

Tips and Tricks to Mastering Meat Goats



Image courtesy of Böhlinger Friedrich
Image is cropped



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Table of Contents

| | |
|--|-------|
| Purpose of Packet..... | 3 |
| Common Terminology..... | 4 |
| Cuts of Meat..... | 5 |
| Parts of a Meat Goat..... | 6 |
| Common Diseases and Treatments..... | 7-8 |
| Breeds..... | 9-15 |
| Housing, Grooming, and Clipping..... | 16-18 |
| Fast Facts..... | 19 |
| Getting Ready for Clackamas County Fair..... | 20 |
| Resources..... | 21-22 |

Purpose of this packet.

The purpose of this packet is to provide basic information to 4-H members and other interested parties about meat goats. Many members, especially those just beginning, are unsure of where to start or what to learn in regards to a meat goat 4-H project. This packet discusses different breeds and types, diseases, and specific issues related to the project. While this packet is by no means all-inclusive of what is required to raise meat goats, it is a good starting point.

This packet will encompass topics such as disease and treatment, types, and other related information that will work to better the reader's understanding of their project. The primary goal is to help facilitate a more confident and prepared member that will continue to develop skills and greater personal and project growth in their desired project area.

Please Note: Market animals intended for auction must follow the rules and regulations of the Clackamas County Junior Livestock Auction (CCJLA). This is NOT a 4-H administered program but we do partner with them at the county fair to widen youth opportunities. The committee only allows youth in 4-H and FFA (in yearlong educational programs) to participate.

For CCJLA information and schedule, please visit: <https://ccjla.wordpress.com/>

This packet was developed in 2020 for families beginning in the meat goat project area.

Common Terminology

1. Buck: Uncastrated male goat
2. Castration: Removal of testicles to prevent breeding
3. Chevon: Goat meat
4. Colostrum: First milk consumed by kid after birth
5. Cow hocked: Hocks turn in towards each other when standing or walking
6. Cull: Removing an animal from your herd/flock due to lack of need for that animal in Program
7. Disbudded: When hornbuds are removed; Usually burned off at two weeks old
8. Finish: Goat's fat covering
9. Fish teat: Teat with small, split secondary teat found on end of main teat; Considered Bad
10. Grade: First definition: Both parents are purebred but not of the same breed
Second definition: Unknown breed(s) in the animal's background
11. Kidding: The birthing process of a goat
12. Percentage: When two goats of differing breeds are bred together; often the result of a boer and dairy goat or a boer and boer/dairy goat breeding
13. Purebred: An animal that only has one breed present in its bloodline
14. Stale: Beginning to collect fat internally and externally
15. Tipped: When tips of horns are flattened so they are not sharp
16. Wasty: Another term for stale; Also means having large, protruding belly
17. Weaning: Removal of kid(s) from the doe to keep from nursing
18. Wether: Castrated male goat
19. Yearling: A goat that is one year old but under two years old and has not kidded

