



DISCOVER



4-H DAIRY HEIFER CLUBS



EXTENSION
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4-H DAIRY HEIFER CLUBS

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Utah State University Extension

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.

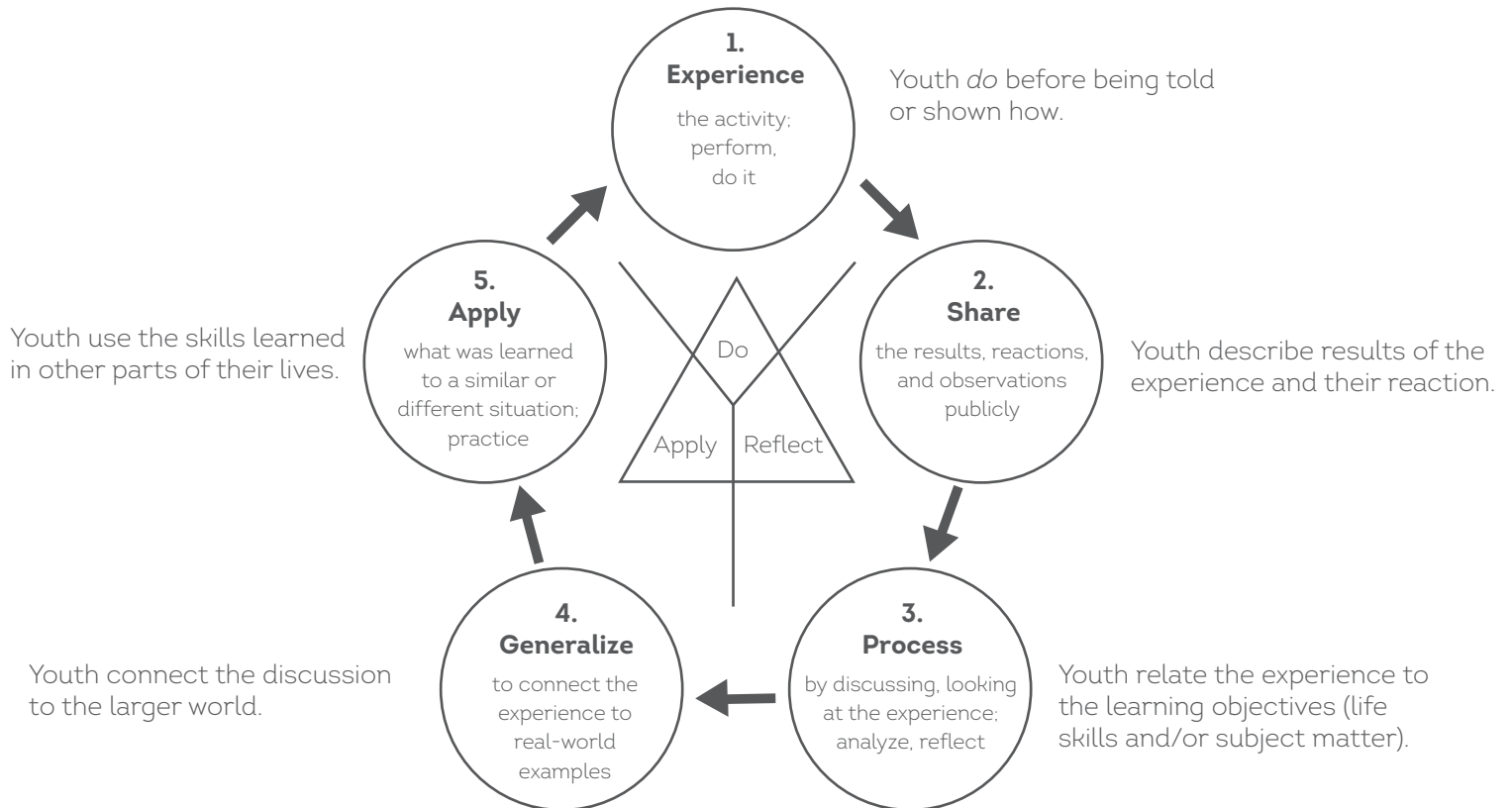
1. **Belonging:** a positive relationship with a caring adult; an inclusive and safe environment.
2. **Mastery:** engagement in learning; opportunity for mastery.
3. **Independence:** opportunity to see oneself as an active participant in the future; opportunity to make choices.
4. **Generosity:** opportunity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

