



# Sheep and Goat Basics

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OKLAHOMA COUNTY  
EXTENSION

# Urban Agriculture and Natural Resources

**Josh Campbell**



## **Programs**

- Natural Resources
  - Composting
  - Water Quality
  - Recycling
  - Soil Health
- Urban Agriculture
  - Vegetable Gardening
  - Farmers Markets
  - Backyard Poultry
  - Small livestock
  - Beginning Farming





# Basic Sheep and Goat Terms

## Sheep

Male Sheep = Ram

Female Sheep = Ewe

Young Sheep (generally under 1 year) = Lamb

Group = Flock

Castrated Males = Wethers

## Goats

Male Goat = Buck (Buckling)

Female Goat = Doe (Doeling)

Young Goat (generally under 1 year) = Kid

Group = Herd

Castrated Males = Wethers

# So you want to raise sheep or goats??

## Considerations:

- Do you have the time?
- Do you have the space?
- Does your municipality have ordinances restricting it?
- What is your purpose?



“They sure look cute, but how much work will it really take?”

# What are your goals?

- Hobby or homestead
  - Showmanship (FFA, 4-H, County Fair)
  - Farm Business
- 
- Be clear with your goals before getting animals so that you set yourself up for success.
  - Use OSU Extension as a resource to help you with your goals.



# Hobby and Homestead

- Hobby or homestead animals are popular and can be a fun activity for the family, supplement food or bring in small amounts of income.
- Sheep and goats can make great animals for hobby settings
- Goat milk is popular for consuming or processing into soaps and other products.





# Resources

- We have lots of resources available for hobby farming
- You can access resources online or through our county Extension office. Or at **Facts.okstate.edu**

More Details at the end of this presentation

OKLAHOMA COOPERATIVE EXTENSION SERVICE ANSI-8202

 **Backyard Flock Production**

Dana Zook  
Area Livestock Specialist

OKLAHOMA COOPERATIVE EXTENSION SERVICE NREM-965

 **Moving to the Country?**

Marley Boom  
Assistant Extension Specialist

A relaxed pace of life, pretty scenery, and good neighbors can make you glad you are putting your roots down in rural Oklahoma. Unfortunately moving to the country does not always work out as smoothly as we might wish. This fact sheet is designed to help you get a good start and avoid the most common pitfalls faced by newcomers.

**Your Home in the Country**

Whether you buy or build, there can be unpleasant and expensive surprises if you do not proceed carefully. Keep in mind that there are generally no regulations on building and land-use practices in rural areas.

The following checklist may help you avoid some serious potential problems:

**Flooding**

- Areas along creeks and rivers are often beautiful but prone to flooding. Be wary of flat areas along creeks and rivers. Flood plains are best left as farmland or to natural vegetation and not used for buildings.
- Sometimes flood-prone areas are not obvious. They may result from blocked or under-sized culverts downstream. Even a dry branch can flood occasionally. Ask the neighbors – they usually know the flood-prone areas.

**Fire**

- Educate yourself about the threat of fire to countryside homes by reading the information at [www.firewise.org](http://www.firewise.org).
- Brush or tall grass close to a house can pose a serious fire risk. Be especially wary of eastern redcedar trees. Contact local fire authorities for recommendations on how wide a zone to keep cleared around your home.
- How many minutes is it from the nearest fire department? Many rural fire departments require membership and annual dues for an emergency call.
- Is fire insurance available and affordable? Many insurers will not issue fire coverage on properties if fire protection is more than 5 miles away.
- Is there water available to fight a fire? For farm fire protection, consider providing 20 gallons per minute (gpm) at a pressure of 60 pounds per square inch (psi).

**Security**

- Are there friendly neighbors to help keep an eye on your place? Or is the house out of sight with easy road access for thieves? Many people believe the best security lies in having a home that is visible from a well-traveled road, but set back some distance from the road.
- Trespassing hunters and mailbox vandalism are a problem in many areas. Ask the neighbors!
- Security lighting sometimes makes things worse by creating glare that discourages looking at an area.

**Resale Value**

- Is it "too much house for the neighborhood?" Find out the average size and price of homes in the area. Do not build too expensive a home unless you are prepared to stay a while or take a large loss when you sell.

**Termites**

- These costly insects are attracted to any wood in contact with the ground. Get a good inspection and do not stack firewood against the house.

**Critters**

- Gophers, moles, tortoises, and snakes are part of the natural environment. You are moving into their neighborhood, so be prepared to meet them! Initial impressions are often wrong: tortoises are harmless, but "beautiful deer" can destroy gardens and ornamental plants.