Cuts of Meat

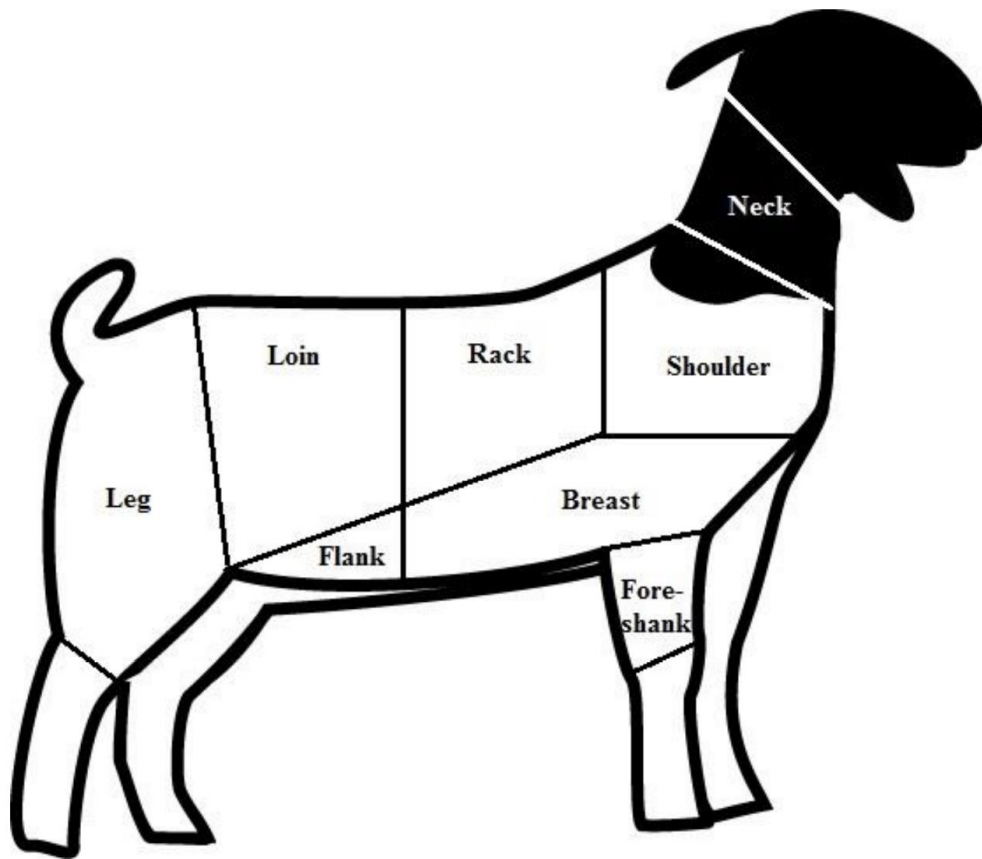
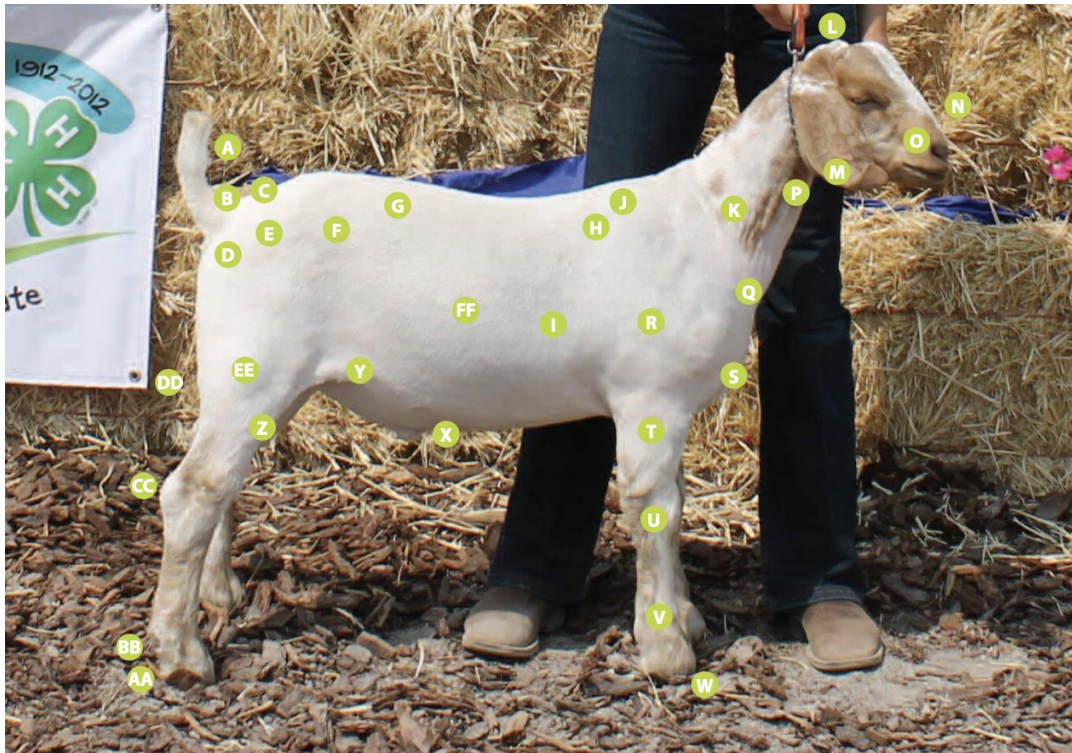


