



DISCOVER



4-H GOAT CLUBS



EXTENSION
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Description

The Discover 4-H Clubs series guides new 4-H volunteer leaders through the process of starting a 4-H club or provides a guideline for seasoned volunteer leaders to try a new project area. Each guide outlines everything needed to organize a club and hold the first six club meetings related to a specific project area.

Purpose

The purpose is to create an environment for families to come together and participate in learning activities that can engage the whole family, while spending time together as a multi-family club. Members will experiment with new 4-H project areas.

What is 4-H?

4-H is one of the largest youth development organizations in the United States. 4-H is found in almost every county across the nation and enjoys a partnership between the U. S. Department of Agriculture (USDA), the state land-grant universities (e.g., Utah State University), and local county governments.

4-H is about youth and adults working together as partners in designing and implementing club and individual plans for activities and events. Positive youth development is the primary goal of 4-H. The project area serves as the vehicle for members to learn and master project-specific skills while developing basic life skills. All projects support the ultimate goal for the 4-H member to develop positive personal assets needed to live successfully in a diverse and changing world.

Participation in 4-H has shown many positive outcomes for youth. Specifically, 4-H participants have higher participation in civic contribution, higher grades, increased healthy habits, and higher participation in science than other youth (Learner et al., 2005).





Utah 4-H

4-H is the youth development program of Utah State University Extension and has more than 90,000 youth participants and 8,600 adult volunteers. Each county (Daggett is covered by Uintah County) has a Utah State University Extension office that administers the 4-H program.

The 4-H Motto

"To Make the Best Better!"

The 4-H Pledge

I pledge: My HEAD to clearer thinking, My HEART to greater loyalty, My HANDS to larger service and My HEALTH to better living, For my Club, my Community, my Country, and my world.

4-H Clubs

What is a 4-H Club? The club is the basic unit and foundation of 4-H. An organized club meets regularly (once a month, twice a month, weekly, etc.) under the guidance of one or more volunteer leaders, elects its own officers, plans its own program, and participates in a variety of activities. Clubs may choose to meet during the school year, only for the summer, or both.

Club Enrollment

Enroll your club with your local Extension office. Each member will need to complete a Club/member Enrollment form, Medical History form, and a Code of Conduct/Photo Release form (print these from the www.utah4h.org website or get them from the county Extension office).

Elect Club Officers

Elect club officers during one of your first club meetings. Depending on how many youth you have in your club, you can decide how many officers you would like. Typical officers will include a president, vice president, pledge leader, and secretary. Other possible officers or committees are: song leader, activity facilitator, clean-up supervisor, recreation chair, scrapbook coordinator, contact committee (email, phone, etc.), field trip committee, club photographer, etc. Pairing older members with younger members as Sr. and Jr. officers may be an effective strategy to involve a greater number of youth in leadership roles and reinforce the leadership experience for both ages. Your club may decide the duration of officers—six months, one year, etc.



A Typical Club Meeting

Follow this outline for each club meeting:

- Call to order—President
- Pledge of Allegiance and 4-H Pledge—Pledge Leader (arranges for club members to give pledges)
- Song—Song Leader (leads or arranges for club member to lead)
- Roll call—Secretary (may use an icebreaker or get acquainted type of roll call to get the meeting started)
- Minutes of the last meeting—Secretary
- Business/Announcements—Vice President
- Club Activity—arranged by Activity Facilitator and includes project, lesson, service, etc. These are outlined by project area in the following pages.
- Refreshments—arranged by Refreshment Coordinator
- Clean Up—led by Clean-up Supervisor



Essential Elements of 4-H Youth Development

The essential elements are about healthy environments. Regardless of the project area, youth need to be in environments where the following elements are present in order to foster youth development.

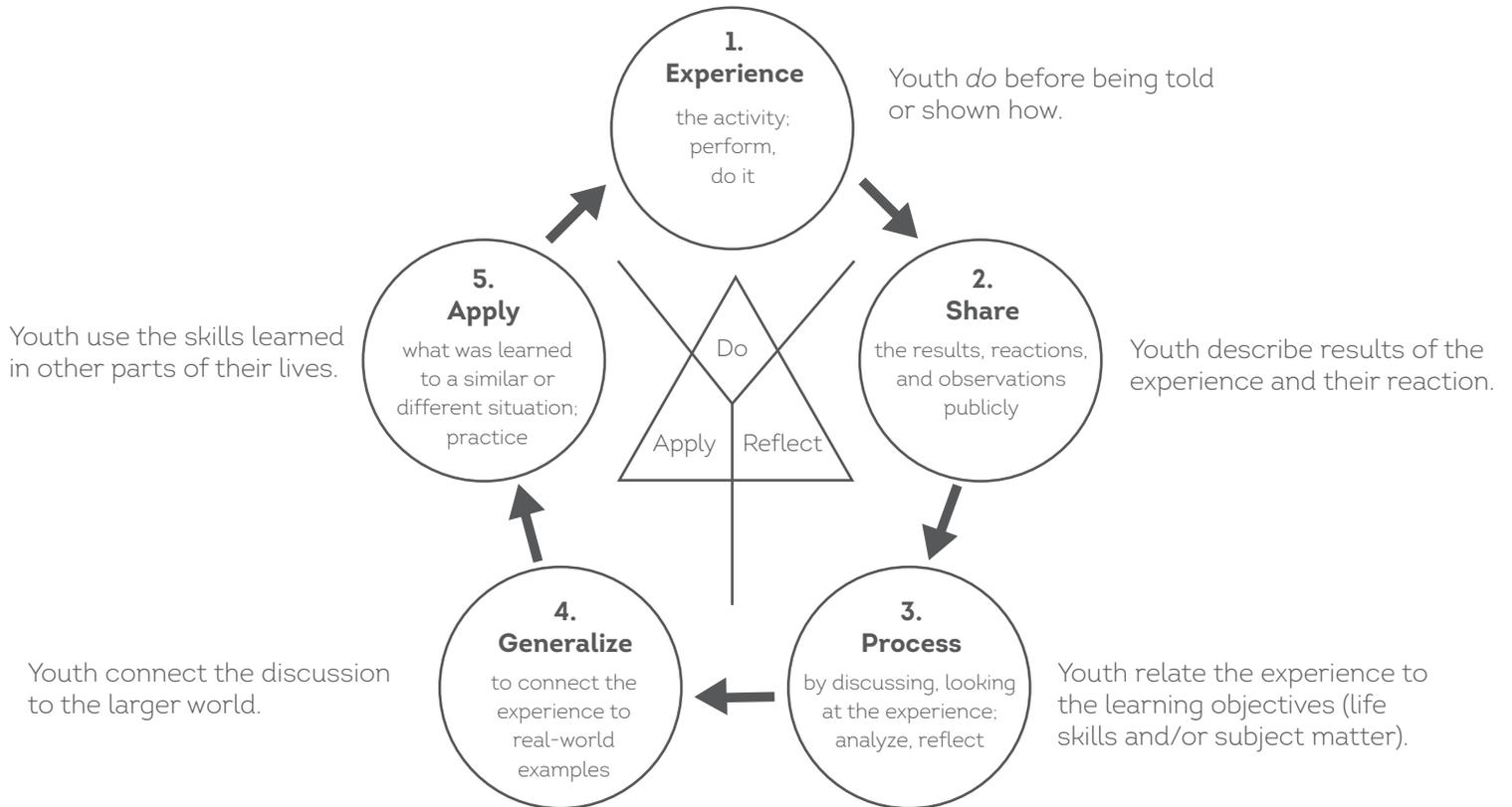
1. **Belonging:** a positive relationship with a caring adult; an inclusive and safe environment.
2. **Mastery:** engagement in learning; opportunity for mastery.
3. **Independence:** opportunity to see oneself as an active participant in the future; opportunity to make choices.
4. **Generosity:** opportunity to value and practice service to others.

(Information retrieved from: <http://www.4-h.org/resource-library/professional-development-learning/4-h-youth-development/youth-development/essential-elements/>)



4-H “Learning by Doing” Learning Approach

The Do, Reflect, Apply learning approach allows youth to experience the learning process with minimal guidance from adults. This allows for discovery by youth that may not take place with exact instructions.



4-H Mission Mandates

The mission of 4-H is to provide meaningful opportunities for youth and adults to work together to create sustainable community change. This is accomplished within three primary content areas, or mission mandates, - citizenship, healthy living, and science. These mandates reiterate the founding purposes of Extension (e.g., community leadership, quality of life, and technology transfer) in the context of 21st century challenges and opportunities. (Information retrieved from: http://www.csrees.usda.gov/nea/family/res/pdfs/Mission_Mandates.pdf)

- Citizenship:** connecting youth to their community, community leaders, and their role in civic affairs. This may include: civic engagement, service, civic education, and leadership.
- Healthy Living:** promoting healthy living to youth and their families. This includes: nutrition, fitness, social-emotional health, injury prevention, and prevention of tobacco, alcohol, and other drug use.
- Science:** preparing youth for science, engineering, and technology education. The core areas include: animal science and agriculture, applied mathematics, consumer science, engineering, environmental science and natural resources, life science, and technology.

Getting Started

1. Recruit one to three other families to form a club with you.
 - a. Send 4-H registration form and medical/photo release form to each family (available at utah4h.org)
 - b. Distribute the Discover 4-H Clubs curriculum to each family
 - c. Decide on a club name
 - d. Choose how often your club will meet (e.g., monthly, bi-monthly, etc.)
2. Enroll as a 4-H volunteer at the local county Extension office (invite other parents to do the same)
3. Enroll your club at the local county Extension office
 - a. Sign up to receive the county 4-H newsletter from your county Extension office to stay informed about 4-H-related opportunities.
4. Identify which family/adult leader will be in charge of the first club meeting.
 - a. Set a date for your first club meeting and invite the other participants.
5. Hold the first club meeting (if this is a newly formed club).
 - a. See *A Typical Club Meeting* section above for a general outline.
 - i. Your activity for this first club meeting will be to elect club officers and to schedule the six project area club meetings outlined in the remainder of this guide. You may also complete a-d under #1 above.
 - b. At the end of the first club meeting, make a calendar outlining the adult leader in charge (in partnership with the club president) of each club meeting along with the dates, locations, and times of the remaining club meetings.
6. Hold the six project-specific club meetings outlined in this guide.
7. Continue with the same project area with the 4-H curriculum of your choice (can be obtained from the County Extension Office) OR try another Discover 4-H Club project area.



Other Resources

Utah 4-H website: www.Utah4-h.org

National 4-H website: www.4-h.org

4-H volunteer training:

To set up login:

<http://utah4h.org/htm/volunteers/get-involved/new-volunteer-training>

To start modules: <http://4h.wsu.edu/volunteertraining/course.html>

(password = volunteer)

References

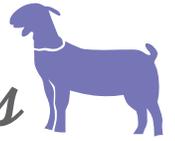
Information was taken from the Utah 4-H website (utah4h.org), the National 4-H Website (4h.org), the Utah Volunteer Handbook, or as otherwise noted.

Lerner, R., M. et al., (2005). Positive youth development, participation in community youth development programs, and community contributions of fifth grade adolescents: Findings from the first wave of the 4-H Study of Positive Youth Development. *Journal of Early Adolescence*, 25(1), 17-71.

We would love feedback or suggestions on this guide; please go to the following link to take a short survey:

<http://tinyurl.com/lb9tnad>

4-H GOAT CLUB *Meetings*



Club Meeting 1

Bring Your Goat Home 2



Club Meeting 2

Goat Selection 12



Club Meeting 3

Nutrition, Feeding, and Health 17



Club Meeting 4

Clipping and Fitting 23



Club Meeting 5

Showmanship 27



Club Meeting 6

Show Time 33

Colorado: Raising and Showing Meat Goats 40

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4-H *Club Meeting 1*

Bring Your Goat Home



Supplies

- Copies of "Project Game Plan" Worksheet
- Copies of "Project Record" Worksheet
- Pens/pencils
- Clip boards or hard surface to write on
- CSU Raising and Showing Meat Goats

PRIOR TO ACTIVITY

1. Contact a local goat producer and ask for permission to hold this club activity at the ranch. You will need to secure a location that has the following items:
 - Goat pen with shelter and fencing
 - Feed troughs
 - Water troughs
 - Alfalfa hay
 - Grain
 - Bedding

If you are unable to find a goat producer, contact your local Extension county agent for ideas.

2. Also, ask the producer if he or she would be willing to attend the club meeting and answer questions club members or parents might have.
3. Inform all members and parents of ranch location.
4. Assign members to read pages 4-7 in their "Youth Market Goat Project Guide."



1. IDENTIFY ITEMS NEEDED BEFORE PURCHASING A GOAT.

During this portion of the activity, stress to members and parents that each of these items on the list are REQUIRED and are not just recommendations. Without each of these items, members are not prepared to purchase and care for a goat. These items are crucial in sustaining the life of the goat.

While you are discussing each item on the list below, identify the object at the ranch you are visiting. This will allow members to see examples of what they will need. If possible, have the producer go with you and add any expertise or advice he or she sees fit.

- **Space**

Before purchasing a goat, make sure you have the space to raise one. The space you provide for your goat needs to be cool, dry, and draft free. You will also need space to exercise your goat. Be sure that keeping your goat in that space complies with all city or county ordinances.

- **Fencing/Panels**

Fences should be at least 48 inches high. When building a pen for your goat, it is important to be aware that dogs can be a danger. Consider selecting materials that will keep your goat in and also keep dogs out.

- **Shelter**

The shelter needs to keep the goat dry and provide it with shade during hot weather. It can be a barn, shed, or any type of structure that will cover the animal.

- **Bedding**

Sawdust, wood shavings, or straw can all serve as bedding for your goat.

- **Water**

When selecting the area for your pen, remember that your goat needs 1-2.5 gallons of water per day. You need to select a location that has fresh, clean water readily available. If you are using a bucket, the water will need to be changed daily.

- **Feed Trough**

You will need to make sure the feed trough is easily accessible and is also kept clean. Goats will not eat dirty feed.

- **Feed**

1. Alfalfa
2. Complete rationed show goat grain

Complete pelleted growing rations that range from 16-18 percent protein are adequate and easily accessible through many commercial feed companies. Check your local feed store. This type of ration can be fed to your goat until it is marketed.



2. WORK ON "PROJECT GAME PLAN" WORKSHEET.

Hand members a worksheet to work on with his or her parents. It would be beneficial to have the producer stay during this activity. The producer can serve as a great resource and may be able to suggest local stores where supplies and feed may be purchased.

Many of the questions on this worksheet may not be answered at this time. But, all of them must be completed before bringing home a goat. Send the worksheet home with the members and assign them to bring it to the next meeting completed. This will give them time to research how they will acquire supplies, space, etc. All of the information on the Project Record Worksheet can be used at a later date to help complete the 4-H Portfolio.

Remind members and parents that the initial expense of the project may be high. But, many of the items they are purchasing can be used year after year and with future goats, they will have already purchased most of the required items.

3. DISTRIBUTE AND EXPLAIN "PROJECT RECORD" WORKSHEET.

Good record keeping is extremely important for all 4-H projects. These records help to indicate the financial outcomes of your projects and also aid in making future management decisions.

Have members fill out the name, county, and record start date on their worksheets.



Explain that they need to read through the entire worksheet prior to purchasing their goats. Every time a purchase is made, feed is bought, income is received, the animal is weighed, etc., all information needs to be recorded on the worksheet. As they begin to purchase supplies before they bring their goat home, they need to be recording the purchases and amounts.

Page #4 of this worksheet is strictly a summary sheet and will not be filled in until the goat is sold.

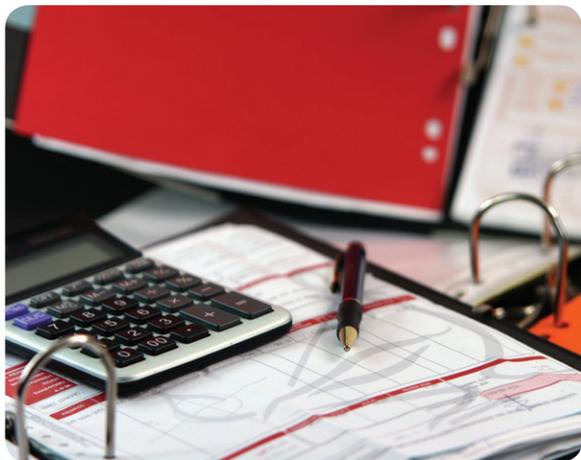
4. THANK THE RANCHER FOR ALLOWING YOU TO VISIT HIS OR HER RANCHING.