**Water**

- Silly as it sounds, some people have bought land intending to build a home only to find out that there is no water. If there is rural water, supply is assured, but the cost may be higher than you expect. Private wells introduce the problems of quantity and quality.
- Does the well yield enough? A four-bedroom home with two bathrooms should have at least 14 gpm that can be sustained for two hours. For more information ask to see Midwest Planning Service publication no. 14, "Private Water Systems Handbook" at the county Extension office – it is in the Water Quality Reference Notebook.

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vents should be placed on sides away from prevailing winter winds; the south or east side is best.

In some cases, there may be buildings on the property that can be altered or renovated for the poultry enterprise with a minimum expense. Depending on bird size, space requirements for laying hens will be 1.5 to 2 square feet per bird inside the house. Broilers need slightly less room at 1 square foot per bird.

The type of construction does not need to be elaborate or highly sophisticated. However, some backyard producers with limited space prefer pre-designed coops, such as the one shown below.

The poultry house can be used throughout the entire life-span of the chickens. For the producer who intends to keep chickens for egg production, but intends to start each new flock with day-old chicks, two houses will be necessary. Separate housing is needed because it is not recommended that birds of significantly different ages be housed together. This is important from a disease standpoint and because different ages require different temperatures, feed and space. To maintain continuous production, the producer may want to purchase started pullets. These are birds approximately 20 weeks old and will start producing eggs soon after being placed in the house.

For those desiring to keep their chickens confined, a run will be necessary to provide sunlight and exercise for the birds. When developing housing for a backyard flock, be sure to construct the poultry coop and run in a manner that protects birds from invading predators. Depending on bird size, space requirements will be 8 to 10 feet per bird in the run.



Photo courtesy Josh Payne

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Division of Agricultural Sciences and Natural Resources • Oklahoma State University

# Showmanship

- Showmanship (FFA, 4-H, County Fair)
- 4-H and FFA Youth ages 8-18 have the opportunity to participate in showmanship and livestock project. Contact your school agriculture program to learn about FFA or your county Extension office to learn about 4-H.





# Resources

- We have lots of resources available on sheep and goat showmanship
- Youth can participate in the fall and spring Oklahoma County livestock shows for the opportunity to win cash prizes and recognition for their effort

OKLAHOMA COOPERATIVE EXTENSION SERVICE ANSI-3864



## Meat Goat Showmanship

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OKLAHOMA COOPERATIVE EXTENSION SERVICE ANSI-3863



## Sheep Showmanship

**Rusty Gosz**  
Extension Youth Livestock Specialist

**Cassie Bacon**  
Animal Science Student Intern

*Showmanship is an exhibitor's ability to most effectively present an animal in a competitive yet positive attitude. A good showman is a person that has a sense or knack for an effective presentation of an animal. Showmanship is the one area of livestock showing in which the exhibitor has the most control. In showmanship a person is judged on their abilities to control and present their lamb to bring out its best characteristics. Advanced planning, practice, and hard work are keys to becoming a good showman. Lamb showmanship not only generates enthusiasm in the show ring, but also teaches many valuable lessons that can be used in day-to-day life. These lessons include responsibility, work ethic, determination to reach a goal, winning graciously, and accepting setbacks with dignity. Winning takes practice at home and can become a reality by working with the lamb.*

**Value of Working at Home**

In the sheep project, working at home is vital to becoming a successful showman. All good showmen start early training and building a bond with their lamb. Once a lamb is weaned, immediately start spending time with your lamb. Talking to or touching the animal while it eats will allow it to get used to you, build trust, and allow it to become more comfortable with you. Remember that this process takes time and patience.

After the lamb is used to you, the halter breaking process should begin. **The key thing to remember when halter breaking is to be extremely careful and ALWAYS watch your animal when it is tied up.** If sheep are not watched closely, especially when they are first introduced to the halter, they could hurt or even kill themselves.

Here are some helpful hints to assist the initial halter breaking process:

- Start halter breaking early.
- Nylon sheep rope halters work best, are generally the easiest for people to use, and minimize stress of the animal.
- Adjust the halter so the nose piece is halfway between the eyes and mouth.
- Tie the lamb up for 10 to 15 minutes while touching it all over to get the animal used to you.
- For the first few times you lead your lamb, try walking in the pen and leave more lead than what you would normally use. Do not apply much pressure to the halter. Simply let the animal get used to the feel of the halter. The lamb could possibly jump, tail, or twist once the halter is put on

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the first few times. Just remain patient, and comfort your lamb with voice rewards. Using hay or feed to reward your animal may also be helpful.