Image courtesy of University of California Cooperative Extension Monterey County
Image is cropped

- The most expensive cut on a goat is the loin.
- $\frac{1}{3}$ of the carcass weight is in the rear leg cuts.
 - A goat usually yields around 40 and 50 pounds of harvestable meat from their carcass. On a 90 pound goat that would mean a meat yield of 44.4% to 55.6%.
- Chevon chops are harvested from the neck, shoulder, and the loin. Some chops may also come from the ribs depending on the butcher.
- Goat meat does not have marbling and is leaner than lamb.

Parts of a Meat Goat

The parts of a meat goat and the cuts of meat on a goat are different. The parts of a meat goat are the physiological parts of the goat while the cuts of meat are the parts we consume. However, there are sometimes overlap between the physiological and consumable parts.



| | | | |
|---------------------|--------------------------|----------------------------|------------------------|
| A. Tail | I. Heart girth | Q. Dewlap/neck fold | Y. Rear flank |
| B. Tail head | J. Withers | R. Shoulder | Z. Stifle joint |
| C. Rump | K. Neck | S. Breast/brisket | AA. Pastern |
| D. Pin | L. Poll | T. Forearm | BB. Dew claw |
| E. Thurls | M. Ear | U. Knee | CC. Hock |
| F. Hip | N. Bridge of nose | V. Cannon bone | DD. Twist |
| G. Loin | O. Muzzle | W. Hoof/toes | EE. Thigh |
| H. Chine | P. Throat | X. Navel and sheath | FF. Rib |

Image Courtesy of Pacific Northwest Extension (University of Idaho, Oregon State University, and Washington State University)
Image is cropped

Common Diseases and Treatments

In the table below are some listed common diseases and ailments found or heard of in meat goats as well as a handful of pertinent details in each column. This list is far from all-inclusive and is just a sampling of what can be found, both of diseases/ailments and in the following columns. In columns two through five are common details related to that disease/ailment.

| Disease | Symptoms | Treatment | Prevention | Other Details |
|--------------------------------------|---|--------------------------------|---|--|
| Caseous Lymphadenitis (CL) | -Abscesses on lymph nodes -Cheese-like consistency in puss -If internal, abscesses on organs and inside lymph nodes -Fever | -There is no treatment for CL | -Vaccination -Do not bring untested goats onto farm -Sporadic testing of your own herd -Cull goats with CL | -There are two forms of this, the internal form and the external form -It is caused by a bacteria and can survive in the soil |
| Caprine Arthritis Encephalitis (CAE) | -Swelling of joints -Atrophied muscles -Seizures -Hindquarter weakness -Death | -There is no treatment for CAE | -Test goats for CAE -Do not bring untested goats onto farm -Sporadic testing of herd -Cull goats with CAE. | -It's a retrovirus |
| Johne's Disease | -Wasting -Eating but gaining no weight | -No treatment | -Cull infected goats immediately -Improved | -Affects small intestine -Can be spread sexually, through |