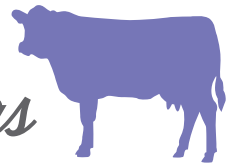
Information was taken from the Utah 4-H website (utah4h.org), the National 4-H Website (4h.org), the Utah Volunteer Handbook, or as otherwise noted.

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 DAIRY HEIFER CLUB *Meetings*



Club Meeting 1

Calf Care 2



Club Meeting 2

Selecting Your Heifer 16



Club Meeting 3

Nutrition, Feeding, and Health 21



Club Meeting 4

Showmanship Basics 26



Club Meeting 5

Clipping and Fitting 32



Club Meeting 6

Show Time 36

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4-H

Club Meeting 1

Calf Care



Supplies

- Copies of "Project Game Plan" worksheet
- Copies of "Project Record" worksheet
- Copies of "Dairy Animal Lifetime Record" Worksheet
- Pens/pencils
- Clip boards or hard surface to write on
- Ohio State 4-H Dairy Resource Handbook

PRIOR TO ACTIVITY

1. Contact a local dairy producer and ask for permission to hold this club activity at his or her farm or schedule a time at your local 4-H office. You will need to secure a location with the following items or have pictures ready:
 - Calf hutch
 - Example of bedding
 - Bottle
 - Grain feeder
 - Water bucket/trough

If you are unable to find a dairy producer and would like to hold this activity at a farm, contact your local county Extension agent for ideas.

2. Also, be prepared to answer questions members may have or ask the dairy producer to stay and be available for questions.
3. Inform all members and parents of meeting location.
4. Assign members to read pages 9-13, 54-57 and 78-82 in the Ohio State 4-H Dairy Resource Handbook.

Ice *Breaker*



This activity could either be held at your 4-H office or at a local dairy farm.

As a fun activity to break the ice for your club members you could play Dairy Breed Basket, like Fruit Basket but using breeds of dairy cows. As members arrive assign them each a breed of cow and have them sit in a circle. You will need to pick one person to stand in the middle of the circle and call out a breed and everyone who was assigned that breed will have to switch spots. Whoever is left in the middle will get to call the next breed. If the caller wants everyone to have to move he or she can yell “The Cows Are Out” and everyone must switch places. Play for the first 5 minutes to allow the kids to have fun from the beginning. After the game, take 5 minutes to briefly talk about the breeds you used in the game. Members should have already read a little about each breed. You can use the most common breeds or all six depending on how many members you have.

1. Holstein–Biggest breed, black and white or red and white, most common breed in U.S.
2. Jersey–Smallest breed, brown to gray, second most common breed, highest butter fat in milk.
3. Guernsey–Intermediate size, fawn colored, some white markings, yellow pigmentation of skin.
4. Brown Swiss–Large in size, one of the oldest dairy breeds, light brown to gray, have big ears.
5. Ayrshire–Medium size, red and white
6. Milking Shorthorn–Dual-purpose breed for meat and milk, can be horned or polled, medium to large in size.

Get *Started*

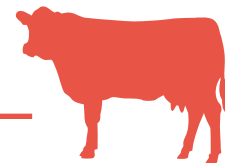


Officially start your meeting. Introduce yourself and welcome everyone, then begin teaching.

1. DISCUSS WHAT TO DO FOLLOWING BIRTH

These are important things to do to care for your heifer.