- Once your lamb gets used to the halter, you can firm up on your grip when you walk your lamb and choose an area to walk that is not enclosed. Lead your lamb with their head held high, so they walk naturally but still look appealing.
- When releasing your animal, gently remove the halter, maintaining control until you place them into their pen. If the animal gets away, they think they can repeatedly do it. Stay calm without jerking the halter away.
- Practice makes perfect—introduce your animal to all the procedures you will be following when you arrive at the show. It is important to set the lamb's feet and legs properly as well as teaching the lamb how to brace. Occasionally, have another person handle your animal the way a judge would, so the animal becomes acquainted with this procedure. Allowing your animal to stand with their head held up high for about 20 minutes a day will teach them to keep their head high and be less stressful when they have to keep their head up in the show ring (Figure 1).

**Leading for Exercise**

The halter should be properly placed on the lamb's head with the lead rope on the lamb's left side. The halter strap that crosses over the muzzle or nose should be between the eyes and the nose. Rope halters and show halters can be adjusted for proper fit. If the halter is too small, it will get into

we light pressure on the chain. Let the animal become accustomed to the feel of the chain. The goat may jump, kick or twist when the chain is put on the first few times. Let remain patient, and calm the goat using a soothing tone of voice for reassurance. Using hay or feed to reward the animal may also be helpful.

Once the goat is familiar with the chain, strengthen your grip when you walk the goat. Choose an area to walk that is not enclosed. Lead the goat with their head held high, so they walk naturally but still look appealing. When releasing the animal, never let them get away from you. Once an animal gets away, they think they can repeatedly do as. Stay calm, without jerking the chain.

Practice makes perfect—introduce the animal to all the procedures that will be followed when arriving at the show. Train your animal to set their feet properly. The goat's feet should be at the corners of the body with the goat's weight evenly dispersed over its legs. Have another person handle the animal the way a judge would, so the animal becomes acquainted with this procedure. Allowing your animal to stand with their head held up high for about 20 minutes a day will teach them to keep



1. Remaining in control of your goat during a show will help make your experience more successful. Training must take place before you get to the show.

Resources • Oklahoma State University


# Business

- Farm Business – the end goal is to make a profit. Requires specific planning, budgeting marketing. Opportunities include meat goat and sheep production and goat milk production.
- Markets across the state purchase sheep and goats for meat production. Chickasha has a large meat goat sale each week.
- Resources: OSU Beginning Farmer and Rancher Program (August 2021), OSU Meat Goat Producer Bootcamp (October 2021), OSU Small Farm Business Development Assistance (personalized support), etc.



# Resources

- We have lots of resources available on sheep and goat production
- Utilize our Enterprise budget tools and other resources for livestock businesses.



**OKLAHOMA COOPERATIVE EXTENSION SERVICE** AGEC-267

**Funding for Small-Scale Farms: Tips for Grant and Loan Proposals**

Damona Doye  
Farm Management Extension Economist

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**OKLAHOMA COOPERATIVE EXTENSION SERVICE** ANSI-3856

**Starting a Sheep Enterprise**

Gerald Q. Fitch  
Extension Sheep Specialist

Before getting into the sheep business ask yourself these questions:

1. Do I like sheep?
2. Will sheep fit into my current operation?
3. What size of sheep operation do I want?
4. Do I have adequate facilities to handle the number I want?
5. Will I have an adequate feed supply?
6. Do I want to lamb in the spring or fall?
7. What breeds should I select to achieve my goals?
8. When and where can I market my lambs?
9. Could I have a predator problem?

**Why Raise Sheep?**

There are several reasons why you might want to consider raising sheep in Oklahoma. There are very few states in the U.S. that have year-round forage production like Oklahoma. Sheep are more efficient than beef cattle in the conversion of forage to retail product. The initial investment required to begin a sheep enterprise is relatively low. Expensive sheds and barns are not necessary; often buildings you already have will provide the dry, clean shelter needed by sheep. Sheep production is not limited only to meat production, because wool also provides a portion of the income. Fall lambing in Oklahoma has provided marketing of lambs during the peak of spring lamb prices. These factors have made the sheep operation a very profitable enterprise over the last several years.

Anyone considering getting into the sheep business should consider several things before actually purchasing any sheep. One of the first things to consider is the initial size of the flock. Do you begin with a commercial size flock of 200 to 300 ewes or a smaller flock of 20 to 50 ewes. Of course, the feed supply available will be a major contributing factor in this decision.

Sheep are not difficult animals to raise; however, they do require a higher level of management than beef cattle. Therefore, if you have never raised sheep before, the first suggestion would be to begin with 20 to 50 ewes and then increase numbers in future years, if the sheep business is for you.