| | | | | |
|----------------------|--|---|---|--|
| | -Feces that is clumpy -Diarrhea in end stage | | biosecurity and regular testing of animals | milk, placenta, feces, and affected grazing areas |
| Chlamydiosis | -Weak kids -Stillbirths -Abortion -Retained placenta -Sometimes polyarthritis and conjunctivitis | -Antibiotics at discretion of veterinarian | -Herd testing -Require recent testing of other goats before coming to your farm and herd | -This CAN spread to humans |
| White Muscle Disease | Skeletal Muscles -Stiffness in gait -Trembling -Weakness Cardiac Muscles -Fever -Heightened rates of respiration and heart rate -Difficulty breathing -Frothy, sometimes bloody, discharge from nose | -Vitamin E and selenium supplements reaching therapeutic levels at discretion of veterinarian | -Selenium and vitamin E dietary supplements -Injectable selenium at discretion of veterinarian | -Degenerative disease that affects skeletal and cardiac muscles -Sometimes only impacts skeletal or cardiac muscles, sometimes both -More commonly seen in young and/or fast growing kids -Heart damage is common in goats that survive |

***DISCLAIMER:** Authors are not veterinarians and only provide this information as a personal reference. They are not responsible for outcomes. Consult a veterinarian for veterinary advice and treatment.*

Breeds

In the meat goat world, there are only a handful of breeds, all with a wide variety of purposes and uses. Their capabilities vary equally as widely. Below are six breeds of meat goats selected to show the reader a variety of goats that have different uses or combinations of uses. Listed after are some characteristics to the breed that make it unique, characteristics, or are strong suits of that breed.

Boer



Image courtesy of University of Tennessee Extension Livestock Judging Guide
Image is cropped

The Boer goat and Boer goat crosses are the most commonly used for market classes

- It is in the breed standard for a purebred Boer to have horns; however, those goats who are dehorned are not discriminated against in show.
- While it is not recommended, this breed can have three kidding's within a 12 month calendar year.
 - This is **STRONGLY** discouraged.
- Boer kids are capable of gaining between .4 and .6 lbs. a day.
- They are relatively new to America having been imported from New Zealand and Australia in 1993.

Kiko



Image is courtesy of Crack O' Noon Kiko Goats
<https://www.wendysbarn.com/our-bucks-and-does>
Image is cropped

- One characteristic the Kiko breed is that it was bred for was their ability to have twins. It was not uncommon for does who had single kids to be culled when the breed was being formed.
- The parent breeds of the Kiko are indigenous New Zealand goats and anglo dairy breeds such as Toggenburgs, Saanans, and Nubians.
- Kiko goats do not have a breed standard, considerably rare for a purebred animal, but they do have a breed association (American Kiko Goat Association) where they can be registered.
 - The breed instead has what is called “Breed Guidelines”.
- They have a yearlong breeding season, something not commonly seen in other breeds.

Spanish Goat



Image courtesy of University of Kentucky-College of Agriculture Cooperative Extension Service
Image is cropped
Please note female Spanish goats have smaller horns

- Due to the very wide variety found within the breed itself some Spanish goats are actually used to produce cashmere, a type of fiber.
- The breed was in America as early as 1540's when some of the goats brought over by the Spaniards escaped or were released into the wild in what is now Texas and Oklahoma.
- They are on the Livestock Conservancy's "Watch List" meaning there are less than 2,500 breed registrations a year in America and less than 10,000 estimated globally.
 - They are also included in this category if they are limited to certain locations and seem to not be spreading or if genetic and numerical concerns are expressed.
- While the breed has been around for centuries it only recently started a purebred association in August of 2007.

Savannah



Image courtesy of Vaz Savannas
<https://vazsavannas.com/savanna-does-fullblood>
Image is cropped

- Savannah and Boer goats hail from the same indigenous South African bush goats.
- While commonly white-coated, they are to have pigmented skin that is somewhere between black and brown.
- They are barred from having red heads or red coloring on their heads if they are to be registered with their breed association.
- In a study of 61 bred does in 2001, there was a pregnancy rate of 89% and a 171% kidding rate.