5. ASSIGN MEMBERS TO READ PAGES 9-12 IN THE "YOUTH MARKET GOAT PROJECT GUIDE" BEFORE THE NEXT ACTIVITY.

6. BEFORE ENDING THE ACTIVITY, HOLD A GROUP DISCUSSION USING THE QUESTIONS FROM REFLECT AND APPLY.



SCIENCE – Throughout the course of this project, members will be adding items to their "Project Record" Worksheet. It is important that they use correct math skills when calculating totals. Once totals have been calculated they can determine whether or not the project was profitable.



Reflect

- What do I need to do before I get my goat?
- How often should I update my record sheet? What is the benefit of filling out this sheet?

Apply

- Why is it important to keep track of how much you spend and how much you earn?
- If you are not prepared to bring a goat home, it could be disastrous. What other things in your life have you had to prepare for?



Belonging

Be alert and aware of any dangers that could surface during the meeting at the ranch location. It is important to create a learning environment that provides a positive, safe experience.

Mastery

It is crucial that the members add to their worksheets when expenses occur. This will instill a good daily habit and help members with future finances.

Generosity

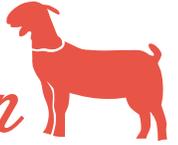
At an upcoming activity consider writing a thank you note to the rancher. It is important to teach members how to appropriately show appreciation.

References

Information retrieved from:

- The Ohio State University Extension "Goat Resource Handbook for Market and Breeding Projects."
- North Dakota State University Extension "Youth Market Goat Project Guide."

Project *Game Plan*



Name: _____

1. Where do I plan to house my goat?

2. Does my location fit the requirements?

_____ Is there space to exercise my goat?

_____ Is water available?

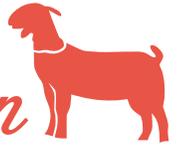
_____ Does keeping my goat here comply with county and city ordinances?

3. What type of fencing will I use?

4. Where will I get my fencing? How much will it cost?

5. How will I get this fencing? How will I construct my pen?

6. What type of shelter will I provide for my goat? What will it cost?



7. What type of bedding will I provide for my goat?

8. Where will I get bedding? (feed store, local farmer, etc.) What will it cost?

9. What will I use as a feed trough? How will I get a feed trough and what will it cost?

10. Where will I get the alfalfa and grain? What is the cost per bag/bale?

11. Am I committed to feeding and watering my goat TWICE a day EVERY DAY?

Project Animal Performance Record

Number or name of animal	Date started on feed	Beginning weight	Final weight	Total lbs. of gain	Date of final wt.	Total days fed
Total				[2]	Total	[3]

Project Income

Date	Describe what you sold, used at home, earned from shows, or have left at end of project	Total value
Total		[4] \$

Feed Record Summary

Month	Type of feed (grain mix, hay, pasture, etc.)	Quantity (pounds, etc.)	Total cost
Total		[5]	[6] \$

Other Expenses

Date	Describe expenses other than feed or project animal purchases (entry fees, veterinary services or supplies, interest, etc.)	Total cost
Total		[7] \$

Financial Summary

Item	Directions	Your Project Value
Income		
<i>How much value has your project developed?</i>	Enter box [4]	<input style="width: 100%;" type="text"/>
Expenses		
<i>What was the value of the animals you started with or bought?</i>	Enter box [1]	<input style="width: 100%;" type="text"/>
<i>How much did you spend for feed?</i>	Enter box [6]	<input style="width: 100%;" type="text"/>
<i>How much did you spend on other expenses?</i>	Enter box [7]	<input style="width: 100%;" type="text"/>
<i>What are your total expenses?</i>	Add boxes [1], [6], [7]	<input style="width: 100%;" type="text"/>
Profit or Loss		
<i>Was your project profitable for you? (Positive value means profit; negative means loss.)</i>	Subtract total expenses from income	<input style="width: 100%;" type="text"/>

Project Evaluation

Project Trait	Directions	Your Calculations		
Average Daily Gain <i>(How rapidly did your project gain weight?)</i>	Divide [2] by [3]		÷	=
		[2]	[3]	<input style="width: 100%;" type="text"/> pounds per day
Feed Efficiency <i>(How much feed did your project need to gain one pound?)</i>	Divide [5] by [2]		÷	=
		[5]	[2]	<input style="width: 100%;" type="text"/> pounds of feed per pound gained
Feed Cost of Gain <i>(How much did feed cost to produce a pound of gain?)</i>	Divide [6] by [2]		÷	=
		[6]	[2]	<input style="width: 100%;" type="text"/> dollars per pound of gain

4-H *Club Meeting 2* Just “Kidding:” Selecting Your Goat



Supplies

- Four goats tied up
- Goat producer
- Pens/pencils
- Paper
- Copies of “idea” list of producers
- Colorado State University “Raising and Showing Meat Goats”

PRIOR TO ACTIVITY

1. Contact a local goat producer for assistance with this activity. If you are unable to find a goat producer, contact your local county agent or Extension office for ideas. You could also check online for judging activities.

During this activity you will be discussing how to select a goat. Ask the producer if he/she would be willing to separate four goats from their flock for you to evaluate. You could also do this from goat classes you find online.

It would be helpful to have several goats that are conformationally correct and at least one that is incorrect.

Ask the producer if he/she would be willing to stay for the activity, and discuss with members things to look for when selecting a market goat. The producer’s knowledge and expertise will be very useful.

2. Make sure you inform all members and parents of activity location. Remind them of reading assignment pages 9-12 from the “Youth Market Goat Project Guide” provided with this series.
3. Compile a list of market goat producers in your area who members could purchase a goat from. Do not hesitate to ask your local county agent, other 4-H club leaders, or producers for ideas of names to put on the list. Once a list is compiled, make copies to distribute at the activity.

How to *Choose a Goat*



1. REMIND MEMBERS TO BE COURTEOUS AND RESPECTFUL WHILE VISITING THE RANCH.

2. HAVE THE PRODUCER DISCUSS AND IDENTIFY ITEMS TO LOOK FOR IN SELECTING A GOAT TO PURCHASE.

(Members should have read about this in their reading assignment.)

Refer to "Colorado State University Raising and Showing Meat Goats" pages 10-15 for descriptions of the following items:

- Frame Size and Height
- Muscling
- Structural Correctness
- Balance
- Eye Appeal



Encourage members and parents to ask questions during this portion of the activity.

3. EVALUATE FOUR GOATS.

- Distribute pencils and paper.
- Using the knowledge just learned from the producer and the reading assignment, have each member evaluate the four goats.
- Have the members write down which one they would purchase and why. Also have them write down which one they think is the worst and why.
 - Allow 10-15 minutes for the youth to evaluate.
- Discuss with members what they chose and have them explain why they picked the ones they did. Assist them if needed.
- Once the group has finished evaluating the goats, have the producer give his or her opinion of the four goats and specific things he or she likes and dislikes about them.

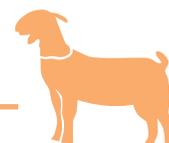
4. INFORM MEMBERS OF SEVERAL IMPORTANT SHOW RULES.

Different shows have different rules. Be sure to check the rules and regulations of the show you plan on attending. Several state rules are:

- Age – Exhibitors must be at least in the third grade, but not younger than 8 years of age as of October 1st of the current 4-H year. Exhibitors can only show through the same season as their high school graduation, but not past their 19th birthday. Exception: Disabled persons as defined by public law 98-527. In these special cases, animals must still be the project animals of the exhibitor and be cared for daily by the disabled person.



SCIENCE – Evaluation of animals, understanding animal anatomy as it relates to structural correctness, as well as correlating muscle and size to final meat production are all topics studied in animal science.



- Ownership of animals – The exhibitor will own, possess, feed, and care for his/her project animal(s) for not less than 60 consecutive days for market goats immediately prior to the show they intend to participate in. No interruption of ownership or possession can occur.
- Tagging – Local Extension/4-H agents will publicize tagging information regarding date, places, etc., and arrange local tagging for state-assisted shows. Animals must be tagged by ownership deadline dates. Possession and ownership requirements must be met for each show entered.
- Market animal weights – Ideal market weights as determined by the meat industry may vary somewhat from year to year, but the following show-day ranges are what suggested weights are based on:
Goat: 80-120 lbs., .75 lbs. gain/day

Before purchasing a goat, you need to be sure that you are going to meet the requirements of the show you plan to attend. The rules listed above are the rules for state-assisted shows and may be different than those of county fairs. It is important for you as an exhibitor to CHECK THE RULES OF THE SHOW YOU ARE ATTENDING!

5. DISCUSS THINGS TO KEEP IN MIND WHEN PURCHASING.

- All of the items discussed today; frame size and height, muscling, structural correctness, balance, and eye appeal.
- Select a goat with a weight that is appropriate to the amount of time you have from project start until fair time. Know the dates of your fair and figure the number of days you will be feeding your goat. Goats will generally be purchased weighing 50-60 pounds.

Your goat has to weigh a certain amount (check your show rules) in order to be allowed in the show. An average goat on a good ration will gain .50 to .75 pounds per day. Be sure your goat weighs enough when purchased so it will hit the target weight.

Anticipated Weights for Goats Gaining .5 Pound per Day:

Days Until Show	Purchase Weight	Final Weight
100	50	100
100	65	115
100	80	130
80	50	90
80	65	105
80	80	120
60	50	80
60	65	95
60	80	110



- All goats should have an owner identification (scrapies) tag, be polled or dehorned before purchase. Whether goats should be castrated at this time.
- A market goat is a lot of fun, but involves daily responsibility. Before purchasing a goat, ask yourself if you are ready to take responsibility and care for it each and every day.

6. DISTRIBUTE THE "IDEA" LIST OF PRODUCERS TO PURCHASE FROM.

Make it clear that this is only a list of ideas and they as members are free to purchase from any producer they wish.

7. DISCUSS PURCHASING A HALTER OR COLLAR AND TRAINING TO LEAD.

Now would be a great time to purchase or make a halter to lead your goat. It is a good idea to start training your goat to lead not long after you bring it home. When halter breaking goats, they should be caught, haltered, and tied to a fence with the goat's head in an upright yet comfortable position. Never leave a tied goat unattended; strangulation and/or death may occur.

After the goat has been accustomed to the halter breaking process, leading the goat is the next step. When leading the goat, a gentle pull should be applied to the rope halter or collar. If the goat resists, ask an adult or older sibling to apply light pressure to the tail to initiate forward movement. Continue leading your goat often to prepare it for leading without a halter which we will work on in a different activity. Try leading your goat at night or in the morning when it is cool and less stressful for your goat.

8. ASSIGN EACH MEMBER TO READ PAGES 15-24 FROM THE "COLORADO STATE UNIVERSITY RAISING AND SHOWING MEAT GOATS" BEFORE THE NEXT ACTIVITY.

9. BEFORE ENDING THE ACTIVITY, HOLD A GROUP DISCUSSION USING THE QUESTIONS FROM REFLECT AND APPLY.



Reflect

- What do I need to look for as I select my goat?
- What rules do I need to remember before purchasing my goat?

Apply

- When presented with many choices, what do you do to make a selection?
- What have you purchased in the past that you had to take care of?
- What do you take care of now? (pet, lawn, bedroom, etc.)
- Are you being responsible with what you take care of now? What can you do better?



Belonging

During this and upcoming activities work on getting to know each of the members. Discuss with them what their hobbies are outside of 4-H.

Mastery

Explain to 4-H youth that in life, many of the choices they make will need to be justified with a reason. In judging goats it is the same way. It is important for them to take notes and be able to explain why they chose the one they did.

References

Information retrieved from:

- AgriLife Communications and Marketing, The Texas A&M System, "4-H Meat Goat Guide."
- Colorado State University "Raising and Showing Meat Goats."

4-H *Club Meeting 3* Nutrition, Feeding, and Health



Supplies

- Pencils (not pens)
- Paper for note taking
- 2 copies of "Nanny the Goat"
- Prize for the winning team
- A bag of balanced grain ration (Be sure the feed tag is present and readable)
- Colorado State University "Raising and Showing Meat Goats"
- Alfalfa Hay (a flake is plenty)

Getting *Started*

1. ALLOW REVIEW TIME.

As 4-H youth arrive to the meeting, begin separating them into two teams.

- Divide teams based on equal numbers and ability.

Assign teams to review pages 15-24 in the Colorado State University "Raising and Showing Meat Goats."

- Explain that they are going to use this information to compete in a game and the winning team will receive a prize.
- Team members are allowed to take notes but the "Youth Market Goat Project Guide" will not be allowed during the game.
- Allow 10-15 minutes for review.

2. FEED NANNY RIGHT GAME.

Explain to members that the feeding and nutrition of their goats is the most important thing to focus on when raising a show goat. Correct feed rations, balanced diets, and plentiful fresh water are key elements to a marketable goat.

A goat that isn't fed correctly will not express proper condition for the show. Proper feeding and nutrition will allow goats to be marketable and healthy.

Rules of the Game:

1. Each team needs to select an individual to be the official "hand raiser."
2. Give each team a Nanny the Goat worksheet (see page 21).
3. The club leader will read a question aloud to the group (see page 22).
4. The teams can discuss the answer among themselves.
5. As soon as the teams have an answer, the "hand raiser" raises his or her hand.
6. The first team to raise a hand will answer the question.
7. If it is correct, members get to fill in a line to a dot on their goat in PENCIL (not pen).



8. If the answer is incorrect, members must erase a line to a dot on their goat and the other team has the opportunity to answer and fill in a line.
9. At the end of the 20 questions the team with the most complete Nanny wins the game.

Present a prize to the winning team.



3. DISCUSS TYPES OF FEED

Show the group a bag of balanced ration feed. Explain that any commercial type feed they buy will have a feed tag attached to the bag. A feed tag is like the Nutrition Facts label you see on a cereal box. It lists the ingredients in the feed. The ingredients listed are in the descending order of the percent makeup of the feed.

These types of complete pelleted growing rations that range from 16-18 percent protein are adequate and easily accessible through many commercial feed companies. Check your local feed store. This type of ration can be fed to your goat until you market it.

Show the group a flake of alfalfa hay. Along with feeding their goats a balanced grain ration, they will also need to feed alfalfa hay. Goats need hay for digestion.

The first few days after purchasing your goat allow it get used to its new home. Start the feeding routine slowly. Feed some good quality alfalfa hay. Don't feed grain for the first few days if your goat has not previously been fed grain. Start feeding grain in small amounts and allow the goat's digestive system to get used to the concentrated grain. This should be about $\frac{1}{4}$ to $\frac{1}{2}$ pound of grain per day. Allow goats 15 minutes to finish their grain. If they don't clean up their grain in that time, remove the uneaten feed and reduce their next feeding by that amount. Increase feed gradually to approximately 2-3 pounds of grain (as recommended by the feed's nutritional label) and approximately 2 pounds of hay per day. After 2 weeks, your goat should be on full feed.

*****The amounts of feed listed above are only approximate amounts and the amount you should feed will vary based on the condition of your goat, the weight of your goat, etc.*****

4. DISCUSS WATERING.

You cannot emphasize the importance of water enough!

Troughs and buckets used for watering must be kept clean and free of slime and dirt.

Goats should always have access to a supply of clean, fresh water!



HEALTHY LIVING – Discuss how the six nutrients needed by goats are also needed by humans. It is important for us to be conscious of eating healthy and exercising.



5. DISCUSS GOAT HEALTH

Refer members and parents to pages 15-16 in their “Colorado State University Raising and Showing Meat Goats” for a list of common market goat diseases.

The key to a healthy goat is the development of a preventive health program. Assume that the goat you purchased has had no treatments, and consult with a veterinarian for recommendations.