- Move your calf into its own calf hutch or pen. There should be clean sawdust, sand, or straw for the calf to lay on depending on the time of year, what is available, and your location.
- Calves require Colostrum, which is the first milk produced by a cow. It is rich in antibodies and nutrients. Calves require this to receive passive immunity from their mother. Calves require a half gallon in the first half hour of life and another half-gallon in the next 6 to 8 hours. It is beneficial to feed colostrum for the first 2 to 3 days of life.
- After birth it is important to dip the umbilical cord in iodine for a few seconds to prevent disease.
- After calves have finished getting their colostrum, feed them whole milk or milk replacer. Although whole milk is preferred, a high quality milk replacer can be sufficient. If bottle feeding, it is important not to hold the bottle too high this will cause the esophageal groove not to function correctly. The esophageal groove allows milk to bypass the first three stomach compartments and enter the abomasum.



- **Dehorning** is important. It should be done once the horn bulbs become visible. There are several ways to dehorn. The most common way is with a hot iron. Press the hot iron over the calf's horn bulbs for 10 to 15 seconds until there is a ring around the bulb. It is better to do this at a young age because there is less stress for the animal.
- **Vaccinations** should be done on all animals. There are a variety of vaccinations available. Talk to your vet to see what he/she recommends for you or follow your herd health protocol to ensure your heifer is receiving the correct vaccinations at the right time. Members may want to hire a vet to give the vaccinations.

2. TWO COMMON CALF HOOD DISEASES TO WATCH OUT FOR

1. **Scours** – Most common disease. It is diarrhea caused by bacteria. Prevent scours by providing high quality colostrum at birth and keeping calves in a clean, dry environment. Vaccines may also help.
2. **Pneumonia** – Second most common disease. It is inflammation of the lungs. Symptoms include coughing, diarrhea, difficult breathing, increased temperature, and nasal discharge. Prevent pneumonia by providing clean, well ventilated housing. Vaccines may also help.

3. WORK ON "PROJECT GAME PLAN" WORKSHEET

Give each member a worksheet to on with their parents. 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 your heifer is born or purchased. 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 for future heifers, and they will have already purchased most of the required items.

4. DISTRIBUTE AND EXPLAIN "DAIRY ANIMAL LIFETIME RECORD" AND "PROJECT RECORD" WORKSHEET

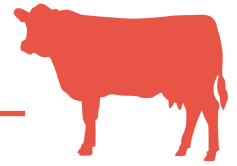
Good record keeping is extremely important for all 4-H projects. These records help indicate the financial outcomes of your projects and also aid in making future management decisions.



Have members fill out their name and club name on their worksheets.



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.

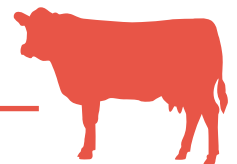


Explain that they need to read through the entire worksheet. Every time a purchase is made, feed is bought, income is received, the animal is weighed, etc., all information needs to be recorded on the worksheet. If they purchase supplies before they bring their heifer home, they need to be recording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

5. IF YOU HELD THE MEETING AT A DAIRY, THANK THE DAIRYMAN FOR ALLOWING YOU TO VISIT HIS OR HER FARM.

6. ASSIGN MEMBERS TO READ PAGES 5,14-15 AND 17-19 IN THE “DAIRY RESOURCE HANDBOOK” BEFORE THE NEXT ACTIVITY.

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

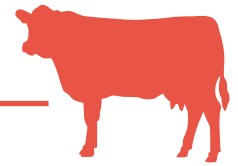


Reflect

- What do I need to do before my heifer is born or purchased?
- How often should I be updating my record sheets? What is the benefit to 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 care for you heifer, 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 first meeting. 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 them with future finances.