Myotonic



Image Courtesy of Naughty Goat Acres
<https://naughtygoatacres.com/does-1>
Image is cropped

- Myotonic goats are more commonly known as the fainting goat or the Tennessee Fainting Goat
- This breed is classified as “Recovering” by the Livestock Conservancy, having graduated from the “Watch” list. This means there are now over 10,000 in population globally and more than 2,500 annual American breed registrations.
- Even though they are said to faint, they remain fully awake and aware of their surroundings during a “fainting spell”.
- The fainting is caused by myotonic congenita, a hereditary disorder that only causes these fainting spells and doesn’t harm them or their health.

Texas Genemaster



Image courtesy of HB3 Ranch
<https://www.openherd.com/animal.aspx?id=3908850&spid=8&title=hbe-squanto>
Image is cropped

- This is not a purebred breed, but is instead a crossbred that has recently been gaining popularity.
- The parent breeds of this crossbreed are Kiko and Boer, being $\frac{3}{8}$ Kiko and $\frac{5}{8}$ Boer.
- This is an American formed breeding having come from a Texas ranch called Onion Creek Ranch.
- Some of these goats of this crossbreed have myotonia in their background, but it is rarely seen exhibited by them.

Housing, Grooming, and Clipping

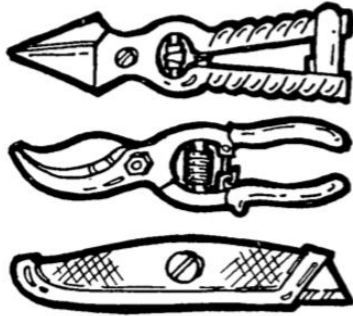
Housing

Goats are notorious for their dislike of rain and must have shelter to get out of the rain and stay dry. Shelter should be provided to them at all times, even in the summer. Goats can be sunburned from exposure, just as prolonged exposure to rain and mud can cause hoof problems. An open or semi-open structure is encouraged for goat housing to support better airflow to prevent dust and gas buildup and make it easier to clean their housing area. It is suggested that each animal has between 15 and 25 feet of space depending on how the number and size of the goats. Proper housing can help prevent many diseases and illnesses goats can contract.

Hoof Correctness and Trimming

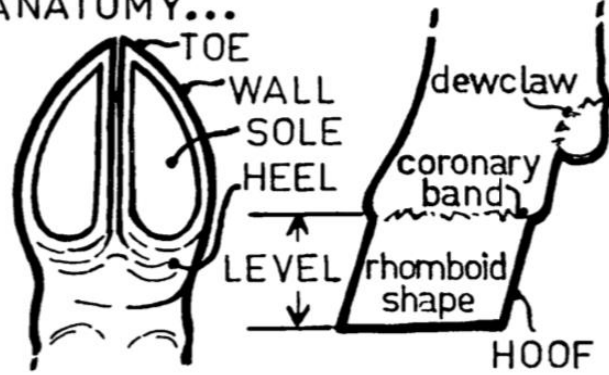
The hooves of your animal are the foundation on which they stand. When the foundation is strong, then so is your animal. When the foundation is weak, so is your animal. Trimming hooves can be tricky for first time goat owners, however. It is important for them to know though that it is just like cutting your fingernails. As long as you are mindful and not catching their quick, it is painless. For this activity, you will need foot trimmers, also called foot shearers, and blood stop. It is normal for the goat to kick during this or try to pull away when grabbing a back leg, but don't worry, this is just their natural instinct as they are prey animals. Below is a diagram on what they should look like and how to trim your goat's feet.

TOOLS...