Several things to do to start a preventative health program are:

- Trim hooves every 4 to 6 weeks. Use caution and always try to trim hooves at least 1 week before a show. If you cut too deep into the hoof you may temporarily cripple the goat. This may affect how the goat performs in the show ring.
- Set a de-worming schedule. To prevent internal parasites, de-worm regularly. Goats should be de-wormed every 30 days for best results. This helps the goat achieve its growth potential. There are several goat de-wormers available that control internal parasites effectively. Use caution as you approach the show to avoid giving de-worming medication too close to the harvesting date of the animal. Talk to your veterinarian to decide on a de-worming program that best fits your situation.

6. DISCUSS HOW TO WASH GOATS.

At the next activity, members will be shearing their goats. It is important that the goats are washed and dried the day of the next activity, prior to arrival.

- Members will need to capture their goats and restrain them with a proper goat halter. Tying the goat at head level to a secure fence works very well.
- Use a mild soap or detergent. Soak the hide well with water, being careful not to get water in the goat's ears. Apply a small amount of soap and scrub the goat from top to bottom. Use a brush and curry comb to scrape off all the dirt and dung. When the hide is clean, rinse it thoroughly several times to remove all dirt and soap.
- Dry the goat off with a clean rag or towel.
(Halters, soap, brushes, and curry combs can be purchased at feed stores.)

7. ASSIGN EACH MEMBER TO READ PAGES 26-31 IN THE “COLORADO STATE UNIVERSITY RAISING AND SHOWING MEAT GOATS” BEFORE THE NEXT ACTIVITY.

8. BEFORE ENDING THE ACTIVITY, HOLD A GROUP DISCUSSION USING THE QUESTIONS FROM REFLECT AND APPLY.



Reflect

- What do I need to feed my goat daily?
- How often do I need to water my goat?

Apply

- Other than your goat, what responsibilities do you have?
- Your goat's health and well-being rely on your good care. What are the consequences of not taking care of your other responsibilities?
- The same nutrients your goat needs are the same nutrients you need. What can you do to eat healthy and exercise?



Belonging

Clearly state the rules of the game as well as expectations of good behavior and sportsmanship during this activity.

Independence

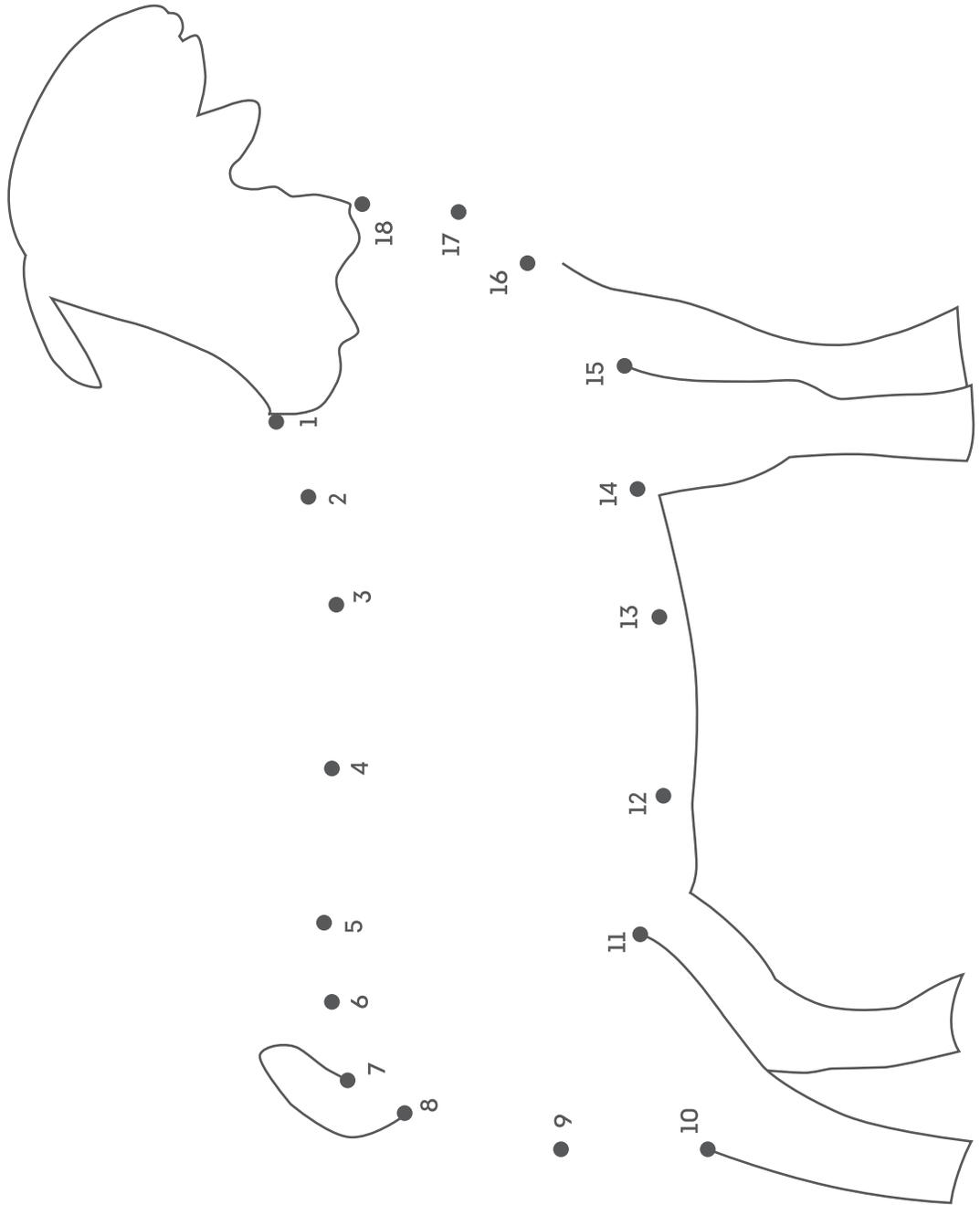
Encourage youth to use what they have learned about nutrition in deciding what type of feed they will purchase for their goat.

References

Information retrieved from:

- Colorado State University "Raising and Showing Meat Goats."
- The Wyoming "4-H Meat Goat Manual."

NANNY THE GOAT





GAME QUESTIONS

1. What are the six major nutrient categories required by goats?
2. On average how much water will a goat drink in one day?
3. What is one thing water does for a goat?
4. What is one thing protein is responsible for?
5. What is the primary energy source found in a goat ration?
6. If your goat is being lazy and doesn't want to walk, is it okay to never exercise it?
7. What do fats provide to your goat?
8. What percent of protein will a typical show goat ration have?
9. What are the two subgroups of vitamins?
10. True or False:
If I am too busy to water my goat it is okay not to water it. He will be fine without it until tomorrow.
11. True or False:
TDN stands for Total Digestible Nutrients.
12. True or False:
If I feed my goat right then it is a guarantee that it will be Grand Champion.
13. A competitive goat comes from; selection, management, exercise, showmanship, and _____?
14. True or False:
Corn is considered a major carbohydrate source in a goat ration.
15. What is one of the benefits to exercising your goat?
16. What are two of the Macro Minerals?
17. I ran out of my goats mineral supplements today, but I have a bag of horse supplements. Is it okay for me to feed it to my goat?
18. Why is it not okay to feed my goat mineral supplements for other species?
19. What are two of the Micro Minerals?
20. True or False:
Temperature can factor into how much your goat will drink.



4-H Club Meeting 4 Clipping and Fitting



Supplies

- Electric clips
- Scissors
- Curry comb
- Medicated Vaseline or bag balm
- An expert shearer if needed
- Washed and dried goats
- Colorado State University "Raising and Showing Meat Goats"
- Towels
- Trimming stand
- Squirt bottle

PRIOR TO ACTIVITY

If you are not an expert at clipping it is a good idea to call someone who is. The person may charge a small fee to come and clip, but it will be a small fee well spent. Contact your county Extension office if you need information on who clips goats in your area.

Members need to wash their goats the day of the activity prior to attending. They need to arrange transportation for their goats to and from this activity.

How to *Clip a Goat*



1. DISCUSS REASONS FOR CLIPPING.

You will probably want to clip your goat once or twice before the fair. This will help keep your goat cool during the summer. It will also help keep the animal clean. Goats that are cool and clean gain weight better and stay healthier.



Mission Mandates

2. DISCUSS DIFFERENT FITTING TECHNIQUES.

Fitting and grooming does not start at the show or even during the week of the show; it starts the day you bring the goat home. Fitting the goat means feeding, watering, and otherwise caring for the goat so that it achieves and maintains proper condition. When clipping the goat, start at its rear and clip off the hair in long, smooth, and even strokes. Use vertical strokes on the legs and horizontal strokes on the body and flank areas (see the drawing). Clip all of the hair on the body except for the tail. The final grooming step is to use the small animal clippers to remove the hair from around the goat's ears, eyes, and face. Also, use the hand shears or scissors to touch-up any hard-to-reach places, to blend in areas, or to smooth out any rough spots.



Mission Mandates

SCIENCE – Animal health and rate of gain are both topics that are studied in animal science. Keeping your goats clean will help them stay healthy in the heat as well as improve their rate of gain.



3. BEFORE STARTING, GATHER ALL SUPPLIES.

- If you are proficient in clipping, have your supplies and materials ready.
- Have members bring any of the items on the list they may have.
- If you have a professional come, provide as many materials as you and your club members can.

4. IDENTIFY AND DISCUSS SUPPLIES.

- Ask whoever is clipping to quickly identify the equipment being used and discuss what each item is used for.

5. BEGIN CLIPPING.

Caution! It is important to note that when clipping a goat you are using many sharp tools. Be careful not to injure yourself or any of the exposed areas of the animal, especially the hocks, the belly, the face, and the area under the hock.

Even though the members may not be able to clip their entire goat on their own, it is important that they stay with their goat and observe what is taking place. Encourage them to ask questions, take notes, and learn as much as possible about the clipping process!

Washing note: The cleaner the goat, the easier it will be to clip and the longer the clipper blades will stay sharp (because they are not getting dulled by dirt particles). Therefore, make sure that the goat is extra clean.

Safety note: Livestock clippers (not sheep shearers) are recommended for use by younger exhibitors because they are less likely to cut themselves or cut the goat.

Grooming note: No amount of grooming can correct or make up for a poor job of feeding, care, and management of the goat.

Caution note: Goats will almost always run when you enter the pen, you need to learn if they are running in fear or in play and excitement.

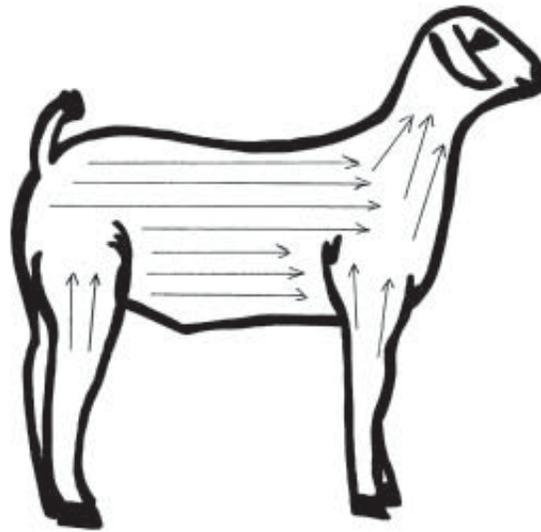
Safety note: During these sessions, the goat should never be left unattended.

6. ASSIGNMENTS.

Each member needs to read paged 30-31 in the "Colorado State University Raising and Showing Meat Goats" before the next activity.

Members will need to bring their goat with a halter or collar to the next activity. If they haven't already, they need to have their goat trained to lead with a halter or collar (Discussed in activity #3) before the next activity.

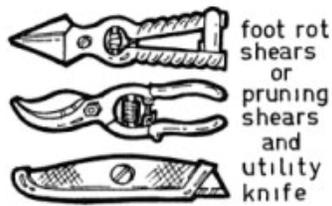
7. BEFORE ENDING THE ACTIVITY, HOLD A GROUP DISCUSSION USING THE QUESTIONS FROM REFLECT AND APPLY.



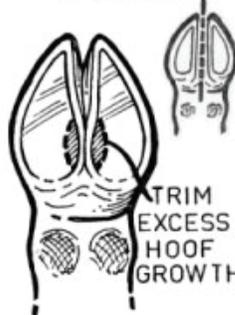
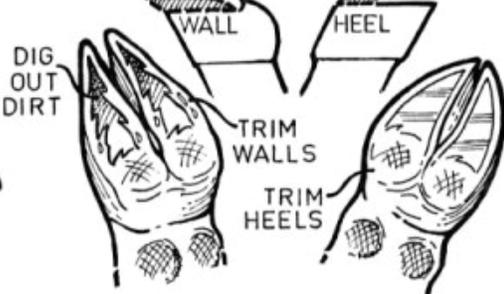
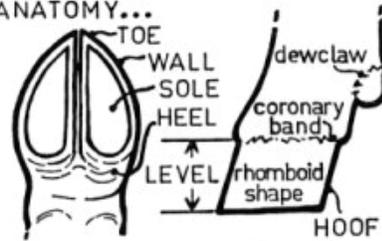
Source: The Wyoming 4-H Meat Goat Manual

HOOF TRIMMING.....

TOOLS...

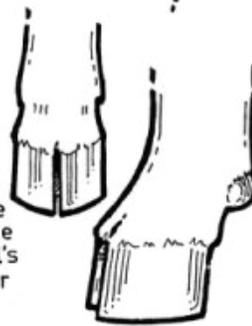


ANATOMY...



* 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





Reflect

- Other than improving the appearance of your goat, what are benefits of clipping?
- Now that you have seen clipping done, what did you find difficult or easy? What will be important to remember for your next goat project?

Apply

- Observing an expert can be a helpful learning tool. What other skills have you learned by observing others?



Belonging

This activity provides a great opportunity for your club to have fun and get better acquainted! It is likely that only one or two members will be clipping their goats at a time. You may want to give food assignments and have a “pot luck” dinner. This will provide a social activity while members aren’t clipping.

Independence

If you as a leader feel comfortable, you may want to allow members to clip open and straight areas. This will be easy for them and will allow them to build the confidence that is needed to clip the more difficult areas later down the road.

Generosity

If you have a clipping expert attending the activity and are holding a “pot luck” dinner, it would be a great idea to invite the expert to eat with you.

References

Information retrieved from:

- Colorado State University “Raising and Showing Meat Goats.”
- Clipping Graphic: http://www.uwyo.edu/4-h/projects/goats/meatgoat_manual.pdf
- Hoof Trimming Graphic: <http://www.homesteadingtoday.com/livestock-forums/goats/333841-what-does-properly-trimmed-hoof-look-like.html>



4-H Club Meeting 5

Showmanship Basics



Supplies

- Goats
- Halters
- Outdoor area large enough to hold a practice goat show
- Copies of "Quick Tips for Showmanship" Handout
- Colorado State University "Raising and Showing Meat Goats."

PRIOR TO ACTIVITY

Contact a local goat showman in your area who can work with the youth in your club on showmanship techniques. If you need ideas on who to contact, ask your local Extension office or county agent.

Schedule your meeting at a time of day that is cool. This will prevent heat exhaustion and weight loss for your goat.

Members will need to arrange transportation for their goat to and from the activity.

Learning the *Ropes*



Learning proper showmanship techniques helps make your goat look its best in front of the judge. It is not only important to feed your goat right and fit your goat, but also to show your goat well. After all of the hard work you have put into your goat project, now is your chance to show it off.

During this activity have the local showman do the demonstrating. Be sure the showman is aware that any advice, tips, etc., are very welcome! It is important to note that a showmanship competition can be subjective according to what a judge is looking for. There are many different styles and ideas of showing. Do what makes you feel most comfortable and what works best for you.

1. DEMONSTRATE HOW TO LEAD GOATS WITHOUT A HALTER.

- A. The exhibitor should walk on the opposite side of where the judge is standing, keeping the goat between him or her and the judge.
- B. One hand should be placed under the goat's lower jaw.
- C. The other hand should apply gentle but firm pressure at the back of the head.
- D. When walking, move slowly and smoothly, keeping a nice, constant speed.
- E. If the goat resists walking, place the right hand on the goat's tail to encourage the goat to move forward.



2. PRACTICE LEADING GOATS WITH COLLARS.

Allow members to walk their goats in a large circle, similar to a show ring. While they are practicing have the local showman watch the youth and ask him or her to give advice and tips.

