### **Breed Basics**

The decision about which breed/s of goats or sheep to raise is made easier if your farm production goals (i.e. meat, breeding stock, and/or milk) are kept in mind. There are many breeds of sheep and several breeds of goats to choose from in the United States. Below are some simple breed selection tips for beginners.

- > Know your market before selecting a breed or breeds choosing a breed that does not sell easily or has a low selling price will negatively impact profits.
- > Consider how to find replacement or new breeding stock. If the breed is rare, or not raised in your area, improving genetics and avoiding inbreeding could be a challenge.
- > Research breeds before buying animals; there are plenty of websites with information about breeds and experts you can contact at County Extension Offices or Land-Grant
  - · Beware of believing everything a breeder or seller tells you about a specific breed - no breed is perfect.
  - Choose a breed or breeds for crossbreeding that will work best in your system, based on your market/s, resources and skills.
- > Consider crossbreeding. For commercial meat production, crossbreeding with two or more different breeds is generally the most profitable.
  - · Females can be a lower input, maternal breed or crossbreed that needs less intense care; these are usually less meaty
  - · Males can be a fast growing breed with heavier muscling (for meat); these usually, but not always, require more inputs
  - Examples of some common breeds used in commercial meat production crossbreeding systems include, but are not limited to:
    - Hair breed type female sheep such as Katahdin or St. Croix with black-faced type males such as Suffolk or Hampshire.
    - > Spanish or Kiko type female goats with Boer or Savanna
    - > Breeds for dairy, fiber or dual purpose systems that complement each other and fulfill farm goals/market
- > Understand that breeds with fiber (i.e. wool) require shearing at least once a year, even if they are raised for meat only. Make sure someone is available to do this task. Determine what will be done with the fiber, including if there is a market for your animals' fiber type and quality.









- > Realize that if you are going to raise purebred or fullblood animals, especially if they are registered (papered), proper selection of breeding stock is critical for marketing.
  - Learn the breed standards for registration, and only buy animals that meet the standard.
  - Learn about conformation (how the animal is put together); this can impact animal marketability and selling price.
  - Know the show history of the parents and/or offspring if you intend to show or sell show stock. Realize that to sell show stock, showing (and winning) is important; this can get expensive.

For more information, contact your local County Extension Office or Fort Valley State University Cooperative Extension program (478-825-6296).

> Created by Dr. Niki Whitley, Animal Science Specialist Fort Valley State University Cooperative Extension Developed August 1, 2016, updated March 14, 2018

REVIEWED BY: Dr. Dahlia O'Brien, Virginia State University, Dr. Kwame Matthews, Delaware State University, Dr. Lawton Stewart, University of Georgia, Paula Burke, University of Georgia, Carroll County Extension, and Sara Beth Routh, North Carolina State University, Randolph County Extension

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845-6136 (in Spanish) Persons with disabilities who wish to file a program complaint, please see information above on how to contact us by mail directly or by email. If you require alternative means of communication for program information (e.g., Braille length) using the please contact USDA through the Federal Relay Service and (800) 677-8339 or (800).

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# **Breeding Stock Selection Basics**

Breeding stock are male and female animals you select to breed for offspring that you will sell or keep. Below are some introductory level tips for choosing breeding stock to buy or to keep from your own herd or flock.

- > In general, beware of buying breeding stock from sale or auction barns; animals grouped from different farms are more likely to share diseases and some animals are sold through multiple sale barns. It is preferred to purchase breeding stock from reputable breeders or special breeding stock sales with animal guarantees.
- > For purebred breeding stock, carefully note breed characteristics and registration status before purchase, especially if registration or purebred marketing is desired.
- > It is a good idea to purchase animals from farms with owners or managers that:
  - · Have similar management styles and resources as the buyer
  - · Raise the animals in the same environment as the buyer
  - Keep production and health records for viewing
  - Have healthy animals in good body condition
- > Males provide genetics to all offspring, so follow strict selection guidelines for them and replace them regularly to make the most genetic improvement.
- > Some selection guidelines include choosing female and male animals that:
  - Were born and raised as at least twins; parents were born and raised as at least twins
  - Had acceptable growth rates (heavy weaning weights, good post-weaning growth compared to their peer group)
  - Have proper overall body structure/conformation (dental pad and teeth meet evenly, no extreme sway or dip in back; legs not crooked), especially if purchasing expensive show/ purebred stock
  - · Have two normally shaped teats; no fish/fused teats; no small, non-functioning teats
  - · Are apparently healthy (no abscesses/bumps, lameness, runny nose, swollen joints, scabs on face or legs, diarrhea/ scours or pale eyelids)
  - · Do not have malformed hooves
  - Do not need to be dewormed often (based on records)
  - · Are not aggressive towards people
- > Select males that also:
  - · Have strong male features and behavior
  - Have two testicles descended into the scrotum that are normally sized for their age with no swellings, bumps or scar tissue









