reasons, little emphasis can be given to these traits in heifer selection.

Most breeders should consider two traits, percent retail yield and marbling. The other carcass traits, carcass weight, ribeye area, and fat thickness, will be selected for indirectly.

Structural Soundness

Sound structure is essential for cows to be productive for a number of years. The most important structural concern is the angle of the shoulder joint and the degree of set to the rear legs. The most serious leg and structural problems in cattle are too straight in the rear legs (a condition termed “post legged”) and too straight in the shoulder joint. The opposite problems are too much set to the hocks (a condition called “sickle hocked”) and too much angle in the shoulder. Although the latter are less severe problems, structurally unsound animals become lame earlier and more frequently.

Other structural considerations are the shape of the legs when viewed from the front or rear and the strength of the pasterns. These are illustrated for bulls in the drawings on the last page.

Body Capacity

Heifers exhibiting adequate body capacity or volume should be selected. Deeper ribbed cows with more spring of rib and a wider chest floor have more ability to consume large quantities of forage and are usually easier fleshing animals. During late gestation this ability is

important to allow the cow to store excess energy as fat. The fat reserves supply energy following parturition when milk yield peaks.

Muscling

Selected heifers should be adequately muscled. Muscling affects retail yield. Commercial cattle that are light muscled are discounted at the market. Replacement heifers should exhibit some thickness in the rear quarters and down their topline. See the illustration on the last page.

Nutrition

After weaning heifers should be fed to gain between 1.25 and 1.75 lb per day. Energy is the most limiting factor in many replacement heifer diets. Research has shown that heifers fed to gain at the rate of 1.5 lb per day reach puberty earlier than those fed to gain 0.5 or 1.0 lb/d. Higher gaining heifers also bred earlier in the breeding season and had higher overall conception rates.

Protein content of the diet can also affect the age at puberty. Developing heifers should be fed a diet containing 11 to 12% crude protein.

To achieve desired rates of gain and proper development of the heifer, be sure that minerals and vitamins are supplemented at appropriate levels.

Ionophores, such as Bovatec and Rumensin, alter the microbial flora of the rumen. They enhance digestion and may increase rate of gain. Often it will be economical to include them in the feed for growing heifers since ionophores increase feed efficiency.

Under no circumstances should purebred heifers be given growth implants.

Management

Feeding management may affect

growth rate, and consequently the age at puberty, as well as feed costs for developing heifers. Heifers must be fed separately from older animals. Splitting replacement heifers into two feeding groups based on weight can result in a 20 to 30% increase in cycling and conception rates among the lighter group of heifers.

Growing heifers must be on a good, effective internal and external parasite control program. Parasites reduce gains by both decreasing feed intake as well as decreasing utilization of nutrients. If weaned heifers are going into dry lots for feeding, deworm them when they go in. If they are kept on winter grazing, they should be dewormed at weaning. A second treatment, depending on product used, may be needed in December or January. It is important that the product used be effective against arrested larvae. During spring grazing, heifers should be dewormed at turnout and then at intervals dictated by the product used.

Conclusion

These are brief descriptions of some of the more important factors to consider in selecting and developing purebred replacement heifers. Paying attention to these factors will ensure a herd of productive cows that will produce eight to ten superior calves during their herd life.

MARKETING *QUALITY* CULL COWS

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Every cow herd periodically has a cow(s) that needs to be removed from the herd for the herd to remain profitable. Approximately half of the cows slaughtered in the United States are beef and half

Con't to page 6...

Con't from page 5...

are dairy. Beef cows are commonly culled because of failure to raise an acceptable calf each year and dairy cows for failure to maintain an acceptable level of milk production. Both may be culled for failure to breed back, physical problems, injury or disease.

These culled slaughter cows make a significant contribution to the total beef supply in this country. They make up approximately half of the total non-fed beef consumed, including imports and approximately 75 percent of the domestic non-fed beef supply. From an economic standpoint it is important to keep in mind that the sale of culled cows and culled bulls accounts for 15 to 20 percent of a beef cattle producer's annual revenue. Therefore, producers should pay considerable attention to the health and quality of the culled cows and bulls they market in order to realize the maximum profit potential that can be obtained from the sale of these cattle.

It is the responsibility of each producer that markets culled cows and bulls to insure this meat is free of quality defects and drug residues. The recommended injection site procedures are just as applicable to cows and bulls as for calves. Give injections in the neck area where the lower price cuts of meat or located. Administer injectables according to label recommendations, subcutaneously when possible, and no more than 10 cc per injection site in the muscle to avoid tissue damage and abscesses when possible. Avoid bruising cattle when working, loading or hauling them. Dehorning and eliminating sharp, protruding objects will decrease the incidence of bruising.

Withdrawal recommendations of health products before slaughter should be observed. Reading label directions and keeping accurate records will prevent

accidentally marketing an animal with drug residues. This can be a costly offense. When pregnancy checking cows to determine candidates to cull this should be accomplished before administering health products. This not only saves the cost of the product but also allows you to go straight to slaughter with the culled animals and not have to maintain them for the withdrawal time.

When you detect an animal with a physical problem, such as cancer eye, stifled, arthritic joints, prolapsed, etc., that you do not believe will get better, then the quicker you can market them (observing withdrawal times), the better. They should be marketed before they become too emaciated and possibly non-ambulatory, commonly referred to as downers.

It is the responsibility of every producer, beef or dairy, to market culled animals in a timely, health conscious manner. We must maintain a good image of the beef cattle industry by the consuming public and each producer must do his or her part. ■