3. DEMONSTRATE HOW TO SET A GOAT UP.

The goal is to have all four legs set squarely with the hind legs slightly wider than the front legs. This will help make the goat look wider from behind.

- A. Maintain control of your goat with one hand under the jaw.
- B. Use the other hand to reach over the goat to set the feet.
 - Always set the rear legs first and then move to the front legs.
- C. When setting the goats legs, pick up the leg and set it down in one smooth motion.
 - The goat will fight less if you pick up the leg above the knee or hock.
- D. When the goat is set, have it stand with its head and neck high with the ears pointing up and forward.

4. DEMONSTRATE HOW TO BRACE A GOAT.

Bracing refers to the forward push or drive of the goat against the inner portion of the showman's thigh. This helps make the goat feel firm and trim when handled by the judge.

- A. To brace the goat, stand in front and hold it securely with its nose pointing level to the ground. Gently push back on the goat with your inner thigh placed in the goat's breast and shoulder area.
- B. Keep your goat in a light brace the whole time you are in the show ring. The only exceptions include when you are leading your goat or when the judge comes to look at the front of your animal. When the judge comes to handle your goat, apply pressure on your goat to get the hardest brace possible.
- C. Never pull up on the goat's neck with your hands. Instead, use your thighs to control the animal. Keep all four legs on the ground.

5. PRACTICE.

Allow members time to practice setting up their goat and bracing it. While members are practicing, have the local showman watch the youth and give advice and tips.

6. PEN GOATS UP, ALLOWING TIME FOR REST.

7. DISTRIBUTE AND DISCUSS "QUICK TIPS FOR SHOWMANSHIP" HANDOUT.

The last three sections are review. Read through the "In the Ring" section and have someone demonstrate how to turn a goat. Encourage members to keep this handout and practice showing at home.



8. HOLD A PRACTICE SHOW.

Now that the members have learned the basics of showmanship, ask the local showman to serve as the ring man/judge for a “faux” show. Be sure to include the following items in the show:

- Walk in a clockwise circle several times.
- Bring the goats into a line side by side.
- Have the “judge” walk up and down the line, allowing youth to practice staying on the correct side of the goat.
- Have the “judge” handle each goat allowing members a chance to brace their goat correctly.

During this faux show, encourage the local showman to give as much critique and advice as he or she can. This show can serve as a great learning tool.

9. ASSIGN HOMEWORK.

Assign members to fill out the “Common Showmanship Questions” on their handout at home. Encourage them to try and memorize the answers. It is very likely members will be asked at least several of the questions listed.

10. BEFORE ENDING THE ACTIVITY, HOLD A GROUP DISCUSSION USING THE QUESTIONS FROM REFLECT AND APPLY.



Reflect

- What can you do at home to prepare your goat for the upcoming show?
- What are things to be mindful of in the show ring?

Apply

- The more you practice with your goat, the more comfortable it will be with you and the more comfortable you will become with it. What other skills in your life are improved upon if you practice?
- What have you learned from raising your goat so far that you can use in your everyday life?



Belonging

As a club you may want to create/order t-shirts, hats, jackets, etc., to wear as a club to the upcoming show. This will help encourage group identity among your club members.

Generosity

Be sure that members are being courteous and respectful to one another during the practice show. Encourage them to help each other and be patient with those who are struggling. Also remind them that it is important to congratulate the winning exhibitors. Teach them to be gracious and kind to the judge.

References

Information retrieved from:

- The Ohio State University Extension "Goat Resource Handbook for Market and Breeding Projects."
- Colorado State University "Raising and Showing Meat Goats."

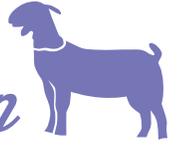
Study information retrieved from:

- http://texas4-h.tamu.edu/files/2011/12/livestock_101_intro_history.pdf



HEALTHY LIVING – The authors of a study done on the benefits of youth exhibiting livestock indicated that six major benefits surfaced as a result of competition through exhibiting livestock: (1) social relations, (2) character, (3) family, (4) competition, (5) learning new cultures and environments, and (6) helping finance the youth's higher education.

Quick Tips for *Showmanship*



IN THE RING

- Enter the ring on time.
- When lining up leave plenty of room between you and the exhibitor next to you.
- ALWAYS keep your goat between you and the judge.
- Be alert at all times.
 - Keep one eye on the judge and one eye on your goat at all times.
- Be courteous and respectful to other exhibitors.
- Pay attention to the instructions the ring man or judge gives to you.
- Be calm, patient, and have fun!
- Always shake hands and congratulate the class winner.
- Be prepared to answer the judges questions.
 - A list of sample questions is provided. Familiarize yourself with the answers!

LEADING WITH A COLLAR

- The exhibitor should walk on the opposite side of where the judge is standing, keeping the goat between him or her and the judge.
- The right hand should be holding the collar.
- The opposite hand should apply gentle but firm pressure at the back of the head.
- Walk slowly and smoothly, keeping a nice, constant speed.
- If the goat resists walking, place your hand on the goat's dock to encourage it to move forward.

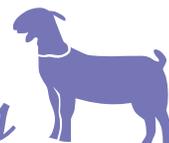
SETTING UP A GOAT

- Keep control of your goat with one hand under the jaw or with the collar.
- Use the other hand to set the goat's feet.
 - Always set the rear legs first and then move to the front legs.
- Pick up the leg and set it down in one smooth motion.
 - The goat will fight less if you pick up the leg above the knee or hock.
- When the goat is set, have it stand with its head and neck high and ears pointing up and forward.

BRACING A GOAT

- Stand in front of the goat.
- Hold it securely.
- Place its nose pointing level.
- Gently push back on the goat with your knee placed in the goat's breast and shoulder area.
- Lightly brace your goat while you are in the show ring except for when:
 - you are leading your goat.
 - the judge comes to look at the front of your animal.
- When the judge comes to handle your goat, apply pressure on your goat to get the hardest brace possible.
- Never pull up on the goat's neck with your hands.
 - Instead, use your inner thigh to control the animal.
- Keep all four legs on the ground.

Common Showmanship *Questions*



1. What breed is your goat?
2. What is the exercise program for your goat?
3. How much does your goat weigh?
4. When was your goat born?
5. How old is your goat?
6. What do you feed your goat?
7. How much do you feed your goat?
8. What is the percent of crude protein in your feed ration?
9. What would you like to change about your goat?
10. Name two goat by-products.
11. How many pounds of feed must be fed for 1 pound of gain?
12. What is the health program for your goat?
13. Is your goat a ewe or whether?
14. What would you change about your goat?
15. What is the best feature of your goat?
16. What are some different meat breeds of goats?
17. How much should a market goat weigh?
18. What is the gestational length of a goat?
19. What is the average amount of back fat on a goat?
20. What are the main cuts of a goat?

4-H *Club Meeting 6* Show Time: Fair Preparation



Supplies

- Items on "Fair Checklist" Handout
- Copies of "Fair Checklist" Handout
- Supplies needed to create fair displays
- Colorado State University "Raising and Showing Meat Goats"

PRIOR TO ACTIVITY

Find out what time weigh-in starts for the show you are attending.

Before the *Fair*



1. DISCUSS FITTING THAT WILL NEED TO BE DONE BEFORE THE SHOW.

- Goats will need to be clipped a second time.
This should be done anywhere from the day before the show to a week before. It is preferred to shear about 3 days before in case a nick or scratch is created by the shears. This should give an adequate amount of time for the wounds to heal.
- Some clubs like to wash their animals before going to the fair. They will then place them in a clean trailer, and try to avoid having to wash them again. If your club decides to do this, please plan accordingly so nobody is late getting to the weigh-in. If you wash your goat before going to the fair, remember that although you may not wash your entire goat while you are there you may need to do some spot cleaning.

2. IDENTIFY AND DISCUSS ITEMS ON THE "FAIR CHECKLIST" HANDOUT.

- Go over each item in detail. Explain what the item is and how it should be used.
 - Try and have the items at the meeting to provide a visual for members and parents.
 - Make sure parents understand that the items on this list are important and must be brought to the show.
 - The list is a suggestion of items. Please modify for your own show and situation if needed.



3. PLAN CLUB/SHOW LOGISTICS.

- Be sure that every member has a trailer or has made plans with others to get their goats to the fair.
- Weigh-ins start at_____ o'clock. Inform members and parents of this time. DO NOT BE LATE! You may want to plan a meeting spot for your club and all weigh in together.
- Once you have weighed in, you can get your goats placed in their pens.
 - Some shows assign pens. As a club you may want to get pens near each other.

4. DISCUSS IMPORTANT THINGS TO REMEMBER WHILE AT THE SHOW.

- The fair or show you are attending will most likely have a lot of fun things happening. It is great to have fun at the show, but it is also important to remember that your goat is the number one priority while you are there.
- You and your project represent 4-H. Represent this organization well and be sure that:
 - Pens are clean.
 - Goat is clean and well cared for.
 - You behave respectfully.
 - You are on time to all scheduled events.
 - You thank those who work at the fair and especially thank the purchaser of your goat.
- Keep your feed away from your neighbor's pen. Goats can be on strict diets and eating the wrong feed could cause severe sickness.
- Start early on show day. Give yourself more time than you need to get your goat ready. This will keep you and your animal less stressed.

5. CREATE CLUB DISPLAY.

This is a chance for your club to get creative! Each member taking a goat to the fair should create a sign to put on the pen with the exhibitor's name and the goat's name on it. You may also want to include pictures of working with the goat. While you are working on the smaller signs for the individual members, you may want to consider creating a larger club sign. This could include your club's name, pictures, names of each of the members, etc.

These signs will represent you as a club and the entire 4-H organization. It is important that they be neatly done and that you do not put items on them that could scare the goats.

6. REMIND MEMBERS TO FILL OUT THEIR RECORD WORKSHEETS FROM ACTIVITY 2 AND COMPLETE IT ONCE THEIR GOAT IS SOLD. THIS INFORMATION CAN THEN BE TRANSFERRED TO THE 4-H PORTFOLIOS.

7. BEFORE ENDING THE ACTIVITY, HOLD A GROUP DISCUSSION USING THE QUESTIONS FROM REFLECT AND APPLY.



Reflect

- What has been the most difficult struggle you have had to face while raising your goat?
- How did you overcome that struggle?
- What has been one of the most important things you have learned while raising your goat?

Apply

- How can you apply what you have learned while raising your goat to your school work?
- What lessons or knowledge have you learned from meeting as a 4-H club that aren't directly related to raising a goat? How can you apply this knowledge in your everyday life?
- Where does your club go from here?
 - Continue focusing on raising goats in more depth or
 - Begin a new Discover 4-H project area.



Mission Mandates



Belonging

Creating signs is not always required by shows but it is a great way to create a group identity and an inclusive environment within your club. Let the members have fun with this project and be creative.

Independence

Now that you have completed the activities provided, it is important to allow members the opportunity to plan where they want to go from this point. Be sure to listen to each person's ideas and help members realize how their thoughts can influence the group's direction. As the discussion progresses, bring up what goals the club wants to accomplish. Use these goals to guide what the club does now. It is crucial that each member's ideas be heard and considered instead of one or two members controlling the direction of the group.

References

Information retrieved from:

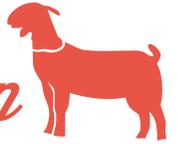
- The Ohio State University Extension "Goat Resource Handbook for Market and Breeding Projects."
- Colorado State University "Raising and Showing Meat Goats."



Mission Mandates

CITIZENSHIP – Now that you have completed the six activities on raising a goat, you may want to consider planning a service project as a club that would meet a need in your community.

Do's and Don'ts *of Showmanship*



DO

- Keep your eyes on the judge at all times.
- SMILE!
- Keep your goat between you and the judge at all times.
- Enter the show ring clockwise.
- Know all your goat parts and scorecard information.
- Show courtesy toward the judge.
- Wear all white if you are showing a dairy goat. Wear a white shirt and black pants if you are showing another breed (Pygmy, etc.).
- Use a collar that is similar in color to your goat's hair (no fluorescent orange - I hope).
- Thoroughly clean your animal: totally shave (if dairy), trim stray hairs (other breeds), hooves trimmed and cleaned, body bathed.
- Practice switching hands on the lead or collar and switching sides smoothly.
- Walk your goat at least one time a day so it is familiar walking with you.
- Please try and do as much of the preparation of your goat for the show ring by yourself or with other 4-H'ers as possible! Remember parents...this is a learning experience. It always drove me crazy when I saw parents doing all the work the night before the show while the child stood and watched, or worse—was nowhere in sight. Please allow your child to take ownership in this project. Victory becomes that much more sweet. Believe me!

DON'TS

- Get dirty before or when you are in the ring. Wear protective clothes over your show clothes, and DO NOT kneel on the ground EVER.
- EVER hit your goat in or out of the ring.
- Chew gum.
- Wear blue jeans or tennis shoes in the ring.
- Show up to your class late and expect to enter the ring.
- Panic if your goat becomes out of control. Calmly try to gain control and ask for assistance if necessary as a last resort.
- Shave your goat the night before, or the day of the show. I have seen many shaving boo-boos that could have grown out in 3-5 days if it had been planned ahead.
- Use a lead for a dairy goat. Only Pygmy goats use leads in the ring.
- Step over your goat at any time.
- Rest your hand on your goat's body at any time in the show ring.
- Ever stop showing—even if you think you have been placed. A judge can change his or her mind at any time during the show—even when you are leaving the ring!



More to *Discover*

Congratulations on completing your Discover 4-H club meetings! Continue with additional curriculum in your current project area, or discover other 4-H project areas. Check out the following links for additional 4-H curriculum.

1. <http://utah4h.org/htm/discover4hclubs>
2. <http://www.4-h.org/resource-library/curriculum/>
3. <http://utah4h.org/htm/resource-library/view-all-curriculum>

Become a 4-H Member or Volunteer

To **register** your Utah club or individuals in your club visit:

<http://www.utah-4.org/htm/staff-resources/4-h-online-support>

<http://utah4h.org/htm/about-4-h/newto4h/>

Non-Utah residents please contact your local 4-H office:

<http://www.4-h.org/get-involved/find-4-h-clubs-camps-programs/>



Stay *Connected*

Visit Your County Extension Office

Stay connected with 4-H activities and news through your county Extension office. Ask about volunteer opportunities and don't forget to register for your county newsletter. Find contact information for counties in Utah here:

<http://extension.usu.edu/htm/counties>

Enjoy the Fair!

Enter your project or create a new project for the county fair. Learn about your county fair and fair judging here:

<http://utah4h.org/htm/events-registration/county-fairs>



Participate in Local or State 4-H Activities, Programs, Contests or Camps

For Utah state events and programs visit:

<http://utah4h.org/htm/events-registration>

<http://www.utah4h.org/htm/featured-programs>

For local Utah 4-H events and programs, visit your county Extension office.

<http://extension.usu.edu/htm/counties>

Non-Utah residents, please contact your local 4-H office.

<http://www.4-h.org/get-involved/find-4-h-clubs-camps-programs/>



Discover *Service*

Become a 4-H Volunteer!

 <http://www.youtube.com/watch?v=UBemO5VSyK0>

 <http://www.youtube.com/watch?v=U8n4o9gHvAA>

To become a 4-H volunteer in Utah, visit us at:

<http://utah4h.org/htm/about-4-h/newto4h/>

Serve Together as a 4-H Club or as an Individual 4-H Member

Use your skills, passions, and 4-H to better your community and world. You are needed! Look for opportunities to help in your area or participate in service programs that reach places throughout the world (religious groups, Red Cross, etc.).

Hold a Club Service Project

USU Collegiate 4-H Club hosted "The Gift of Giving" as a club activity. Club members assembled Christmas stockings filled with needed items for CAPSA (Community Abuse Prevention Services Agency).

<http://tinyurl.com/lu5n2nc>



Donate 4-H Projects

Look for hospitals, nursing homes, or other nonprofit organizations that will benefit from 4-H projects. Such projects include making quilts for CAPSA or Primary Children's Hospital, or making beanies for newborns. During Utah 4-H State Contests, 40 "smile bags" were sewn and donated to Operation Smile.

Partner with Local Businesses

92,000 pounds of processed lamb, beef, and pork were donated to the Utah Food Bank in 2013 by multiple companies.