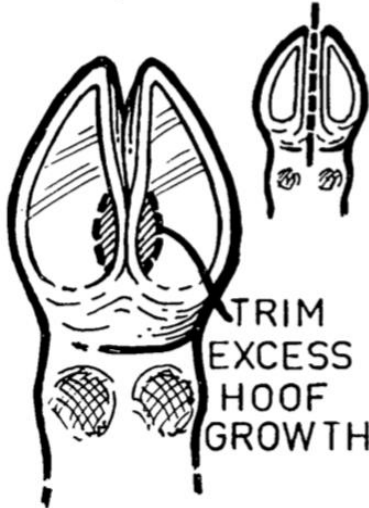
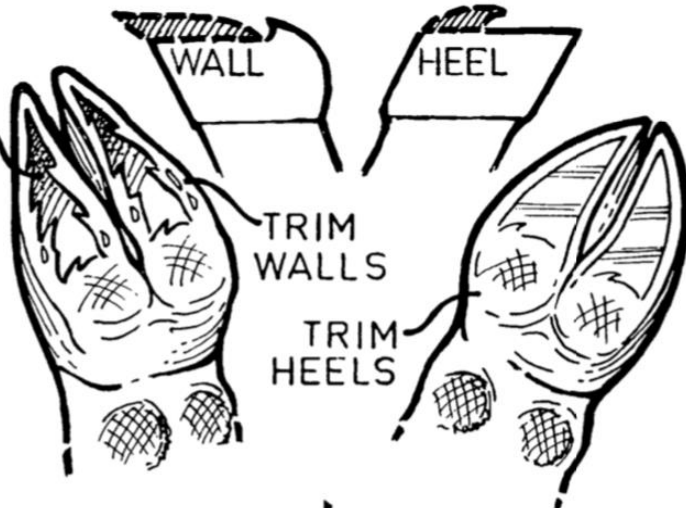
foot rot shears
or
pruning shears
and
utility
knife

ANATOMY...



OVERGROWN

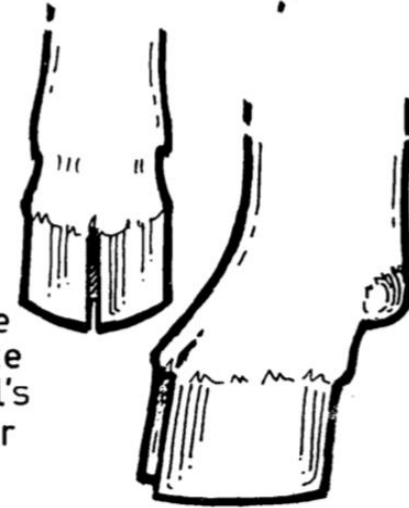
DIG
OUT
DIRT



TRIM
EXCESS
HOOF
GROWTH

* if the hoofs
are trimmed
regularly
the job is
much easier

* if the goat
bleeds use some
iodine and make
sure the animal's
tetanus booster
is up to date



PROPER TRIM

Image courtesy of Oregon State University Extension Service
Image is cropped

Clipping

While other animals are sheared, trimmed, or combed, meat goats are clipped. Clippers, not shearers, are used to prepare them for show. Market goats have all their hair clipped except for on their lower legs, which can be seen on the diagram. Breeding does generally do not and only have some of their hair removed for show. Deciding how much hair to clip off and where depends on your goat's conformation and structural build. To learn how to decide this for your goat when getting ready to show you should contact your extension agent, superintendent, leader, or a local breeder who can show you how to do this or direct you to someone that can.