- Do not have a split scrotum over one inch
- · Passed a breeding soundness exam and/or is a proven breeder
- > Select females that also:
  - · Are no more than three years old
  - · Birthed and raised healthy twins every year since they were two years old
  - Have a well-formed and well-attached udder (does not hang low to the ground) with no swellings, bumps or scar tissue
  - · Have normally formed teats that are not too large for newborn kids
  - Never prolapsed (uterus, vagina or rectum came out of the body)
  - · Have a deep body for carrying kids
- > When purchasing animals, do not forget to quarantine them away from the existing flock or herd for at least 30 days.
- > There are blood tests available for goats and sheep; some farms may test regularly so they can be certified free from certain diseases (i.e. CAE, CL, Johnes).

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Created by Dr. Niki Whitley, Animal Science Specialist Fort Valley State University Cooperative Extension Developed February 6, 2016; updated March 15, 2018

REVIEWED BY: Dr. Lawton Stewart, University of Georgia, Paula Burke, University of Georgia, Carroll County Extension, Dr. Dahlia O'Brien, Virginia State University, Dr. Kwame Matthews, Delaware State University, and Sara Beth Routh, North Carolina State University, Randolph County Extension

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## **Feeding Basics**

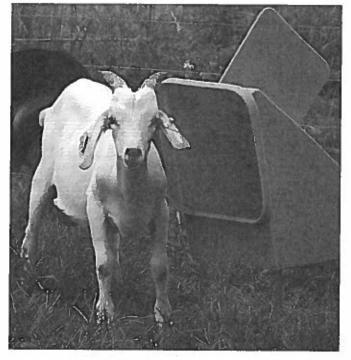
Goats and sheep are ruminant animals with a four-chambered stomach made for digesting forages like pasture, forbs/weeds, browse (brush/shrubs) and hay. However, forages may not always meet animal needs. The following information provides some basic tips for feeding goats and sheep.

- > Excellent pasture and animal management is required for pasture-based systems, but supplemental feeding will probably still be needed at some point.
- > Management tips include:
  - Manage animals in groups by age or production status for nutrition and health reasons.
  - · Use integrated parasite management for multiple methods of worm control.
  - Do not over-graze three to five adults per acre of good forage is a good starting number.
  - · Rotationally graze for the best forage quality or to maintain browse; as forage matures, quality goes down.
  - · Mow pastures as needed to maintain forage quality.
  - Graze at no less than four inches of forage height for parasite
  - · Use browse/wooded areas when available for goats; sheep will eat weeds and some browse but generally like to graze.
  - · Soil sample and fertilize pastures based on forage needs.
- Some animals need extra protein and/or energy, usually given as a grain-based feed or supplement:
  - Young animals (less than a year of age) need more protein and energy.
  - Feeding extra energy to females from two to four weeks prior to breeding to two weeks after may help increase number of offspring born.
  - · Females in late pregnancy (four to six weeks prior to giving birth) and those nursing offspring need more energy; the more offspring nursing, the more energy needed.
- > Loose, not block, minerals made for your species should be available at all times; give sheep only minerals (and feed) made for them due to issues with copper toxicity.
- > Fresh, clean water should be available at all times; individuals will drink up to 4 gallons a day.
- > Water testing for high mineral levels may be warranted, not just for copper (sheep), but for minerals that can block copper uptake like iron and zinc.
- > Do not feed directly on the ground; keep feeders clean.









- > Provide plenty of feeder space when feeding hay or grain, a basic guideline is 8-18" per animal.
- > Learn how to identify high quality hay and ask for hay nutrient test results.
- > Learn about and use body condition scoring (scores of 1 to 5 with 1=too thin and 5=obese):
  - It is best to feed for scores between 2 and 4 with no less than 2.5 preferred. Animals with lower body condition scores should be monitored for health status and have feed levels adjusted.