<http://tinyurl.com/pu7lxyw>

Donate Money

Clubs or individuals can donate money gained from a 4-H project to a worthy cause. A nine-year-old 4-H member from Davis County donated her project money to help a three-year-old battle cancer.

<http://tinyurl.com/mqtfwxo>



Give Us Your *Feedback*

Help us improve Discover 4-H curriculum. We would love feedback or suggestions on this guide; please go to the following link to take a short survey:

<http://tinyurl.com/lb9tnad>

Raising and Showing Meat Goats!



A youth manual for meat goat projects in Colorado!

Developed by:

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Section I - Starting a Meat Goat Project

Introduction

Colorado enrollment in 4-H goat projects has become increasingly popular. Since 1997 the number of 4-H members enrolled in goat projects has risen over 40%. These members participate in one or more different kinds of goat projects. There are three primary classes of goats; dairy, fiber, and meat breeds. As a result there are several variations of projects that a member can complete.

- Σ **Dairy Breeds:** The most commonly known breeds are dairy goats. These goats are typically owned and selected for their ability to produce milk and kids. Dairy goats tend to be larger and gentle with the ability to produce more milk. They are likely to have more kids at one time and are generally excellent mothers. Examples include the Nubian and Saanen.
- Σ **Fiber Breeds:** There are two breeds that are classified as fiber goats. Angora and Cashmere goats are both selected for their ability to produce fiber. Each breed has very different characteristics. However, both have their fleeces harvested and sold for spinning and weaving.
- Σ **Meat Breeds:** All goats can be sold for their meat. However, in recent years producers have begun to place more importance on muscle. As a result, certain breeds have been developed or improved. These animals tend to excel at muscle production, reach their market endpoint quickly and are generally easy to handle. For the purpose of this manual, the meat breeds will be the focus. However, keep in mind that there are several characteristics of the other types of breeds that may be useful in raising and showing high quality meat goats. Specific breeds are discussed later in this manual.

Baby goats are known as **KIDS**

The Decision

As a youth project, meat goats are popular because of the comparably short time, small investment, and minimal facilities that are needed for success. In addition, goats are very adaptable animals that perform well in almost any environment.

Because of their small size, goats are often viewed as fun pets. While this is often true, it is important to realize that goats, like any other project, are a **full time responsibility**. **BEFORE** beginning your project, make sure that you are committed to caring for your goat at **least** twice a day, every day (snow, rain or shine). As with any animal, goats not only require feed and water, they also need exercise, sunshine, and companionship. In order to be successful in your project, your goat(s) will require additional time spent training and grooming.

Once you and your family have decided to begin a goat project and are committed to the responsibility of owning an animal, there are several more steps that need to be completed in order to prepare yourselves. The following are suggested steps to help guide you through your project!

Step 1: Develop a Project Plan

Before beginning any project it is important to know as much as possible about the animal that you will be working with and to have a plan for production, management and marketing of the project.

In order to decide what type of project is best suited for you and your situation, there are several questions that you must first find the answer to.

1. What kind of goals do I have for this project?
2. How much time and money do I want to invest?
3. How do I plan to market my goats?
4. What are my facilities suitable for? Do they need improvement?
5. What kind of goats do I want to raise? i.e. type, breeding or market animals.
6. How many animals can I feed at one time?
7. Do I have the resources available to provide proper health care?
8. Am I comfortable with selecting animals to purchase?
9. What classes are available at my local fair?

There are several different resources that can be useful in answering these questions. Most importantly remember that the best way to find out is to ask someone who has been in the industry. Your county extension agent or 4-H leader should have access to all the resources that you need. If not, they can help you figure out where or who to go to for the information that you need.

A great way to gather information is to attend and observe a goat show. During this time, you can see first hand some of the work and commitment that is part of this project. In addition, this is a great chance for you to meet and talk to producers. Most of these people are happy to share their thoughts and suggestions. It is important to develop good relationships with the other producers in your industry in order to form a strong network of people to learn from and share ideas with.

A female
goat is a
DOE.

A male
goat is a
BUCK.

A neutered
goat is a
WETHER.

Step 2: Setting Project Goals

As in life, setting goals is invaluable to your goat project. The goals that you make will determine the direction that your project takes. Evaluate why you are choosing this project. If you are not interested in a long term commitment, a sensible goal could be to compete only at the county fair with your market goat. No matter what goals you decide upon, commit yourself to developing a detailed plan to accomplish your goals. It is helpful to include your goals as part of your record books. This aids in measuring your project's success.

Long Term Goals:

1. _____
2. _____
3. _____
4. _____
5. _____

Short Term Goals:

1. _____
2. _____
3. _____
4. _____
5. _____

Step 3: Developing a Time and Money Budget

There are several different phases of the meat goat industry in which a person can become involved. The production sector is rapidly growing. Meat goat production includes the owning, breeding, raising and selling of goats. Producing goats begins with the purchase of several does, getting them bred, caring for them through their pregnancy and caring for their kids until the time of sale. To increase profitability, it is usually necessary to own several animals. Production is a year-round time commitment. It involves greater money and time investments than a market project.

The market goat show industry is becoming increasingly more popular. A market goat project includes purchasing a young goat after it has been weaned from its mother. The project member then has the responsibility of feeding and caring for that animal until it is ready to be

**A
BUDGET**
is a plan for
how and
where money
will be spent

marketed. An important advantage to this sector of the industry is that a project member can purchase a young goat kid, feed it out and sell it in a matter of months. This shorter time period and lower investment makes this project more appealing to new members.

After deciding the amount of time and money that you are able to invest, it is helpful to develop a budget in order to measure your success and provide a guideline for your project. The following is an example of a very basic budget that you can research and fill in with the costs that apply to your plan.

Table 1 – Sample Budget

<u>Fixed Expenses:</u>	
Facilities (New or Improved)	\$ _____
Shelter	\$ _____
Fencing	\$ _____
Panels	\$ _____
Equipment	\$ _____
Feeders	\$ _____
Water Tanks	\$ _____
Miscellaneous	\$ _____
Total Fixed:	\$ _____
<u>Annual Expenses:</u>	
Animals	\$ _____
Veterinary Allowance	\$ _____
Feed	\$ _____
Hay	\$ _____
Grain	\$ _____
Pasture	\$ _____
Show Equipment	\$ _____
Total Annual:	\$ _____
<u>Estimated Income:</u>	
Number animals sold	No. head: _____
Price	\$/unit _____
Income from animals	\$ _____
Other income	\$ _____
Total Income:	\$ _____

Step 4: Designing a Marketing Plan

It is important to remember that a goat project is similar to running a business. Like any good business, a project member must know where the product will be sold. The process of getting a product to the point where it can be sold/used is called marketing. The place where that occurs is referred to as a market.

The type of market you target depends on the type of project you decide to pursue. There are several different marketing plans that can be used. It is important that each

operation design the marketing plan that will be the most effective for that specific operation.

Due to the fact the meat goat industry is fairly new, the available markets can be hard to find and not clearly defined. Although this can be more difficult for beginners, it also offers more flexibility to producers. Each project member has the choice to participate in developed markets or create a “niche market”. Several existing markets are defined below. While making a marketing plan it may be helpful to use these options as general targets. However, it is still necessary to define the specific targeted market. This is done by defining the desired customer, creating a demand calendar, and determining the optimal product. An example marketing plan can be found in Appendix 1.

A market created for a certain need is a **niche market**.

- Σ **Regional Auction Market** – Most auction barns will sell goats for the producer.
 - **Advantages:**
 1. There is no need for the producer to find buyers.
 - **Disadvantages:**
 1. This market is very unpredictable.
 2. The seller has to pay a percentage of the selling price to the auction barn (called a “commission”).
 3. Goats may be sold by the pound or on a per animal basis. This makes it difficult to know the most profitable kind of animal to produce.

- Σ **Niche Markets** – These are markets developed by the producer in response to a specific demand.
 - **Advantages:**
 1. The producer is able to capture more value.
 2. The customer base is very specific.
 3. The desired product is well defined
 - **Disadvantages:**
 1. These markets can be very seasonal.
 2. Producers are dependent on the demands of a specific group of customers.
 3. Maintaining the market is the responsibility of the producer and involves hard work to be successful.

- Σ **Seedstock Markets** – This market involves the selling of high quality breeding animals.
 - **Advantages:**
 1. This market allows a producer to capture more value for higher quality replacement animals.
 - **Disadvantages:**
 1. This market is dependant on trends and popular opinions.

The animals used to build a herd are called **seedstock**

2. This is only an outlet for animals that are good enough to be used as seedstock.

Σ **Show Prospect Markets** – This market targets the show industry.

○ **Advantages:**

1. Prices are normally fairly stable.
2. Goats shown in the different shows provide publicity for the producer.

○ **Disadvantages:**

1. This is only an outlet for those goats that are high enough quality to be competitive in the show ring.
2. The show ring is subject to trends and cycles. It is necessary to keep up with these in order to keep goats in demand.

Σ **Youth Livestock Sales** – This is a market for goats that are exhibited in youth shows.

○ **Advantages:**

1. The market is established.
2. The seller usually gains a premium over market value.

○ **Disadvantages:**

1. Buyers can be limited and therefore may be overused.
2. The seller will have to find buyers.
3. There is no guarantee that your animal will be accepted into a Junior Livestock Sale (have to “make the sale”).

Step 5: Facilities

The main requirements for a goat’s comfort are space for resting, exercising, shelter from the elements, clean and fresh feed and water. It is not necessary to build a brand new structure just for your goats. It is okay to use an existing building, as long as it will meet certain needs for the goats. Each goat should have a minimum of 15 square feet of space in the shelter. For example, a 5 foot by 6 foot (30 sq. ft.) shed would be big enough for two goats.

Goats also prefer dry and well bedded floors. The bedding should be changed often enough to keep it relatively clean and dry. The building should also be well-drained so that there is no danger of standing water inside the shelter.

Straw or sawdust
is used as **bedding**
for goats.

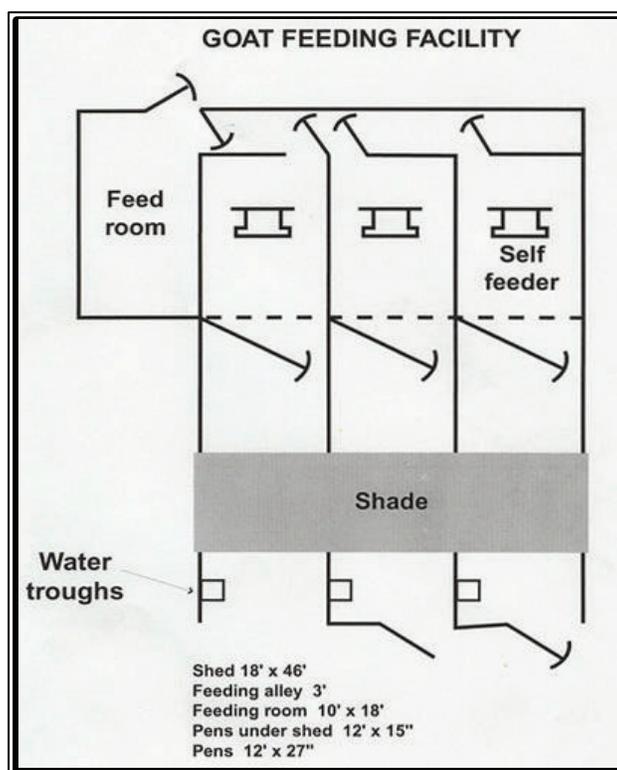
In the harsh Colorado climate it will be necessary for your goats to have some sort of shed or barn that will keep them warm during the severe winters and cool on hot summer days. Remember that the temperature of the goat’s environment is critical to its well being. Goats are less likely to eat when it is very hot. Goats are also more likely to get sick when it is very cold or during drastic temperature changes. Make sure that your barn has good air flow. In the summer, some sort of fan (even misting system) may be helpful but is not a necessary expense to keep the goats cool enough that they continue

to grow and stay healthy. For the same reasons, keep the shelter well insulated and warm in the winter. This can often be accomplished by enclosing the shelter with a tarp or plywood and with additional bedding.

There are no specific size requirements for the outside pens, however, the bigger the pen, the better for the goats. It is also a good idea to have something in the pen that goats can climb on. Climbing on trees to forage for food is natural instinct for goats, therefore they will spend a lot of time hunting for something to climb and play on. This is a great source of exercise for goats and it may also save some wear on your fences. See Fig. 1 for an example setup.

Goats are very active and curious animals. It is important that adequate fencing is used to contain them. This is both for the safety of the animal and is important in keeping a good relationship with the neighbors. While building pens and corrals, use panels that are at least 5 feet tall. It is helpful to use panels with 4-inch (or smaller) squares. These panels are tall enough to stop goats from jumping and the 4-inch squares are small enough to keep the goat from getting their heads stuck in the fences. Additionally, the small squares should keep most predators and stray dogs out.

Figure 1: Example Goat Feeding Facility



Source: Texas 4-H Meat Goat Guide

When fencing pastures or extremely large pens, it is generally better to use woven wire. When shopping for woven wire, make sure that the fence will last and is safe for the goats. Do not forget the cost of installing the fence when comparing costs. The wire should be at least 42 inches tall with spaces 4 inches square or smaller or 8 inches and larger. It may also be helpful to top the fence with one or two strands of barb wire and to have a strand at the bottom of the fence. The barb wire may be helpful in keeping predators out and goats in.

Electric fencing may also be an option. This type of fencing is generally lightweight, and easy to move. Whichever fencing is chosen, there are several fencing companies that have information about their product and representatives available to answer questions.

For a breeding goat project, it will be necessary to have access to some sort of working facility. There is a certain amount of handling required when keeping goats. If the goat operation consists of larger numbers, there are certain working setups that can be helpful for sorting, doctoring, marking and grooming. It may be helpful to construct a chute approximately 10 feet long, four feet high and 12-14 inches wide.

A single file walkway for goats is a **chute**.

Hint: Solid panels keep the goats from spooking as much.

By keeping the chute relatively short and narrow, crowding and turning problems can be avoided. At the entrance of the chute, construct a “catch pen” to run the goats into before crowding them into the chute. At the working end of the chute build or purchase a sorting gate that enables the workmen to sort into different pens. For smaller numbers of goats, a small “catch pen” may be all that is needed.

Step 6: Feed and Watering Equipment

Goats require a nutritious diet and fresh water at all times in order to grow and be healthy. Waterers and feeders must be checked daily. This will help to ensure that each are kept clean and working properly. Although a self-waterer may be the answer for keeping water fresh, it still requires cleaning and regular maintenance. A heated self-waterer will be helpful in keeping water from freezing in the winter. If watering by hand, it will be necessary to keep the ice broken so that the animals can get to the water. The water source should be located in the shade to keep water cool in the summer. It should also be raised off the ground high enough to discourage the goats from standing or relieving themselves in it.

Hint: A smaller water container is easier to keep clean and fresh because it requires changing and filling more often.

The feeder should be raised at least 6 inches off of the ground. This is to assist in keeping the feed cleaner. By not placing feed on the ground the spread of parasites and diseases is lessened. If hand feeding your goat project, use small portable troughs that can be placed at shoulder height to the goat. This again, discourages them from standing and defecating in the feed.

Step 7: Record Keeping

The best way to measure progress in your project is with record keeping. As discussed earlier, all livestock projects are similar to a business. The ultimate goal for each of them is to produce some sort of product. This product may be milk, or fiber, or meat. The best way to make sure that the business is producing the highest quality products with the lowest costs is through record keeping.

Records will help you to keep track of expenses and income and assist you in measuring the genetic and physical progress of each animal. Each individual tends to keep records with their own method. Whichever method works best for you, make sure to include all useful information.

Record keeping can be made easier with a computer. It may be helpful to look for existing computer programs or develop your own spreadsheet. The following checklist is the type of information that you need to maintain for your project.

Hint: Make your record keeping method easy to use and simple to understand.

Record Keeping Information Checklist:

- Expenses
- Income
- Animal Inventory
- Feeding Records (i.e. amount and kind needed)
- Animal Health Records
- Breeding Records
- Birthing Records
- Weaning Rates
- Weight Gain
- Goals

Section II – Breeding and Raising Meat Goats

Step 1: Selection of Goats

The way to produce a quality product is to start with the right ingredients. The ability to select a good goat is something that is perfected through years of experience. This is why it is so important to learn the fundamentals early. More importantly, do not hesitate to ask questions and the opinions of the producers you are buying from.