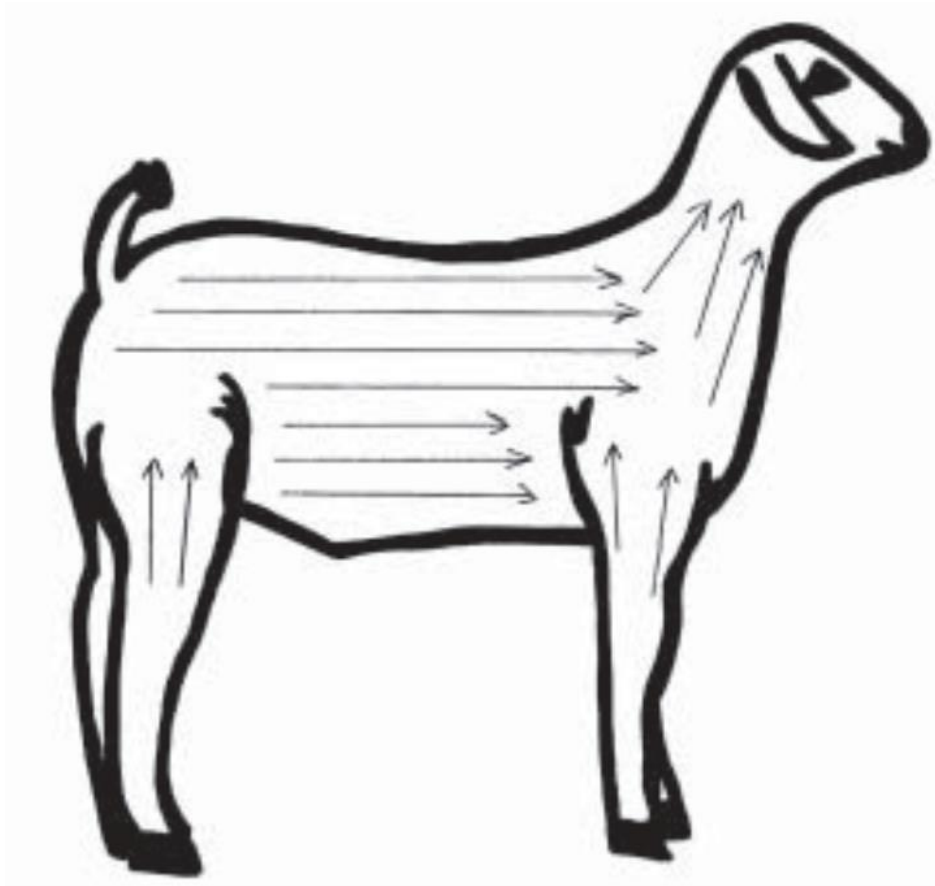


Image courtesy of University of Wyoming Extension Cooperative Extension Service
Image is cropped

Fast Facts

- Georgia, Texas, Kentucky, Oklahoma, and Tennessee have the largest numbers of meat goats in the country.
- Nine out of ten of the largest meat goat producers in America come from the American South.
- Goat meat measures lower in calories, total fat, saturated fat, and cholesterol than pork, beef, lamb, and poultry.
- Every week, America imports roughly 1.5 million pounds of chevon.
- About 63% of the world's population consumes chevon but only 6% of red meat consumed worldwide is chevon.
- Chevon is higher in potassium and iron than pork, beef, lamb, and poultry.
- In 1984 there were 107,299 goats inspected for meat by the USDA. In 2010, that number exploded to 779,000 goats inspected for meat, a 671,701 increase in inspected goats.
- Chevon harvested from older goats is juicier and has more flavor than the chevon of a kid, but it is less tender and darker in color.
- There is a difference in the meat of male and female goats. The meat of a male goat is lower in fat than does and is lighter in its coloring. A doe's meat is more tender making it more desirable for the making of goat chops and steaks.

Getting Ready for Clackamas County Fair

The Clackamas County Fair is in August. Information pertaining to the show, such as weigh-ins, weight gains, breeds, and classes can be found in the Clackamas County Fair book. Rules are subject to change and should be checked in the fair book. It is the responsibility of the member to stay up-to-date on these rules. Below is information pertaining to fair:

General Information

- Members are expected to set-up, paint, and decorate their pen areas.
- Members **MUST** participate in showmanship.
- Good sportsmanship and herdsmanship are strongly emphasized.
- Members are expected to care for animals themselves, including clipping, feeding, and caring for the animal, both at home and at fair.
 - Club members or members from another club enrolled in 4-H may help with these tasks but the sole responsibility falls on the member.
- Pinch collars **ARE NOT** permitted for use at the fair.
- **MUST HAVE A SCRAPIES TAG in accordance with the USDA Scrapie Eradication Program.**

Market Goats

- Market Goats (going to auction) must be dehorned (scurs two-inches or less are permitted).