**Pasture**

Another factor to consider is the kind of pasture available. There are certain kinds of pasture that sheep like, such as cool type grasses that are fairly fine stemmed and high quality. They do not favor coarse grasses such as blue stems or love

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grass. Well fertilized and managed bermuda grass can be utilized very efficiently with sheep. Such pastures are excellent only during May through July. In August and September, adequate dry matter is available; however, the protein level in the bermuda grass is low and additional protein should be supplemented. In fact, five to ten ewes per acre can usually be maintained during this period under central and eastern Oklahoma conditions. Buffalo and grama grasses are excellent pastures for sheep, but have a lower carrying capacity than bermuda grass.

Small grain pastures, such as wheat, rye, and rye grass make excellent fall and winter pastures for lactating ewes. Many producers working with smaller acreages have begun to over seed their bermuda pastures in the fall with Marshall rye grass or wheat to utilize those acreages with year-round forage. These practices require more intensive management practices, but return good dividends if done correctly.

Another way to have year-round forage is with the implementation of cool season perennials to your pastures. The USDA-ARS, Grazinglands Research Laboratory at DRI Ranch has been performing studies on these types of pastures. These cool season grasses begin their fall growth in September and have had crude protein levels ranging from 20 to 25 percent in October. These grasses continue their growth through June and some species appear to maintaining a high crude protein level the majority of the growing season. Three of the nine grasses studied are proving the most beneficial for Oklahoma producers. These grasses include Prairie orchard grass, Lincoln Smooth Blume grass, and Lurel pubescent wheatgrass.

Another possibility for cattle producers is the use of co-specie grazing practices. Cattle are very finicky and do not eat many kinds of weeds. Sheep, on the other hand, like to browse and very often will eat many different kinds of weeds that cattle will not eat. Sheep eat rag weeds very well and can be grazed with cattle. Research has shown that producers can run one to two ewes per cow with no additional feed costs and no detrimental effects on native pastures. In fact, many pastures have been improved with co-specie grazing.

**Building and Fences**

Another factor to consider before entering the sheep business is the availability of buildings, corrals, and fences to adequately protect and control the sheep. Buildings do not need to be elaborate, but need to provide adequate space

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**Get a plan on paper:** Realistically examine the existing farm or potential enterprise and assess goals and priorities, then identify timetables for returns on investments. Make note of prior successes on the farm operation and how you learned from mistakes. This will help you and a funding agency gauge strengths and weaknesses to maximize the impact of additional capital. Several websites offer resources to help develop a business plan. Farm Credit University is an online course that helps farmers and ranchers develop business plans and learn how to work with agricultural lenders: [theplan.farmcredit.com/developplan.html](http://theplan.farmcredit.com/developplan.html). Ag Plan [www.agplan.org/agplan/](http://www.agplan.org/agplan/) helps rural business owners develop a business plan. It includes sample business plans, along with tips and resources. Ag Plan also allows you to share the plan with business advisors, educators or consultants.

**Collect or prepare financial statements:** Whether seeking a grant or applying for a loan, have documents prepared which show cash flow. Supplement this with a balance sheet, which will summarize existing debt and the value of assets. Also note any off-farm income planned to support the business. Extension fact sheets with step-by-step instructions on building financial statements (cash flow, balance sheet, income statement) are available on [foeufacts.okstate.edu](http://foeufacts.okstate.edu).

**Keep records:** This will assist in management of the two previously mentioned practices. Depending on the type of operation, daily, weekly, monthly and annual records of income, expenses, production, purchases and sales of assets will help you and a lender or grant provider make the most informed decision when it comes to funding your operation. The OSU Agricultural Economics Department offers a variety of resources to assist producers in adopting Quicken, an inexpensive personal finance software tool, for farm and ranch financial recordkeeping ([ag econ.okstate.edu/quicken/](http://ag econ.okstate.edu/quicken/)).

**Grant Writing Basics**

**Read the request or call for proposals carefully.** Make sure your goals align with the funder's mission. If what you want to achieve doesn't match well with the agency or organization's call for proposals, look elsewhere. If unsure, ask. Most calls for proposals include contact information. Save yourself time, energy and frustration by avoiding a mismatch early on.



# Goat Breeds

Goats breeds generally fall into one of two categories based on there uses:

- Meat Breeds or Dairy Breeds
- In Oklahoma, meat breeds are the most common although dairy breeds are common on hobby farms and small dairy operations.