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> Created by Dr. Niki Whitley, Animal Science Specialist Fort Valley State University Cooperative Extension Developed June 10, 2016; updated March 15, 2018

REVIEWED BY: Dr. Lawton Stewart, University of Georgia, Sara Beth Routh, North Carolina State University, Randolph County Extension, Dr. Kwame Matthews, Delaware State University, Dr. Dahlia O'Brien, Virginia State University, Paula Burke, University of Georgia, Carroll County Extension

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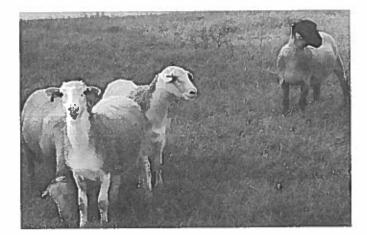
# **Breeding Basics**

In most areas of the U.S., goats and sheep are seasonal breeders. Although breeding activity is higher in the Fall/Winter (short days), animals may breed at other times with lower fertility and fewer offspring born. If males are kept with the females year-round, proper animal management is challenging. It is difficult to feed properly when animals of all ages - babies, yearlings, and adults - as well as production statuses - not pregnant, pregnant, and nursing - are all housed together. In addition, vaccinating properly would be difficult, if not impossible, and managing for differences in how easily they get parasites (worms) cannot be accomplished. Therefore, a controlled breeding season, or only putting the male in with females for a set time period, is recommended.

- > A controlled breeding season (i.e. goats 40-45 days, sheep 35-40 days) allows a producer to:
  - · Determine the time period in which offspring are born to better schedule time, labor and resources.
  - · Schedule birthing so animals are ready to be sold around the time of popular holidays or for certain markets - most buyers like large groups of animals that are similar sizes.
  - Schedule health management procedures such as prebirthing vaccination and deworming checks; females at the time of birthing and offspring at weaning are more likely to
  - · Determine which adult females and offspring to keep for breeding and which to remove from breeding herd (cull).
    - › It is easier to keep records for breeding and birthing, and you can detect reproductive problems sooner if you know when breeding should occur.
    - › Animals born at different times will perform differently, so comparing offspring born at different times may not allow you to select those with the best genetics.

#### Before breeding:

- · Make sure females and males are in good body condition (use body condition scoring)
- · Deworm if needed, trim feet and check for issues (udder problems or other reasons to cull)
- · Decide how you will handle birthing and nursing periods examples of things to think about: shelter for winter, shade for summer, more parasite issues with late spring/summer born offspring, feeder space, and pens for animals that need help during birthing
- Decide on your market and schedule breeding to have offspring ready for that market; note that it is often more profitable to market at, or soon after, weaning



- Set up breeding pens considering one mature male per 20-30 females or one young male (at least eight months old, prefer at least a year old) per 10-15 females; could stagger breeding groups with a very large herd (100+) to start a new breeding period every 30 days
- Consider feeding extra energy two to four weeks prior to breeding and two weeks after to increase chances of twinning (1-1.5 lb/head/day of a high energy diet); this is called flushing.
  - > Pastures or forages that have been nutrient tested as having high energy might be used for this purpose
  - > This works best for animals that are not already in excellent body condition and/or are not already on a high plane of nutrition

Reference: UNP-0117, ACES, Controlled Breeding Season Management for Meat Goats

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### **Hoof Care Basics**

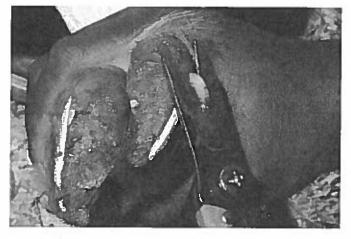
Hoof care is an important part of goat and sheep production. When trimming hooves, the bottom of the hoof should be trimmed flat and at the same angle as the top of the hoof at the hairline; the toe often needs trimming more than the heel. Both halves of the hoof should be the same length; the inside between the two toes should be trimmed. Avoid causing the hoof to bleed by trimming a little at a time and stop if you see pink. Below are some tips about hoof health and hoof care.

- > Hooves usually require regular trimming, with some animals naturally needing it more often than others (from every two weeks to every 12 weeks or more).
  - You can select and breed animals that rarely need hooves trimmed (i.e. one to two times a year or less)
- Living conditions can change how often trimming is needed.
  - Animals in rocky or sandy pastures may need it less
  - · Obese animals or animals fed high levels of grain-based feed may need it more
  - Concrete blocks or shelters with slanted sides covered with asphalt roofing shingles or metal concrete lathe for animals to climb may reduce the frequency of trimming
- Look out for the following possible hoof issues:
  - Hoof scald or rot avoid buying it!
    - Common in both sheep and goat industries nationwide
    - > Caused by bacteria that do not like oxygen and spreads in wet, muddy soils; keeping feet trimmed and dry helps
    - Symptoms include lameness and rotten-smelling feet; with foot rot, there can be pus, sores and maggots; those with scald may just have moist, red areas between the toes
    - Treatment: foot baths (zinc sulfate or others), hoof trimming, antibiotics (work with a veterinarian)
  - · Founder or laminitis
    - > Laminitis is swelling under the hard walls of the hoof, causing pain and lameness
    - › As with horses, the hoof can get thick and overgrown (founder) after the laminitis event
    - Possible causes include sudden or major changes in the diet (i.e. too much grain or fresh grass) or severe bacterial infections
    - Treatment: for painful hooves, soaking in cold water may help and pain relieving drugs may be used (see veterinarian); vigorous hoof trimming of overgrown hooves is needed