Breeds

Although all goats can be harvested for their meat, there are certain breeds that are better suited for this purpose. This publication will focus mostly on the breeds that excel in meat production. For a more complete list and description of all goat breeds, visit the Oklahoma State University website, <http://www.ansi.okstate.edu>.

A **BREED** is a group of related animals with similar traits.

Boer

The modern day Boer is a horned breed that originated in South Africa and is most often characterized by short white hair with red markings on the head and neck and long floppy ears. Through genetic selection, this breed has proven to excel in meat production, conformation, fertility and a high growth rate. The Boer goat breed has demonstrated weaning rates equal to and higher than 160% and a kidding rate of 200% is not unusual. Performance records also indicate an average daily gain of 0.3 – 0.4 lbs/day and some outstanding individuals can gain over 0.5 lbs/day. In addition to their advantages in growth, Boers also tend to reach puberty at an earlier age, 6 months for males and 10-12 months for the females. They also have an extended breeding season.

Spanish

The Spanish meat goat is made up of a wide range of colors and body types. The Spanish goat can be traced back to European sailing ships and Spanish explorers. For several generations, these goats could be found running wild in the Southern part of the United States. During this time, they developed certain common traits through natural selection. The majority of these goats have the ability to breed out of season, and have small udders and teats. Additionally, these animals tend to be very hardy, easy to manage and do well in tough environments. In recent years, certain producers have begun to place more emphasis on increasing meat production. As a result, these animals have become more suited to meat goat production.

New Zealand Kiko Goat

Much like the Spanish Goat, the Kiko is also the result of crossbreeding. Developed in New Zealand by crossing the heavier muscled wild does with Saanen and Nubian bucks. As a result, this breed tends to be larger framed, early maturing, and is often white.

Tennessee Fainting Goat

Also known as Wooden Leg goats or Myotonic goats, this is the only breed that was developed in the United States. These animals tend to be very muscular, will breed out of season and will often kid twice a year. The Tennessee Fainting Goat also suffers from a condition called myotonia. If frightened, these goats experience “extreme muscle stiffness”. This causes their legs and neck to “lock up” and will last 10-20 seconds. If unbalanced during these attacks, the goat will topple over, thus the name fainting goat.

Remember, there are more breeds of goats. These are the most suited to excelling in meat production. It is not necessary to purchase a purebred meat goat in order to meet your goals. There are several crossbreeds between these meat goats and certain dairy goats that are very good at meat production. The best way to decide which will work for you is to observe other goats and talk to other producers to find out what will work for your situation.

Age

The age of the goats purchased for a project depends on what your goals are and the breed of goat purchased. In order to have a kid crop, the goats purchased must be old enough to breed. Males tend to reach puberty at 4-8 months. Most females reach puberty in 7-10 months. This age varies between breeds, although most does may kid at one year of age. Despite this, some producers choose to let them grow out instead of breeding them the first year. This is to allow the goat time to mature without the tougher demands of pregnancy on its body. It is best if the doe has achieved at least 60-75% of its adult weight before breeding.

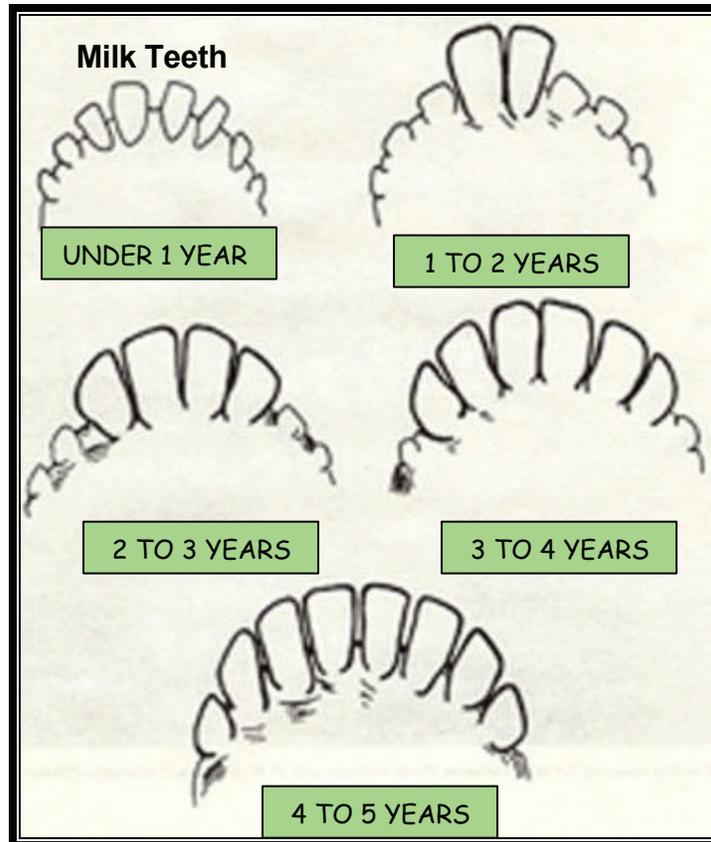
Puberty is the age which animals can be bred to produce offspring.

When a kid goat is removed from its mother’s milk, it is **WEANED**.

Market goats can be purchased after they are weaned from their mothers and are usually kept until they are ready to market. If you are looking for a show wether, make sure he will be within age limits that may exist at the target show. For example, several shows require that a market wether or doe still have their milk teeth.

Most goats lose their milk teeth at 10 to 12 months of age.

Figure 2



Source: Extension Goat Handbook

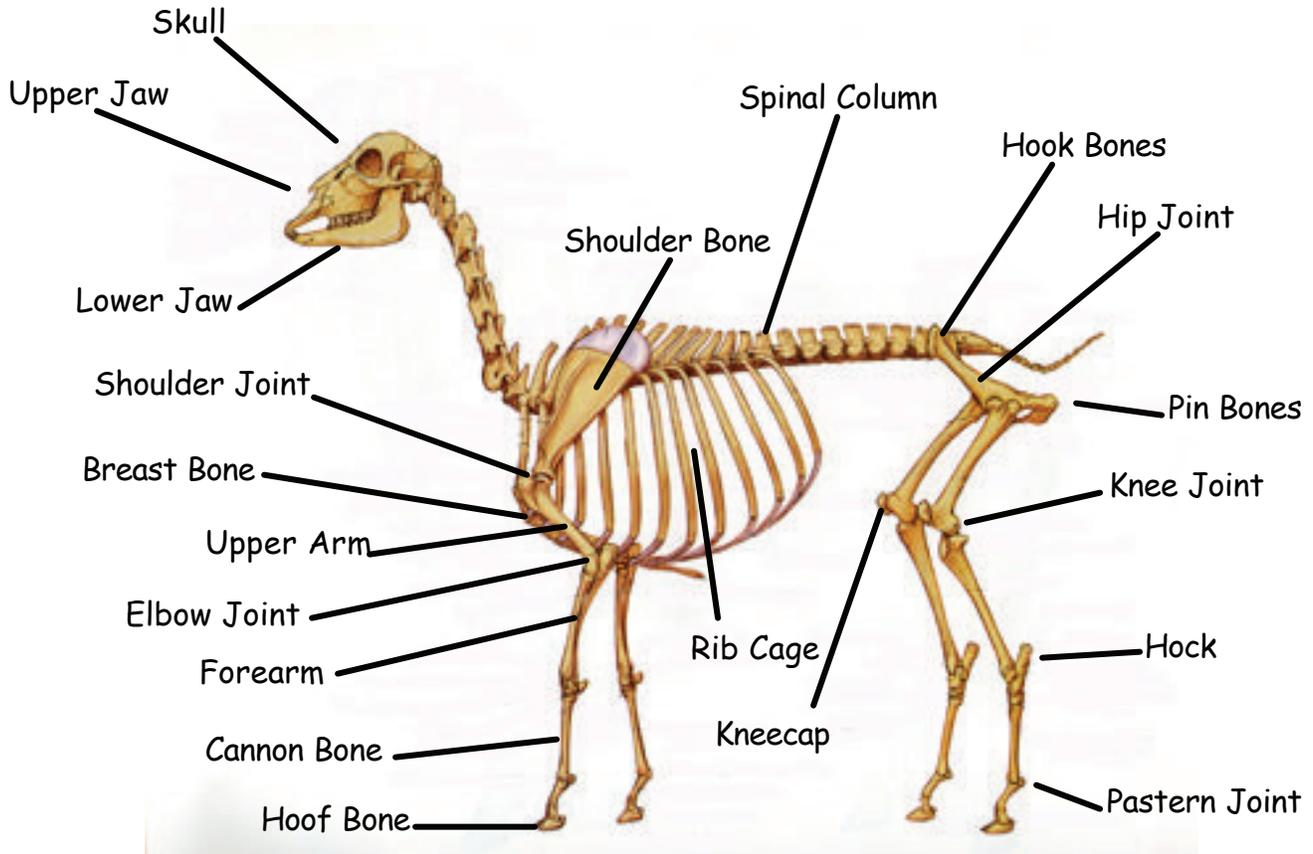
The “Look”

The type of goats that you select for your project will have a direct effect on the results. Although a good management plan can do a lot to help the quality of a project, it always helps to start out with good livestock.

The ability to evaluate livestock is a skill developed through practice and experience. Therefore, do not hesitate to ask for assistance from older and more knowledgeable goat producers. These people have had practice at selection and are generally willing to help a newcomer.

In order to evaluate an animal it is essential to understand the parts that make up the entire animal. Each part serves a function. That function can directly or indirectly impact your operation.

Figure 3: Skeleton of a Goat



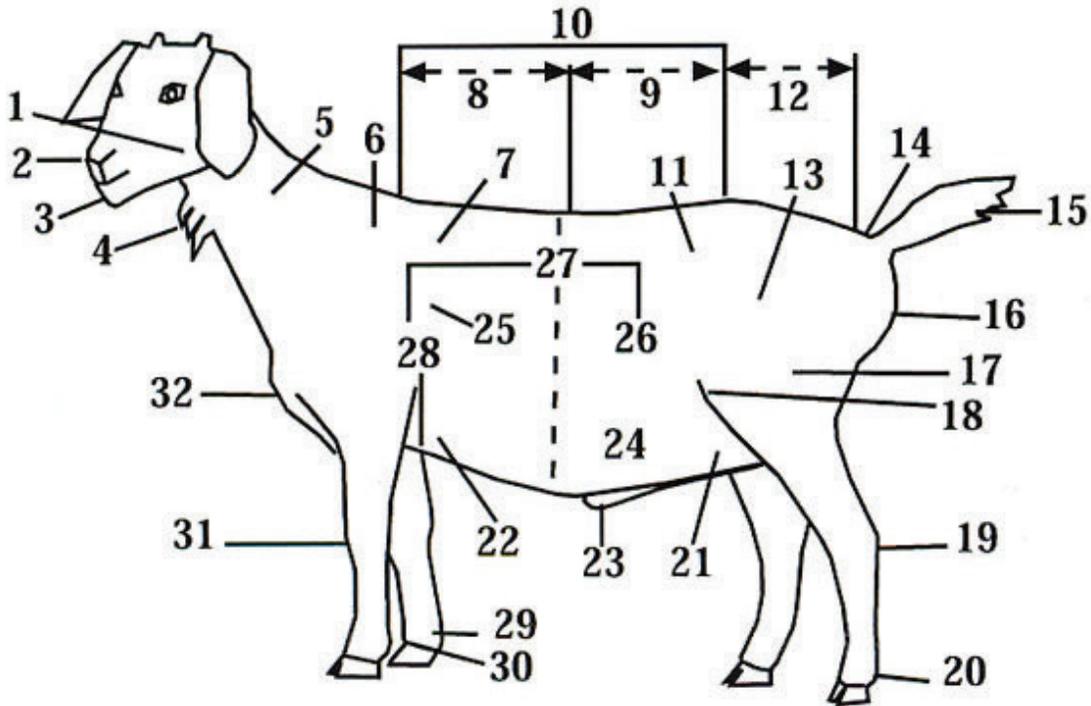
A goat's structure is a direct result of its skeletal design. Structural correctness is essential for any operation because it affects the animal's ability to perform basic daily functions. For example, if a goat has a severe overbite its ability to graze may be affected. If the angle of a shoulder, hip or pastern joint is too straight the animal may not be able to travel distances to reach feed or water.

The bone structure of a goat should be similar to that pictured in figure 3. The most obvious indications of structural problems are in the shoulder, hip and pasterns. If any of the angles in each of these joints are too straight or too excessive, that animal may have problems moving. It is important to remember that skeletal problems cannot be fixed or changed and will only worsen with age.

Helpful Hints for evaluating structure:

1. Make sure the top and bottom jaws align. Over bites and under bites are NOT desirable.
2. The shoulder should have approximately a 45 degree angle.
3. The top line should be fairly level.
4. The angle from hooks to pins should be gently sloping.
5. The hock should have enough angle to allow for ease of movement.
6. All four pasterns should have about a 45 degree angle.

Figure 4 – Meat Goat Parts



- | | | | | |
|------------|---------------|----------------|-----------------|-------------------------|
| 1. Jaw | 8. Chine | 15. Tail | 22. Fore Flank | 29. Pastern |
| 2. Muzzle | 9. Loin | 16. Pin Bone | 23. Sheath | 30. Hoof |
| 3. Throat | 10. Topline | 17. Thigh | 24. Belly | 31. Knee |
| 4. Wattle | 11. Hipbone | 18. Stifle | 25. Fore Rib | 32. Chest |
| 5. Neck | 12. Rump | 19. Hock | 26. Rear Rib | <i>Source:</i> |
| 6. Withers | 13. Thurl | 20. Dew Claw | 27. Barrel | <i>Mississippi Club</i> |
| 7. Crop | 14. Tail Head | 21. Rear Flank | 28. Heart Girth | <i>Goat Guide</i> |

Animals that will be efficient converters of feed into meat are the ultimate goal of a meat goat project. Consequently, it is necessary to select animals that are heavily muscled and production oriented.

The most important muscle indicators are the parts of the goat that provide the most meat if the animal were to be harvested. These areas are the shoulder, loin and leg. The forearm and shoulder should exhibit shape and muscle expression. A heavy muscled goat has a thick muscular top from chine to hook bones. This thickness extends out to the pin bones and the muscle is carried down to the hocks. When viewed from behind there should be shape and width from stifle to stifle.

When an animal is killed for meat it is **HARVESTED**

Hint: Goats that tend to stand and walk wider are generally heavier muscled.

The most obvious physical indicators of production traits are **volume** and **capacity**. These terms refer to the size of the animal along with the length and depth of body in that specific animal. A longer, deeper bodied goat generally maintains good body condition easier. In breeding animals, this makes for a healthier pregnancy in females and bucks that finish the breeding season in better condition. High volumed market goats are generally more efficient at converting feed to gain.

The **condition** or **finish** of an animal refers to the amount of fat cover over the spine and ribs. In breeding animals it is desirable to have a thin layer of fat cover. This layer acts as an energy reserve for the animal. This helps them to handle the stress of breeding and pregnancy better. Market animals are expected to maintain a trimmer layer of fat. A thin layer of fat is necessary to produce a fresher, tenderer carcass. However, too much fat will translate to a carcass unappealing to consumers. Please note, lambs and goats will put on finish differently. Goats will not deposit as much finish over the loin, as compared with lambs.

Goats are commonly sold by the pound, it is generally better to have goats with more **growth potential**. Goats that are growthier will be heavier which will translate into more pounds to be sold and more income. The most obvious indicators of a goat with more growth potential are a long head, neck, cannon bone and body.

The final category of selection is the hardest to define. **Style** and **balance** are not related to growth, production, or muscle. However, both are useful when marketing your animals. A stylish, correctly balanced animal is more likely to catch a buyer's attention. Style refers to the eye appeal of an animal. A doe should appear feminine with a long, thin neck, smooth shoulders and more refined bone structure than a male. A buck should be rugged and masculine with a heavy bone structure and expressive muscle pattern. Balance is a measure of how well all parts of an animal blend together. When evaluating balance an animal should be viewed from every direction. An animal should have a smooth shoulder that blends smoothly into a deep ribcage. A goat should exhibit a long, level top line that extends into a gently sloping hip. When viewed from behind the goat should be fairly thick between pin bones and this thickness should be proportional to the thickness from stifle to stifle. A superior goat should also stand straight and square on all four feet and legs.