Breeding Does

- Dehorned goats are strongly recommended for the youth shows, by the superintendents, however, if they are part of the breed standard for your goat, horns will be allowed.
 - If the horns become a safety issue the horns will be capped or could result in disqualification.
- Exhibitors may only have **TWO** entries per class.

Please Note: Boer Breed Standard calls for horns to be present on both sexes. Removal of horns will result in a lowered score for the animal at breeding shows per the ABGA rules.

Resources

1. https://commons.wikimedia.org/wiki/File:Burenziegenlamm_01.JPG
2. <http://www.whiterailranch.com/WRRFebMar12.pdf>
3. <http://abga.org/wp-content/uploads/2016/01/Meat-Goat-Judging-Terminology.pdf>
4. <http://www.goatworld.com/articles/terminology.shtml>
5. <https://goats.extension.org/goat-glossary-of-terms/>
6. <http://cemonterey.ucanr.edu/files/197374.pdf>
7. <https://www.cooksinfo.com/goat>
8. <http://www.thegourmetgoatlady.com.au/blog/goat-cuts/>
9. <https://www.extension.uidaho.edu/publishing/pdf/PNW/PNW678.pdf>
10. <https://www.farmhealthonline.com/US/disease-management/goat-diseases/johnes-disease-in-goats/>
11. <https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/nvap/NVAP-Reference-Guide/Control-and-Eradication/Johnes-Disease>
12. <https://www.tractorsupply.com/tsc/cms/life-out-here/the-barn/animal-medication-for-goats/goat-health-conditions-and-caprine-arthritis-encephalitis>
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14. <https://www.tennesseeameatgoats.com/articles2/caseouslymphadenitis.html>
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20. <https://www.goatfarming.in/kiko-goat-farming>
21. <https://drive.google.com/file/d/1EZILTzEwEDBZPL6RjVbhSHNm0O1VRHbI/view>
22. <https://animalsake.com/facts-about-kiko-goat>
23. <https://extension.tennessee.edu/Marshall/Documents/4-H/Livestock/Goat%20Skillathon.pdf>
24. <https://livestockconservancy.org/index.php/heritage/internal/parameters-cpl>
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27. <https://vazsavannas.com/savanna-does-fullblood>

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28. <https://northamericansavannahassociation.com/wp-content/uploads/2016/04/Savanna-Goat-Guide.pdf>
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 32. <https://livestockconservancy.org/index.php/heritage/internal/tennfaint>
 33. <https://livestockconservancy.org/index.php/heritage/internal/parameters-cpl>
 34. <https://www.thoughtco.com/fainting-goat-4691940>
 35. <https://www.openherd.com/animal.aspx?id=3908850&spid=8&title=hbe-squanto>
 36. <https://goats.extension.org/goat-breeds-genemaster/>
 37. <http://www.texmastermeatgoats.com/>
 38. <https://www.unce.unr.edu/4H/programs/stem/files/pdf/4-HManualIntroMeatGoat.pdf>
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 42. <http://www.thepretendchef.com/20-interesting-facts-goat-meat-chevon/>
 43. https://www.fsis.usda.gov/wps/portal/fsis/topics/food-safety-education/get-answers/food-safety-fact-sheets/meat-preparation/goat-from-farm-to-table/ct_index

****4-H Reference Books:**

1. Goat Resource Handbook by The Ohio State University Extension
2. 4-H Goat Manual by The Ohio State University Extension

Note: These books are available to check-out or purchase from the Clackamas County 4-H Extension Office in Oregon City.