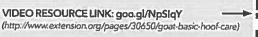








- Shelly hoof
  - > Caused by issues with the white line (where the soft and hard part of the hoof meet); these parts separate and a pocket of air forms
  - > Symptom: usually only see the pocket of dirt between the hard and soft part of the hoof
- Treatment: trim out the pockets to avoid infection like foot/hoof scald or rot
- · Hoof abscesses or granulomas are possible, but these are not common





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> Created by Dr. Niki Whitley, Animal Science Specialist Fort Valley State University Cooperative Extension Developed February 6, 2016; updated March 15, 2018

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## Starting an Enterprise

Small ruminants are popular livestock, but as with any enterprise, prior planning is important. The following tips may offer some assistance.

- > Establish and evaluate short and long term goals.
  - What is the objective: a lifestyle choice, a business to pay for itself or support of a family? Keep these in mind as the desired type of operation is considered.
  - · What is your goal timeline?
- Learn about the types of operations available, pros and cons of each and resources needed; this can help determine if a specific enterprise will assist in meeting your goals.
  - Talk to farmers, University Cooperative Extension faculty/ staff, Georgia Department of Agriculture, and local and state USDA personnel to get this type of information.
    - Attend workshops, seminars, farm tours, field days, and other educational events in the area of interest.
    - Include local marketing and sales in your information search, not just production.
  - Volunteer to work on farms to gain experience; this will help determine if your interest is maintained and also helps prepare for farm ownership.

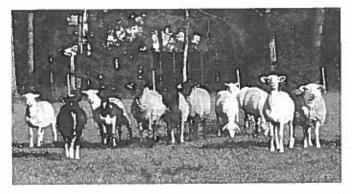
#### > Evaluate your resources:

- Labor it is good to confirm that someone is willing to help; clarify how much time they are willing to invest and what type of assistance they are willing to provide; interns, hired labor or share croppers are possible other labor sources.
- Land Do you have enough for the operation under consideration and perhaps to expand for later? If no land is owned, is there land to buy or lease in the desired area?
  - Land link websites/organizations for leasing, purchasing, partnering, as well as real estate agents, agricultural organizations and others can help.
  - Internships/apprenticeships, farm worker positions with housing, share cropping type arrangements and other opportunities can be considered.
- Capital do you have money to purchase (or can you borrow) the resources that you do not already have such as equipment, shelters/barns, hay/feed storage, fencing, water (wells), and farm insurance?
  - Governmental programs can provide low-interest farm and operating loans as well as cost-share programs for some of the resources you may need.
  - Grants are not available for starting a farm; consider possible investors.









- Business management: It is important to focus on farming as a business.
- A business plan is important to evaluate the possibility of success and to apply for funding; U.S. Small Business Development Centers or the USDA Farm Service Agency can assist
  - A USDA Farm Service Agency farm number is required for participation in governmental assistance programs; check your local office to determine if one already exists for the property.
  - Talk to a knowledgeable accountant about how to set up your farm business for tax purposes.

#### > Possible Resources:

- USDA New Farmers Website newfarmers.usda.gov
- UGA Center for Agribusiness and Economic Development caes2.caes.uga.edu/center/caed
- University of Florida IFAS, Choosing a Small Farm Enterprise - edis.ifas.ufl.edu/hs338
- Cornell University Beginning Farmer Resource links smallfarms.cornell.edu/resources/beginning-farmer
- Fort Valley State University County Staff ag.fvsu.edu/ index php/extension/county-agents-and-program-assistants

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> Created by Dr. Niki Whitley, Animal Science Specialist Fort Valley State University Cooperative Extension Developed January 22, 2017; March 15, 2018

REVIEWED BY: Marc Thomas, Fort Valley State University, Paula J. Burke, University of Georgia, Carroll County Extension, Sara Beth Routh, North Carolina State University, Randolph County Extension

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