# Boer Goats

- Meat Breed
- Fast Growth Rate
- High Fertility
- Does well on pasture grazing



# Spanish Goats

- Primarily used for brush control
- Low maintenance, hardy breed
- Considered meat breed





# Alpine Goat

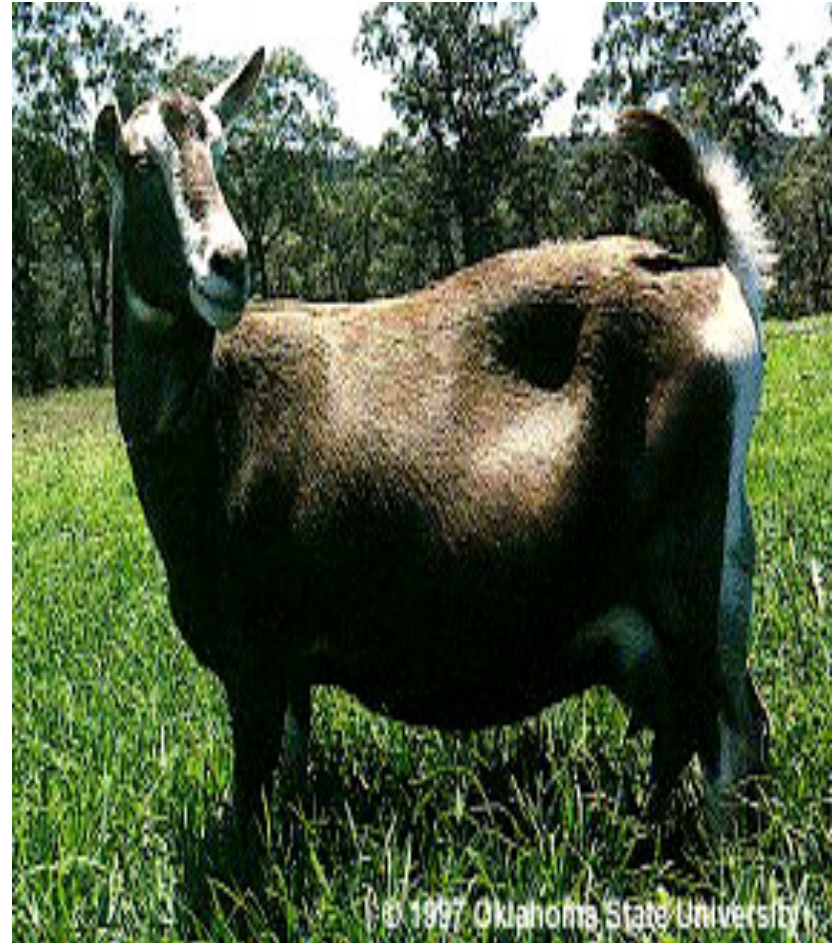
- Dairy Production
- Hardy, adapt well to a variety climate
- Good health
  - low maintenance



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Provided by Crystal D'Eon

# Togenburg

- Dairy Production
- High Milk Production
- Perform Better in Cooler Climate



# Sheep Breeds

Sheep breeds generally fall into one of two categories based on there uses:

- Meat Breeds (Hair Sheep) or Wool Breeds
- In Oklahoma, meat breeds are the most common. Some small-scale wool operations exist but this is not common in Oklahoma .





# Dorper

- Hair sheep, meat breed
- Developed in the arid regions of South Africa. One of the most fertile of sheep breeds, hornless with good body length and a short light covering of hairy wool. The breed has the characteristic black head (Dorper) as well as white heads (White Dorper).
- Easy care breed that is hardy and can thrive under range conditions where other breeds can't



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Provided by Select Genes Ltd

# Katahdin

- Hair sheep, meat breed
- American breed that originated in Maine
- Hardy, low maintenance sheep that produce vigorous lamb crops and lean meat carcasses. They do not produce a fleece and do not require shearing.
- They are medium-sized, utility breed for production in a variety of management systems.



Provided by Katahdin Hair Sheep International

# Shropshire

- Wool sheep but considered a great dual-purpose breed because of solid meat production.
- Shropshires are gentle in disposition, making them perfect for the hobby farm flock or as a 4-H or FFA project for kids.





# Suffolk

- Great dual-purpose breed because of solid meat production and wool production.
- Large body sheep with black face and legs
- One of the most common for the hobby farm flock or as a 4-H or FFA project for kids.



# Want to Learn More About Breeds?



Breeds of Livestock, Department of Animal Science

UNIVERSITY LINKS [+]

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Information on adding new breeds or updating existing information.

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afs.okstate.edu/breeds

Valais Blacknose

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# Facilities Needed

- Fencing
  - Fencing needs for sheep and goats are different. Goats need much stronger fencing than sheep.
- Housing
  - Housing needs for sheep and goats will be similar.
- Working Facilities
  - Working facilities for sheep and goats will be similar. Small hobby operations may not need sophisticated working facilities.