Generosity

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

References

Information retrieved from:

- Ohio State 4-H Dairy Resource Handbook

Project *Game Plan*



Name: _____

Club name: _____

1. Where do I plan on housing my heifer?

2. Does my location fit the requirements?

_____ Is there space for my heifer?

_____ Is water available?

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

3. What type of bedding will I use? Where will I get it?

4. What type of shelter am I providing for my heifer? Will it cost anything?

5. Do I have a bottle to feed my heifer with? Will I feed her whole milk or milk replacer?

6. Do I have a grain feeder?

7. Where will I get calf grain and hay?

8. Am I committed to feeding and cleaning up after my heifer twice a day?



Youth and 4-H

Dairy Heifer Project Record Worksheet

This information will be helpful when filling out your 4-H Portfolio

Name: _

County: _

Record Start Date: _

Record End Date: _

(Use one record worksheet for each type of project.)

Project Type: _

Project Animal Information

Number or name of animal	Animal's value at start of project	Status of animal at end of project (sold, died, etc.)
	\$	
Total	\$ [1]	

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]	pounds per day	
Feed Efficiency <i>(How much feed did your project need to gain one pound?)</i>	Divide [5] by [2]		÷	=	
		[5]	[2]	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]	dollars per pound of gain	



Iowa 4-H Youth Development

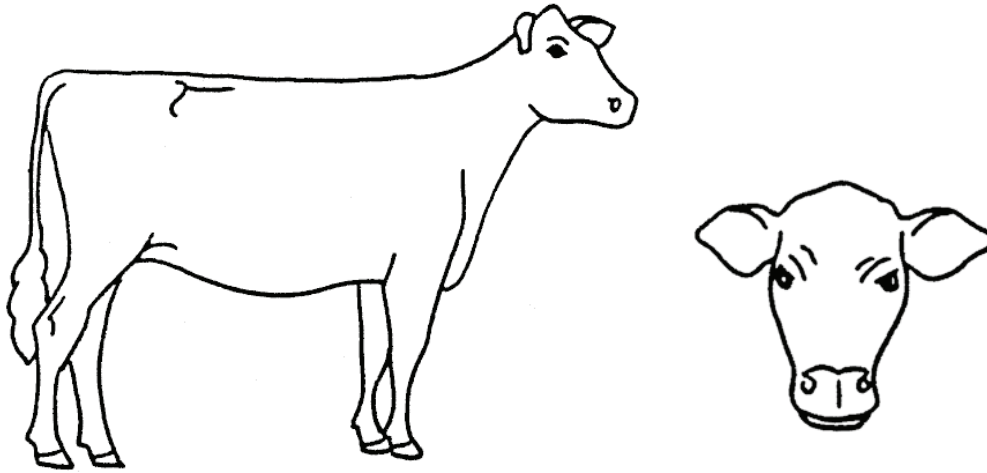
Dairy Animal Lifetime Record

4-H'er's Name _____ Club _____

Use one of these summary forms for each 4-H dairy project animal. It contains permanent identification, production, and financial records. Simply add information to this form as long as you have the animal listed below.

I. Identification and Animal Genetics

Draw an outline of your animal's color markings for broken color breeds.



Animal's Name _____ Breed _____

Date Born _____ Date Project Started _____ Tattoo or Eartag # _____

If registered, registration # _____ PEBV* - milk _____

Sire's Name _____ Sire's Code _____ Sire's PTA \$** _____

Dam's Name _____ Dam's Registration or Eartag # _____ Dam's EATA*** _____

*PEBV – Pedigree Estimated Breeding Value; **PTA\$ – Predicted Transmitting Ability, protein dollars; ***EATA – Estimated Average Transmitting Ability (If you do not have EATA, you can use the dam's index.)

Prepared by Ron Orth, former Extension Dairy Specialist; Deb Hall, former Extension 4-H Youth Development Specialist; and Jeff Johnson, 4-H Program Assistant

... and justice for all

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II. Growth Record (Record animal growth information in the blanks provided.)