Hint: When visually evaluating an animal, remember that fat is smooth and flat, while muscle creates shape.

Step 2: The Health Plan

The key to a good health program is prevention. By being observant, one can notice illnesses before they become serious. Fortunately, goats tend to be hardy, so an effective health plan can be fairly basic. By having some knowledge of goats and the diseases common to them most problems can be prevented.

Table 2: Normal Goat Physiological Data:

Temperature:	104 ± 1°F, 40°C
Heart Rate:	70 to 80 beats per minute, faster for kids
Respiration Rate:	12 to 15 breaths per minute, faster for kids
Rumen Movements:	1 to 1.5 contractions per minute

All animals should be checked at least daily for signs of illness. Obvious signs include: moving slower than other animals, poor appetite, diarrhea, limping, breathing hard or fast, grunting, grinding teeth, or other unusual behavior. If an individual shows any of these signs, it will need further examination. In order to decide how to treat the animal, it will be necessary to identify the symptoms. To help with a complete examination, use a checklist. The following is a list from The Goat Health Handbook; it may also be helpful to check with your veterinarian for common diseases in your area.

1. Look at the undisturbed animal from a distance. Note the general condition and age of the goat. Can it stand? Does it walk normally? Can it see? Is it bumping into objects? Does it exhibit signs of pain? Is it bloated? Are there swollen areas? Count respirations per minute (one count equals a complete in-and-out movement of air).
2. Approach the goat. It should be held by an assistant by the neck and body. Do not run the goat or fight it as this will cause a false temperature, pulse and respiration reading.
3. To take the goat's temperature, insert the thermometer into the goat's rectum, and leave it for 3 minutes.
4. Place your fist, palm, or fingertips on the left flank and feel for rumen movements. Note if the goat reacts as if in pain. If the rumen feels slushy or water-filled, this should also be noted.
5. Place fingertips on both sides of the lower rib cage and feel for the heart rate. Count heartbeats for 1 minute. The pulse may also be taken by feeling the big artery on the inside of the upper rear leg.
6. Roll back the eyelids and lips of the mouth to observe color of mucous membranes. Pink is normal except when dark skin colors extend into the mouth.
7. Feel over the goat's body to locate swellings and/or signs of pain.
8. Check for blindness. Move a hand toward the eye, but do not fan the air because a blind goat will blink if it feels air movement. If the hand is moved straight toward the eye, blinking will occur only when the goat can see.

A goat has a stomach with four compartments, the largest is known as the **RUMEN**.

9. Note any unusual sounds. Wheezing or coughing could indicate general body pain, either in the chest or abdomen.
10. Check all body fluids to see if the goat has diarrhea, excessive salivation, a runny nose (note whether the discharge is clear or cloudy), and crusty or runny eyes.
11. When examining a lactating doe, always check the udder. Look for clots or bloody milk. Feel for hard knots, heat, or signs of a painful udder.
12. To detect abnormal sounds of the abdomen and chest areas of a goat, a stethoscope should be used. If one is unavailable, place your ear against the goat's chest or abdomen and listen.

As you progress through the checklist, take notes about the animal. By making detailed notes you will have a list of symptoms to help you identify the animal's illness. It will also be easier to monitor the animal's progress if all the information is compiled in an easy to read manner. Design a form for recording this information and keep the forms close to the animals so that they are easy to use. Form 1 is an example of a health form that can be used by project members.

After determining the symptoms, use the following disease descriptions and chart to determine which disease is affecting the animal and the proper treatment. Remember to consult with your veterinarian before administering treatments. Always follow the label instructions on any drug treatment before using.

Disease Descriptions:

Acidosis occurs when goats eat too much feed with high levels of starch or sugar. This includes grains, grain by-products and vegetable parts. This makes the rumen more acidic and gives the goat a stomach ache.

Enterotoxemia is caused by an organism that is normally present in the intestine of goats. When a goats feeding schedule is changed suddenly or large amounts of grain are consumed the organism will grow rapidly and produce a toxin that causes death in a few hours.

Caprine arthritis-encephalitis (CAE) is caused by a virus. This disease spreads from older infected goats to kids, perhaps by contact or through the milk from an infected doe to her kid. Only a small percentage of goats show signs of the disease. This is despite the fact that a high percentage of tests for the virus are positive.

Caseous lymphadenitis (CL) can be contracted when goats eat contaminated feeds or through breaks in the skin. There is even some proof that the bacteria can enter unbroken skin. The disease is caused by a fairly common bacteria found in the soil.

Coccidiosis is caused by a tiny parasite which lives in the cells of the goat's intestine. The severity of the disease depends on the number of parasites living in the intestines. If the diseased goat becomes stressed the symptoms become worse and other diseases may be contracted.

Internal parasites include various types of worms that can be contracted through grazing in pastures. Each type of worm has a different life cycle and can be found at different times of the year. The presence of worms is normally indicated by a decrease in body condition and loss of appetite.

Pinkeye is identified by watering of the eye, redness in the whites of the eye, eyelid swelling and clouding over of the pupil. Several different organisms can be the cause of pinkeye. It is usually transmitted through contact with an infected goat or by insects, traveling from goat to goat.

The ability to resist infection is **immunity**.

Ringworm is a skin fungus. Many fungi can live in the soil for long periods of time. When an animal is infected, rough, scaly circular areas develop. Infection is most commonly found on the head, ears, neck and sometimes the body and udder. Consult a vet to find a safe treatment, as humans can contract ringworm.

Soremouth is a viral disease found in sheep and goats. The virus can live for long periods of time in the soil and equipment in a barn or corral. The symptoms are thick, scabby sores that can be found on the lips and gums of an animal. In severe cases the sores can be found on the udders of does. These sores are painful and make nursing impossible. Adult goats will develop immunity to a disease if they are continually exposed to the virus. A vaccine can be given to kid goats within a month of age. Once an animal has developed the disease, treatment is of little help. Softening ointment on the sores may be helpful. Most importantly make sure that the animal is still eating and drinking water.

Urinary Calculi is found only in male animals. Similar to kidney stones in humans, this disease is the formation of stones in the urinary tract. Calculi results from high phosphorus levels and an imbalance of phosphorus and calcium levels in the feed ration. Make sure that feed rations have a 2:1 calcium:phosphorus ratio, and 10 to 15 pounds of ammonium chloride per ton of feed. This, along with plenty of fresh drinking water will help to prevent calculi from forming.

Table 3: Quick Reference Disease Guide

Disease	Symptoms	Treatment/Prevention
Acidosis	Bloat, Dehydration, Weak Pulse, Increased Respiration, No rumen movement, Full, watery stomach, Very Weak	Administer mineral oil via stomach tube this will help to breakup the excess gas
Enterotoxemia	Full stomach, Fever, Star gazing, Convulsions and tooth grinding, Sudden death is common	Administer Antitoxin immediately Prevention: Two doses of vaccine
(CAE) Caprine Arthritis Encephalitis Syndrome	Young are weak in rear legs, Progressive weakness until death, Swollen joints in adults	No corrective procedures Prevention through testing and culling positives
Caseous Lymphadenitis (CL)	Large knots and abscesses located on body at lymph nodes, Fever, May start losing body condition	Lance abscesses, Rinse with 7% Iodine, Inject antibiotics
Coccidiosis	Diarrhea (may be bloody), Some loss of appetite, Loss of weight, Possible sudden death	Sulfa drug, Good sanitation, Isolate sick animal
Internal Parasites	Swelling under chin, Increased pulse, Increased respiration, Paleness, Severe weakness	Consult Vet to find the most effective de-wormer All animals should be de-wormed upon purchase and when put on pasture.
Pinkeye	Watering eyes, Redness of whites of eyes, Swelling eyelids, Squinting, Cornea becomes cloudy	Inject Antibiotics Apply eye ointment
Ringworm	Rough circular areas over body	Consult your vet to find a safe treatment
Soremouth	Scabby sores on lips and gums (may occur on udders)	Vaccine for kids, Softening ointments may help existing sores, Use caution around eyes
Urinary Calculi	Unable to pass urine, Restless, Kicking at belly, Stretching while attempting to urinate	2:1 Calcium:phosphorus ratio in feed ration, Ammonium Chloride in ration, Plenty of clean drinking water

Step 3: The Nutrition Plan

There is no such thing as one plan suits all when it comes to feeding. Each producer needs to design the program that works best for them.

A goat's diet has the same basic five requirements as all livestock. These are water, protein, energy (provided by carbohydrates, fats and even protein), minerals and vitamins. Each of these are needed by the goat for: maintenance, growth, gestation, lactation, and fattening.

Water composes 70% of lean tissue and is essential to replenishing body fluids. Water also assists in regulating the amount of feed a goat eats.

Water is one of the MOST IMPORTANT nutrients for your goat. Make sure they have a clean, fresh water supply at all times.

Dietary protein is an important ingredient of products such as meat, milk, and fiber. As a result, it is essential that a goat receive enough protein to maintain body tissue and stay healthy. Goats have a daily protein requirement that varies according to their size, age and condition. Protein is generally obtained through oilseed meals: cottonseed, soybean, peanut, and sunflower meals.

As with humans, animals need energy not only to grow but to carry out normal daily functions. In order for a goat's body to utilize nutrients it needs energy. Grains or hay are generally the most economical source of energy. Protein supplements can also provide energy for an animal but are more expensive.

Minerals needed by goats are not well defined scientifically, because each environment and ration is different, thus requiring different supplementation. For this reason, soil testing and assistance from your extension agent may be appropriate. Furthermore, mineral requirements are dependent upon age, sex, stage and level of production of your goats. The minerals to be most concerned about for goats are salt, calcium, and phosphorus. It is possible to feed salt free-choice, however many premixed rations already include up to 1 percent salt. Calcium and phosphorus should be fed at a ratio of 2 to 1. Hay and roughages are generally high in calcium and low in phosphorus. Grains are mostly low in calcium and intermediate in phosphorus. Feed and hay tests are available through most extension offices.

While it is important to monitor the contents of the ration fed, most commercially mixed feeds will meet goat nutritional needs. Buying feed becomes a question of which kind to buy to suit the immediate needs of the goats. As a goat grows and matures its nutritional needs will change with its body's demands. These needs are affected by body weight, stage of production (i.e. maintenance, growth, gestation, and lactation), age, body condition, climate, physical activity, diseases and parasites. A doe's highest nutritional demand is at the time of kidding. This is because late pregnancy and early lactation are critical times for the kid and the doe. By planning your breeding dates so that your does kid when more forages are available you can minimize feed costs.

Caution: Underfeeding during critical times is not profitable in the long run. Feeding large amounts of purchased feed will also hurt profit. By planning your production cycle around forage availability you can avoid these pitfalls.

Although most pasture or browse will meet dietary requirements for goats, it may be necessary to supplement during pregnancy or lactation. It is also easier to monitor and train your market projects if they are hand fed.

Table 4: Dietary Protein and Energy Requirements of Goats.

Class of Goat	Avg. feed intake/day, lb*	% Crude Protein¹	%TDN²
Growing doe, 45 lb ^a	2.4	8.8	56
Growing male kid, 66 lb ^b	2.9	9.0	57
Yearling doe, 90 lb ^c	4.6	10.0	56
3 yr. Old doe, 110 lb ^d	5.0	11.7	69
Mature buck, 220 lb ^e	5.3	9.0	55
Dairy doe, 150 lb ^f	7.5	11.6	71

*Approximations; based on dry matter in the feed

¹Calculated on basis of the dry matter in the feed

²TDN = Total Digestible Nutrients

^aGrowing at the rate of .25lb/day

^bGrowing at the rate of .33lb/day

^cYearling female, last trimester of pregnancy and growing

^dMilking 2 qt/day – enough for twins

^eNot gaining weight, moderate activity

^fNubian, milking 1 gallon/day of 4.0% butterfat

Source: Pinkerton and Pinkerton, 2000

When shopping for feed there are several factors that you need to consider. These Although price is important, you must also consider dietary needs and goat eating behavior.

In order to feed properly, it is important to understand the nutritional needs of goats. Use Table 1 as a reference for deciding which feed would work best for the goals that you are trying to accomplish. It is important to monitor

your animal's average daily gain, as faster gaining animals will require more nutrients. If you goat is gaining over 0.33 lbs/day, then you will have to supply them with more protein and energy (TDN) as compared to lower gaining animals.

Average Daily Gain (ADG) = total pounds gained ÷ number of days it took to gain that weight.

A goat's eating behavior is another factor in deciding what to feed. As goats are capable of picking though feed and eating only what appeals to them, the type of feed you

choose is important. Several producers will attest to the fact that a pelleted ration is often the best option. By feeding a pellet, the goat is unable to pick and choose what part of the feed it will eat.

It is also important to establish a feeding routine for your goat. By feeding your animals at the same time(s) everyday, there is less risk of upsetting the rumen. If changes need to be made in the amount or type of feed, make them slowly and gradually.

Caution: Sudden changes in feed or feeding can upset the rumen.

Use Table 5 as a quick reference guide when deciding which feed is needed. Because each geographic area and type of forage offers different dietary requirements, consult local producers, feed representatives, and extension agents for special feeding needs.

Table 5: Practical Dietary Recommendations for Feeding Goats.

Class of Goat	% Protein	%TDN
Growing kids, dry does, and bucks	9-10	54-58
Pregnant goats	10-11	56-60
Lactating goats	12-13	62-68

Source: Pinkerton and Pinkerton, 2000

Step 4: The Production Plan

After developing a plan to keep your goats healthy you need to make a plan to keep them productive. This plan will differ according to the type of project that you decide upon. If the focus is a market project, your plan will begin at the purchase of the market animal and end at the time of harvest. However, if you choose to begin a breeding project, your plan will be much more complex. Organizing your plans in the form of a calendar may assist in keeping your project on track. An example can be found in Appendix II.

When developing a production plan for your project, keep in mind your production goals. A main goal in a market project is to produce a healthy, market-ready goat for harvest. As a result, it will be necessary to include knowledge about facilities, health, nutrition, and fitness. (See Section III for information on fitness.)

The breeding production plan should combine all of the information that you have gathered so far with some basic facts about reproduction in goats.

Table 6: Physiological Data for Goats:

Female		Male	
Age of puberty (months):	7-10	Age of puberty (months):	4-8
Breeding weight:	60-75% of adult weight	Breeding age (months):	8-10 months
Length of heat (days):	17-23 (average 21)	Breeding season:	All year
Duration of heat cycle (hours):	12 to 48 (average 24)	Breeding ratio (buck:does):	1:20 or 30
Signs of heat:	Tail wagging, mounting, bleating		
Length of gestation (days):	148 to 156 (average 150)		
Breeding season:	August – January		

By combining this information with your marketing goals and forage availability you should be able to decide the best time to put the buck with your does. Remember to include required feeding changes in your calendar along with marketing dates, different facilities requirements and relevant health measures.

There are several additional practices that will be necessary in a breeding project. Consult with other producers and your veterinarian to get a better idea of what to expect and the best system for kidding with your available facilities.

It is essential that a kid goat gets colostrum from its mother immediately after birth. This milk includes important nutrients and antibodies that must be ingested within the first 12 to 24 hours of life. For this reason, it is important that you keep a close eye on the new kid to make sure that it gets up and nurses soon after birth.

Colostrum is the first milk a mother produces for her offspring. It is rich in antibodies to help aid immunity in the young.

Small pens used for kidding are called **jails** or **jugs**.

This may be made easier by building small pens to keep the kid(s) and its mother in. These pens are generally 4 to 5 foot square and are placed in some sort of shelter to keep the animals warm and dry. Depending on the health of the kids, these goats

are generally kept in these pens for 2 to 5 days. Afterwards, they are released into larger pens with other does and their kids.

Horn development is a trait of goats found in most breeds. For safety purposes, remove the horns while the animals are young, between 3 to 14 days of age. There are several ways to dehorn goats. These methods include dehorning pastes, burning irons, or physically removing the horns. You will need to research the method best suited for your project.

Much like dehorning, there are several methods of castration that can be used. It is smart to consult with your veterinarian or another producer before performing this task.