# Fencing Considerations

- Generally, goats require much more robust fencing than sheep.
- Consider tighter fencing if you plan to have horned animals
- Good fencing can help with predator control/deterrence
- 45" – 47" Tall fence with a single strand of barbed wire on the top works well for goats
- ¼ mile \$500 - \$700 ~



# Barbed Wire

- Barbed wire is most common existing fence for many properties but is generally built for cattle and will not work for goats and sheep.
- 5 – 6 strands likely enough for sheep, 10 -12 strands required for goats
- Spacing 3"- 3.5" bottom and 4"- 6" top
- Existing fence can be updated
- ¼ mile \$174 - \$684 (meat goat production manual)



# Electric Fencing

- Cheap and quick to assemble. ~ \$650 to enclose a square acre
  - Sheep are easily trained to electric fencing, but goats can also be trained to it.
  - Good for small properties or rotational grazing systems.
- 
- 1. Use quality material
  - 2. Animals must be trained (ideally from young age)
  - 3. Keep fence hot





# Housing

- Sheep and goats can both tolerate cold weather well as long as they remain dry. This is critical for herd/flock health.
- Need cover from rain and snow or they become more susceptible to illness.
- Housing can be a barn, or other structures. Housing can help with predator control



# Working Facilities

- Helpful when performing routine management task such as:
- Catching animals
- Sorting young for weaning
- Vaccinating
- Loading onto trailers
- Etc.
- Small Operation:
  - Small Catch Pen



# Stocking Rates Sheep and Goats

- Rule of thumb - 5-6 sheep or goats/cow
  - 6 Mature Goats = 1 Cow on Native or improved Pasture
  - 10 Mature Goats = 1 Cow on Browse or Under story Grazing
- Forage
  - Sheep prefer forbs, grass, and browse
  - Goats prefer browse, forbs, and grass
- Multiple-species grazing advantages
  - Weed and brush control
  - Greater financial return per acre





# Goat Dietary Requirements

- Daily Intake of Dry Matter:
  - 3 – 5% of body weight per/hd per/day
- Prefer Browse over Grass:
  - 60% Browse
  - 40 % Grass

# Preferred Browse for Goats

- Winged Elm
- Hickory
- Buckbrush
- Greenbrier
- Sumac
- Locust



# Predator Control

- Secure housing at night
- Good fencing
- Donkey
- Llama
- Guardian Dog





# Health

- Overall Goats are a Healthy Animal
  - Yearly 3 way Vaccine
  - Parasite Control ( drench )
  - Buy Healthy Stock
  - Sanitary Conditions
  - Proper Nutrition

# Sires and Gestational Length

- Seasonal matings
  - 1 Ram - 30 to 40 per season ~
  - 1 Buck - 30 head per season ~
- Great variation due to individual, age, environment and physical condition but good rule of thumb.

Gestation

Meat goats

150

Sheep

145



# Basic Health, Nutrition & Management

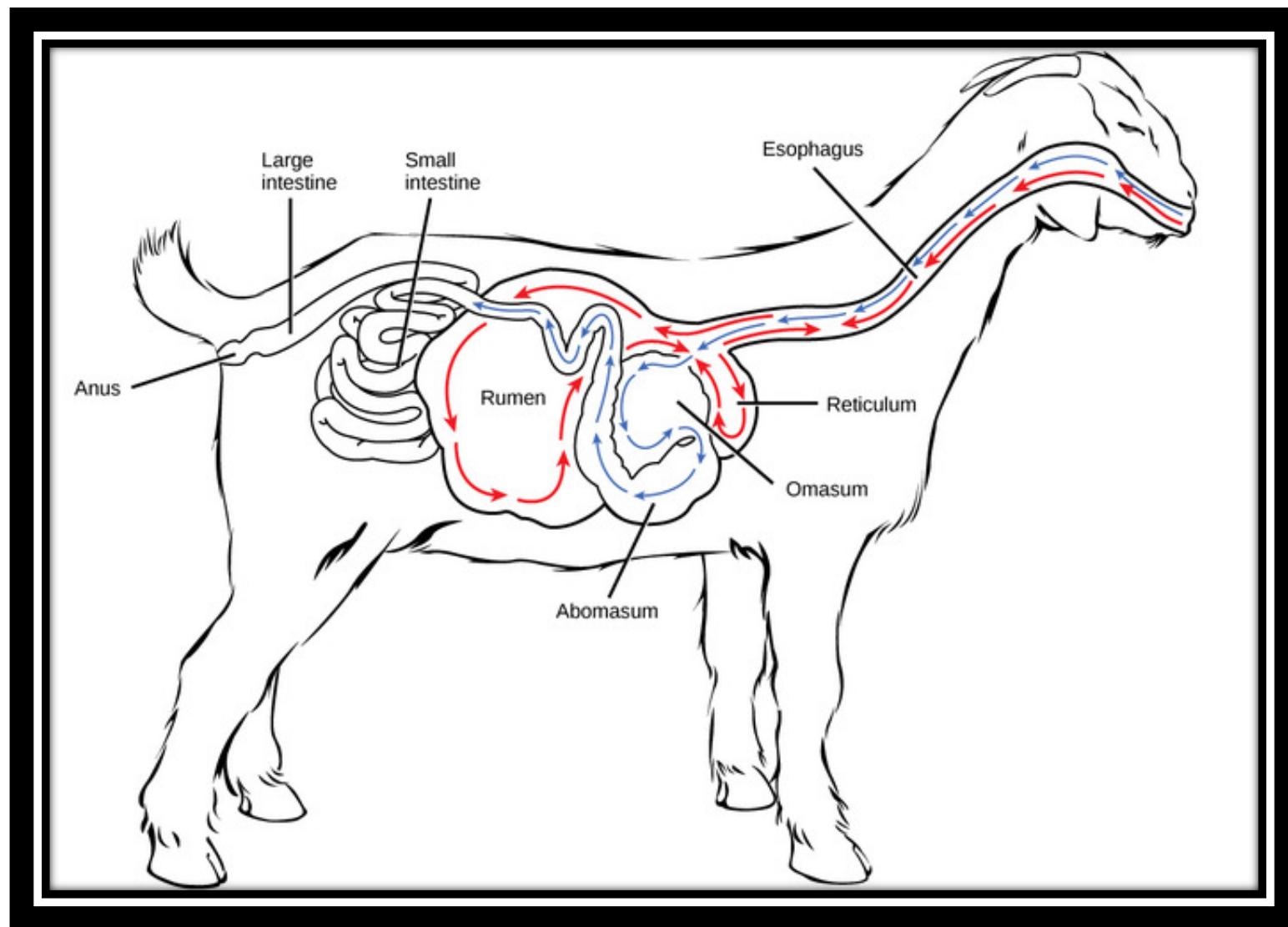
**Show Goats and Show Sheep**



# Ruminants

- Cattle
- Sheep
- Goats
- Alpacas
- Deer
- Camels







# Nutritional Know-How



# Essential Nutrients



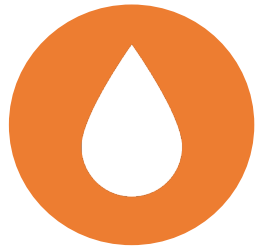
- Water
- Protein
- Energy (Carbohydrates and Fats)
- Minerals
- Vitamins





- Most essential nutrient for every animal
- Can limit all other nutrients
- Water dictates feed intake
- Smaller watering troughs favored over larger tanks
- Provide fresh water daily





# Water Requirements

Sheep	Water Requirements (Gallons)
Weanlings	0.5 - 1
Adult Dry Sheep – Grassland	0.5 – 1.5
Ewes with Lambs	1 – 2.64

Adapted from <http://www.livestock-emergency.net/userfiles/file/water-supply/Marwick-2007.pdf>

# Protein

- Protein is the building block for muscle
- Required for creation of meat, milk, fiber
- High protein essential for building muscle in young animals
- Later on in feeding period, energy is the driver and protein can be reduced slightly



Protein = Crude Protein (CP)



# Energy

- Carbohydrates and Fats
- Referred to as calories in a growing diet
- Grain and protein supplements are more concentrated in energy than hay or forage
- Most limiting nutrient in sheep and goat diets



Energy = Total Digestible Nutrient (TDN)

# Minerals & Vitamins



- Mineral supplementation – a common practice
- Commercial feeds are often formulated to meet vitamin and mineral requirements of certain stages of livestock

## **Most Important Macro-minerals**

Salt, Calcium, Phosphorus, and Magnesium

## **Most Important Micro-minerals**

Selenium, Copper (goats), Zinc

Vitamins A and D



Sheep have sensitivity to Copper

## Macrominerals

Sodium (Na)  
Chloride (Cl)  
Calcium (Ca)  
Phosphorus (P)  
Magnesium (Mg)  
Potassium (K)  
Sulfur (S)

## Microminerals

Iodine (I)  
Copper (Cu)  
Iron (Fe)  
Manganese (Mn)  
Zinc (Zn)  
Molybdenum (Mo)  
Cobalt (Co)  
Selenium (Se)  
Fluoride (F)