You will also need to decide on an identification system for the goats in your breeding program. The most common method is tagging. With this method you can use both numbers and colors to help identify different individuals, families, or gender groups. Tattooing and ear notching are also options that should be researched. Each has different equipment requirements and advantages. Check with the local livestock supply store and other producers for more information.

A male goat is **castrated** when his testicles are removed.

Another important aspect of identifying your goats properly is the concern over animal health. For example, there are specific requirements for scrapie identification in sheep and goats. Traveling to any show (even your local county fair) is considered “interstate movement”, meaning your goats must have an official scrapie tag. The only exception to this is wethers, they do not require an official tag. For more information call 1-800-USDA-TAG regarding the Eradicate Scrapie program.

NOTES:

Section III – Showing Meat Goats

Showing meat goats can be a great way to market the product you are producing. There are shows for breeding animals and for market animals. Both shows provide excellent learning and promotional opportunities. Shows are a great place for producers to interact and learn from each other. Attending will increase your expenses. As a result, it is important to weigh the possible benefits against the expenses. For example, will award money and public exposure be worth the cost of travel, entry fees and the time spent preparing?

How you present your goat will determine your success while at a show. Therefore, the preparation for a show is very important. Preparation begins the day you start your project! After deciding which animal(s) you are going to show, they must be taught how to act properly. The animals will need to be easy to handle and be comfortable around people. In order to ensure that your goat is well trained, you will need to spend considerable time with it **before** going to the show. You will find each goat will react differently to the steps that you take. Some may be more stubborn than others and some may be gentler than others. However, if you are persistent, most goats can be trained.

Step 1: Deciding which animals to show.

There is not one breed or crossbreed that is best suited for the show ring. Instead it is more important to analyze the goat's conformation and potential.

When selecting which goats to take to the show, look for the goat that is the most complete. Evaluate the goat's structure, muscle, growth potential, balance, and style. Although it is very unlikely you will find the perfect animal, by looking for the goat with the least problems you will be more successful in the show ring.

It will be necessary to prepare all paperwork which will be needed at the show. For example, health papers, brand papers, and registration papers may be required.

Step 2: Obtaining the Proper Paperwork

Depending on the breed and type of goat that you are raising, it may be beneficial to register the animals with a breed association. These associations can help monitor the genetics of a herd. They provide opportunities for publicity and marketing that are not available to unregistered stock. Most shows require breeding animals be registered in order to show. Therefore, if planning to show, make sure the animals are registered **in your name**. This means you will need to contact the breed association in plenty of time to get the papers put in your name. For more information contact your breed association.

Veterinary health inspection papers and brand papers may be required. Check with the show management to make sure you have the right paperwork before you leave for the show.

Step 3: Training Show Animals

It is important your goats are well behaved and easy to handle at the shows. If your animal misbehaves or is easily spooked, it will be difficult for you to present it successfully.

Caution: Never leave a tied animal alone.

- Σ Halter breaking is a convenient way to begin the gentling process. It is best to teach your animal to lead by a chain. Halters are acceptable for small children. However, a chain is thought to maintain more control of the animal. Furthermore, it is more effective at showing off the animal. It is necessary for the animal to be comfortable with its chain. The goat must be caught and tied up with the halter or chain. Make sure to tie the goat where he/she can not get hurt. This should be repeated until the goat is calm and comfortable with the collar on.
- Σ Once the goat is comfortable with the halter or collar, it is time to teach it to lead. Use the collar to hold the goat's head high. You will need someone to push the goat from behind. When a goat is leading properly, its shoulders will be even with your leg and its head will be in front of your body. The goat should lead freely without tension on the chain.
- Σ As the goat learns to lead, you can begin training it to set up. This involves teaching the goat to stand properly when not moving in the show ring. While keeping the body and neck straight, set the front legs squarely beneath the chest. Then, place the hind legs so the goat is standing square and naturally. Make sure to keep the head held high and in alignment with the body.
- Σ Proper training will teach the goat to set his/her legs up square each time the goat is stopped
- Σ Goats can be trained to respond to subtle cues for the more experienced showman
- Σ After you have trained your goat, it will be helpful to practice often. Have a partner act like the judge. Your partner can move around the ring and handle the animal in order to give both you and your animal practice.
- Σ By the time you take the goat to the show, the goat should stand squarely each time stopped, always lead freely and be accustomed to people.

Step 4: Fitting and Grooming

As with training, fitting and grooming begins months before the show. Fitting your goat, is making sure the goat is healthy, properly cared for and in desired condition.

Good condition means that the goat has good muscle tone and is not too thin or too fat. Through practice you will learn to evaluate the different degrees of fat cover and muscle tone. Fat feels soft and loose. Muscle feels shapely and firm. Both fat cover and muscle can be monitored and changed through diet and exercise. As discussed earlier, a balanced ration is important. However, as each goat is different it may be necessary to adjust the amount of feed the goat receives. Exercise may be a more effective and healthier method of keeping your goat in good shape.

The purpose of these goats is to produce meat, meat is muscle, and therefore a goat has to build muscle tone. Just like humans, goats build muscle through exercise. If a pen is big enough, a goat can get plenty of exercise on its own. However, it never hurts to provide additional exercise for your animals. Some facilities have the feed trough on one end of the pen and the water source on the other in order to ensure the goat must walk from one end of the pen to the other. Other people build circular tracks and exercise their goats around it.

There is no fool proof plan for an exercise program. It is important to develop a program that fits your situation. The main requirement for an exercise program is safety. It is most effective to exercise the goat intensely for a short amount of time. Therefore, whatever setup you choose to use, make sure that the obstacles are free of harmful edges and wires. It is helpful to make rounded corners in any tracks and to make the sides solid so the animals can only see forward. This will help keep them from trying to jump out and possibly hurting themselves.

Goat grooming can be divided into three different tasks: washing, clipping, and foot care. Each of these tasks need to be done close to show time. However, by brushing your goat's hair on a regular basis in the month prior to the show, you will keep the hair coat healthier.

To wash your goat, you will need:

- A collar for leading and tying the goat.
- A hose and a bucket
- Mild soap
- A scrub brush
- A couple of towels or some other way to dry the goat.

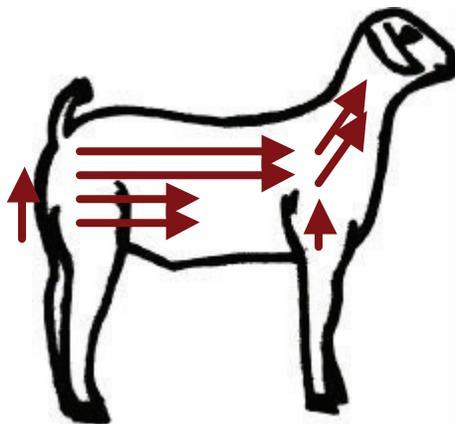
Wash your goat similar to how you wash a dog. Tie the goat to a post or fence. Make sure the goat will not be standing in a puddle and will stay clean while washing. Do not put the soap directly on the goat. Instead mix soapy water in the bucket and pour it on the wet goat. Once the goat is clean, finish your job by drying the animal.

To clip your goat, you will need:

- Livestock clippers and/or sheep shears
- 20 to 23 tooth combs
- Oil for clippers
- Scissors (for hard-to-reach places)
- A spray bottle (for wetting the hair)
- A trimming table
- An extension cord

Wash your goat immediately before clipping. After washing the goat, put it on the trimming table and towel dry. It is best to clip the goat while it is clean and slightly damp. Dirty hair is tough on your clippers. Damp hair is easier to clip smoothly. Clip all of the hair on the body except for the tail and below the hocks and knees. Use long, smooth strokes to clip your goat. Use vertical strokes on the legs and horizontal strokes on the body (see Figure 5).

Figure 5: Goat Shearing Diagram



Source: The Wyoming 4-H Meat Goat Manual

Only the top one third of the hair on the tail should be removed. The remaining hair should be blended into the clipped part and cut to about ½ “. The hair on the underside to the tail should then be clipped and blended with the rest.

The hair on the knees and hocks should also be blended with the clipped part of the goat's body. Use the scissors to trim long hairs and make the legs look smooth and well fit.

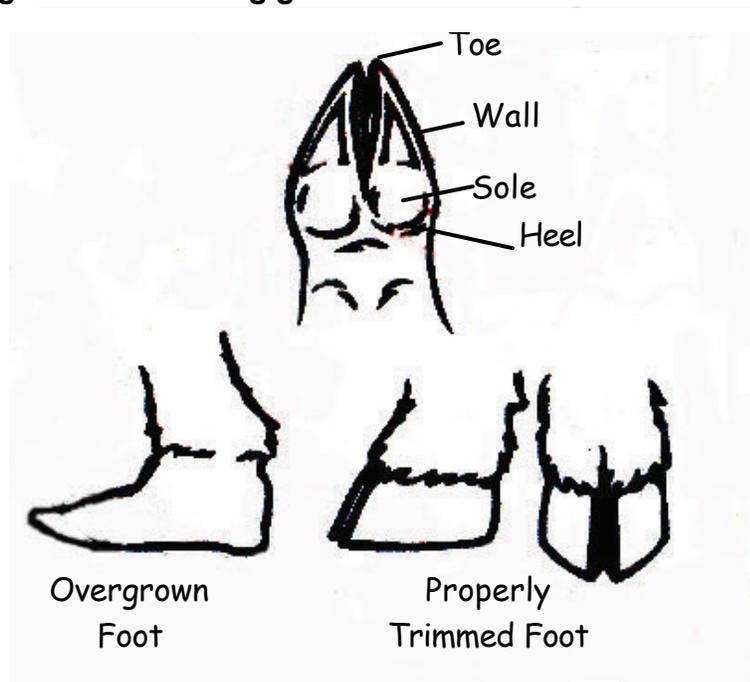
Use your clippers or small animal clippers to remove the hair from around the goat's eyes, ears and face. You can also use the scissors to get hard to reach places and smooth out rough spots.

To trim your goat's feet you will need:

- Foot trimmers
- Foot care medication
- A collar
- Someone to help hold the goat

The wall of the foot should be trimmed so that it is level with the sole of the foot. See figure 6. The feet should be trimmed a couple of times before the final trimming. This is to give both you and the goat practice. The final trimming should be done at least 14 to 21 days before the show. This allows time for any healing.

Figure 6: Diagram for trimming goat's feet



Step 5: Showmanship

After you have trained your goat, fit and groomed your goat, and collected the proper paperwork, it is time to go to the show! Most market shows include market classes which are separated by weight and showmanship classes. These classes are separated by the age of exhibitors showing the animals.

Showmanship is the true test of a show person's knowledge of his or her project. Some believe that this is a competition that is limited just to the showmanship class. However, showmanship skills are something that should be used throughout the show. Good showmanship can either make or break an animal in a competition. The purpose of showmanship is not to showcase the exhibitor. It is to help showcase the animal to its best ability. A good showman can evaluate his/her animal to determine its weaknesses. Once the weaknesses and strengths are determined, the showman can decide the best way to deal with each. For example, if your goat has too much slope to its hip, it may be helpful to set his rear legs further back in order to raise the hook bones.

In order to present your animal during its class at the show, you must know some basic guidelines.

1. It is important to dress appropriately. A neat, unwrinkled shirt, usually with a collar and pants are acceptable with clean and shined leather shoes.
2. Always keep an eye on the judge. This is **very** important in order to keep track of what is going on in the ring. The judge will be moving around to get a better view of the animals. The showman must know where the judge is at all times in order to be in the correct position.
3. Make sure your animal is always between the showman and the judge. This ensures that the judge always has the best view of the animal.
4. At all times, keep your movements at the front of the animal. When the judge switches sides, the showman should move around the front of the animal to the correct position.
5. Keep your movement slow and controlled. Your animal can sense your tension and stress. Therefore, if you are upset the animal will react in the same manner. This causes a lot of frustration which can be avoided by remaining calm.
6. Keep your goats head straight and upright. This helps make the animal more eye appealing to the judge and can also make your animal appear longer bodied.
7. Set the legs of your goat squarely underneath the body. This will help to show off body confirmation and muscling.

8. Make sure that your goat is trained to stand still when the judge handles your animal.
9. Most importantly, SMILE AND HAVE FUN!

Section IV – Conclusion

This manual provides general information and should be used as a tool to **begin** learning about your project. For more information, remember to talk to other project members, producers and your leaders. Also, refer to Appendix III for additional sources of information.

4-H provides a great environment for learning and expanding your experiences. Take advantage of the learning opportunities that your goat project will provide. More importantly, enjoy the chance to try something new and exciting.

NOTES:

Appendix 1 – Example Marketing Plan

Broken Dollar Goat Ranch

Project Mission –

Located southwest of Wellington, Colorado, the Broken Dollar ranch includes 10 acres of Front Range property. The Broken Dollar goat herd consists of 20 Boer Nubian cross nannies. The producer's mission is to maximize profit through the production of a high quality, uniform product.

Marketing Objectives –

1. To build an image of a high quality product that suits the demands of the show wether market.
2. To increase profit through the production of superior show animals.

Target Markets –

1. 4-H and FFA Meat goat project members.

Characteristics:

1. Young
2. Diverse in location, age and product demands.
3. Loyal to successful results
4. Tight budget

Distribution –

1. Area Club Goat Sales
Objective: To increase the scope of exposure while showcasing available show stock.
2. Private Treaty Sales
Objective: To capture more profit through reduced expenses, and build customer loyalty through personalized service.

Appendix 2 - Animal Health Note Card

Animal Id.#	Pen Location:	Date:
Temperature:	Coloring:	
Heart Rate:	Sounds:	
Respiration Rate:	Body Fluids:	
Rumen Movements:		
Other Abnormalities:		

Appendix 3 – Example Production Calendar

January	Begin kidding; check teats for milk flow; identify kids, Separate singles from twins; if possible, pen individual does with their kids; feed does to maintain milk production
February	Finish kidding
March	Continue supplement to lactating does
April	<p>Vaccinate kids, Wean kids, Select replacement does and bucks; supplement replacement does and bucks with a high-protein, high-energy feed, Discontinue supplement feeding to lactating does, Evaluate does and bucks; sell unsound and inferior animals</p> <p>Criteria for culling:</p> <ul style="list-style-type: none"> ∑ Barren female-missed two seasons in a row ∑ Bad teats or udders—too big or too small ∑ Bad mouths-smooth/broken mouth, over/under shot jaw ∑ Structural defects – bad feet and legs or back ∑ Bad testicles – too small or infected ∑ Unthriftiness – due to old age or disease
May	Move mature does and bucks to summer pasture, Monitor internal parasites through fecal samples (2500 eggs/gram would indicate the need for treatment). Your veterinarian can help get fecal counts.
June	Begin looking for replacement bucks with good confirmation, structural correctness, muscling, and a high weight per day of age.

July	Continue selecting replacement bucks, Treat for internal and external parasites as needed, Begin flushing does and bucks; flush with fresh green pasture or ½ of a pound high energy feed/head/day for 2 to 3 weeks before and after buck turnout
August	Turn out bucks with does; breeding ratio: 1 buck per 20 to 25 does depending on pasture size and breeding conditions
September	Remove bucks and feed to regain body condition, Evaluate pasture and forage conditions
October	Determine does' body conditions and plan winter supplemental feeding program, Monitor internal parasites through fecal samples. If heavy, treat after first hard freeze
November	Sort pregnant from open does, Begin feeding pregnant does
December	Monitor body condition of does; increase or decrease, supplementation if necessary, prepare for kidding

Appendix 4 – Suggested Additional Resources

American Meat Goat Association
Website: www.meatgoats.com

American Boer Goat Association
Website: www.abga.org

Website: www.boergoats.com

North Carolina State University – Department of Animal Science
Website: www.cals.ncsu.edu

Oklahoma State University, Department of Animal Science
Website: www.ansi.okstate.edu

Pacific Showcase Magazine
Website: www.pacificshowcase.com

Purple Circle Magazine
Website: www.purplecircle.com

Texas 4-H Meat Goat Guide by Frank Craddock and Ross Stultz
Website: <http://texas4-h.tamu.edu/publications/as34060.pdf>

The Showbox Magazine
Website: <http://www.theshowbox.com/>

General List of Resources:
Website: <http://livestock.colostate.edu>