# Hay & Forage for Ruminants



- All ruminants require some fiber/forage to maintain rumen health
- When grain is fed in large amounts and animals are not adapted to a high grain ration, digestive system is thrown off
- For good rumen health, **long stem hay** (>2in) should be fed
- Low Quality hay being fed to small ruminants leads to **hay belly**
- Some rations contain fiber for animals fully adapted to a grain-based ration



# Common Feedstuffs



## **Protein Feeds**

Soybean Meal  
Corn Gluten Feed  
Distillers Grain  
Sunflower Meal

## **Energy Feeds**

Corn  
Wheat Middlings  
Soybean hulls  
Whole Cotton Seed  
Fats & Oils

# Common Forages/Roughages



Alfalfa Hay

Teff

Bermuda hay

Fescue Hay

Alfalfa Pellets

Cotton Seed Hulls  
(pelleted/loose)

Native Hay



# Feeding Tips

1. Full Feeding/Self Feeder
2. Hand Feeding\*
  - Two times daily
3. Animals should be individually fed
  - Most important at end of finishing period
4. Fresh water daily



# Diet Targets – Nutrition

- Young fast-growing animals
  - 17 - 20% Protein
  - Fed at 1 – 2% of BW
  - ¼ lb. of high-quality hay fed daily
- Fattening stage with a market ready goal
  - 15 – 17 % Protein
  - Fed at 2-2.5% BW
  - Grains and fats play a more essential role at this stage
  - 3 - 5% fat
  - ¼ lb. of high-quality hay fed daily





# Diet Targets – Consumption

Total feed needed will be fed according to % of body weight

Animal Weight	% BW	Lb.(s) Feed
30	2	0.6
45	2.5	1.125
60	3.0	1.8
75	3.5	2.625
(Animal Weight)*(% BW as a decimal) = feed needed		

- Depending on frame size, weight, and age this will vary from one animal to the next
- Weigh as often as possible to increase accuracy
- Animals should be slowly adapted to any dietary changes that are made

# Accuracy is key



# General Health and Parasite Control

- There are dozens of diseases and health issues that could impact sheep and goats, but good care can largely prevent these issues
- Parasites are the #1 health concern for sheep and goats
- Goats and Sheep require a well-managed parasite control
  - External and internal (ticks, worms, etc)

# Checking for Parasites

- **Check animals regularly for signs of illness**
  - Anemia (gums or eyelids look pale, creamy or gray) indicate internal parasites
- Understand an effective deworming program
  - Scheduled deworming?
    - Every 30 days?
    - Every 60 days?
  - Rather than deworming on a set schedule check periodically for need.
    - Have a vet look over your flock/herd
    - Have fecal exams performed 2 times per year by a vet or lab to determine need and set deworming schedule

**\* Many great resources: Watch OSU YouTube videos for health information. Refer to books like the Storey's guides available at the library.**



# 5 Big Picture “Musts for Success”

- Determine your goals
- Know your capacity
- Prepare your property
- Understand feeding and FRESH water
- Know your animal and monitor health



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# External Parasites of Goat

Published Oct. 2016 | Id: EPP-7019

By Justin Talley

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## Introduction

Arthropod pests limit production in the goat industry in many ways. External parasites feed on body tissue such as blood, skin and hair. The wounds and skin irritation produced by these parasites result in discomfort and irritation to the animal. Parasites can transmit diseases from sick to healthy animals. They can reduce weight gains and milk production. In general, infested livestock cannot be efficiently managed.







# Further Information

- OSU – Meat Goat Manual
  - <http://agecon.okstate.edu/meatgoat/manual.asp>
  - Meat Goat Boot Camp (October 2021)
- Langston University
  - [www.luresext.edu/goats](http://www.luresext.edu/goats)
  - Annual Goat Field Day
- OSU YouTube Channels

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
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Dr. Barry Whitworth explains another cause of parasite symptoms in sheep and goats.



**OSU Sheep Program (3/29/14)**  
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We visit the OSU Sheep and Goat Center during spring lambing season and take a glimpse at the program's history with the significant work of former sheep industry legends Alex McKenzie, Bill...



**Vet Scripts - Helping orphaned sheep (3/24/18)**  
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Dr. Barry Whitworth has information about how to spot the sore mouth virus and how it can impact livestock. SUNUP is a production of the Division of Agricultural Sciences and Natural Resources...

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Kansas State Extension Specialist Justin Goodno and Oklahoma State University Extension Economist JJ Jones give a presentation on sheep and goat facilities at the Kansas/Oklahoma Sheep & Goat...



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<https://extension.okstate.edu/>



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Oklahoma State University Extension Veterinarian Barry Whitworth discusses vaccinations and FAMACHA at the Kansas/Oklahoma Sheep & Goat Conference in Cherokee, OK on April 6, 2019.



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