Age of animal (months)	2	4	6	8	10	12	14	16	18	20	22	24
Height (inches)												
Weight (pounds)												
Chest (inches)												

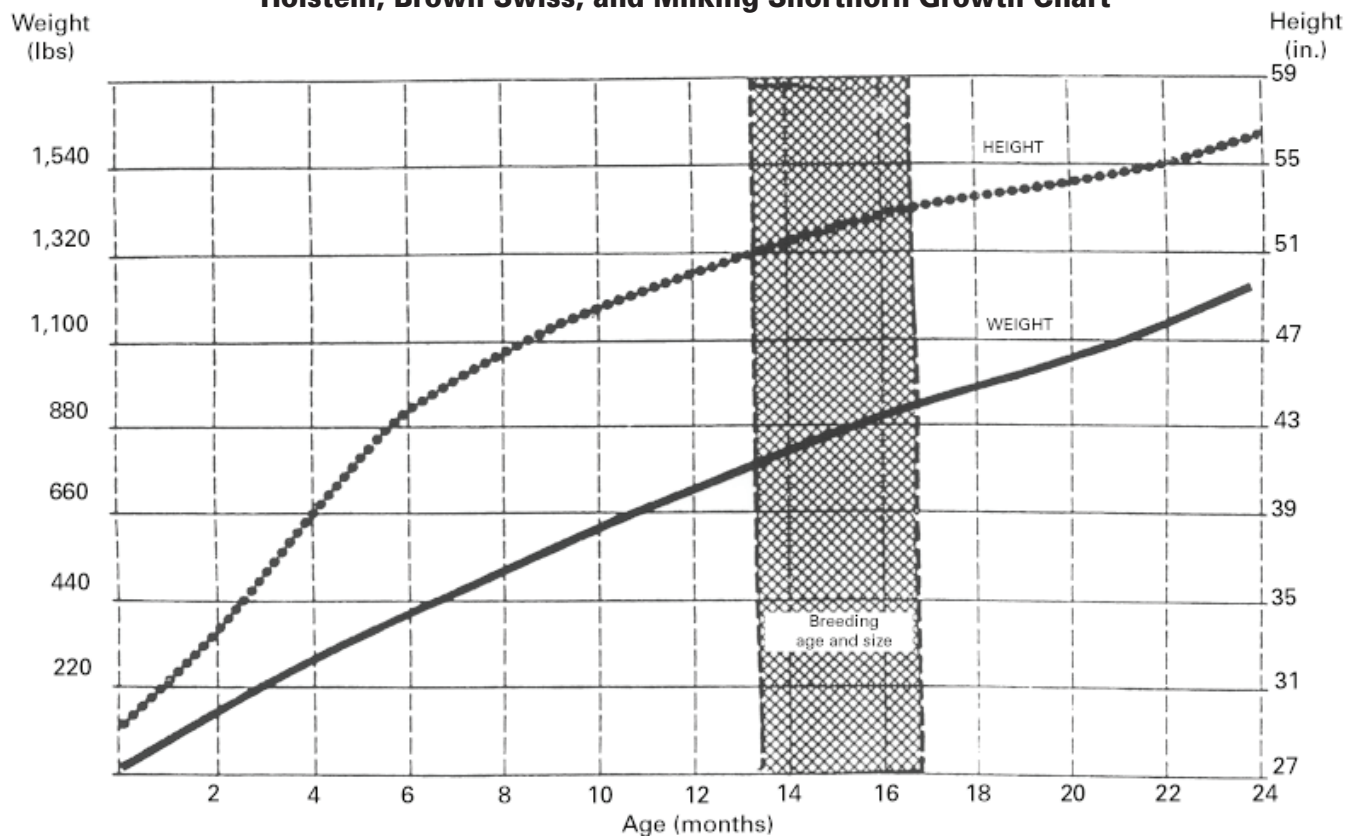
One way to use the above information is to calculate the average daily gain. To calculate average daily gain

- Compute total gain by taking the most current weight minus the first weight you recorded.
- Compute the number of days on the growth period by counting the number of days between the first and last weight you recorded.
- ADG = Total gain divided by the number of days in the growth period.

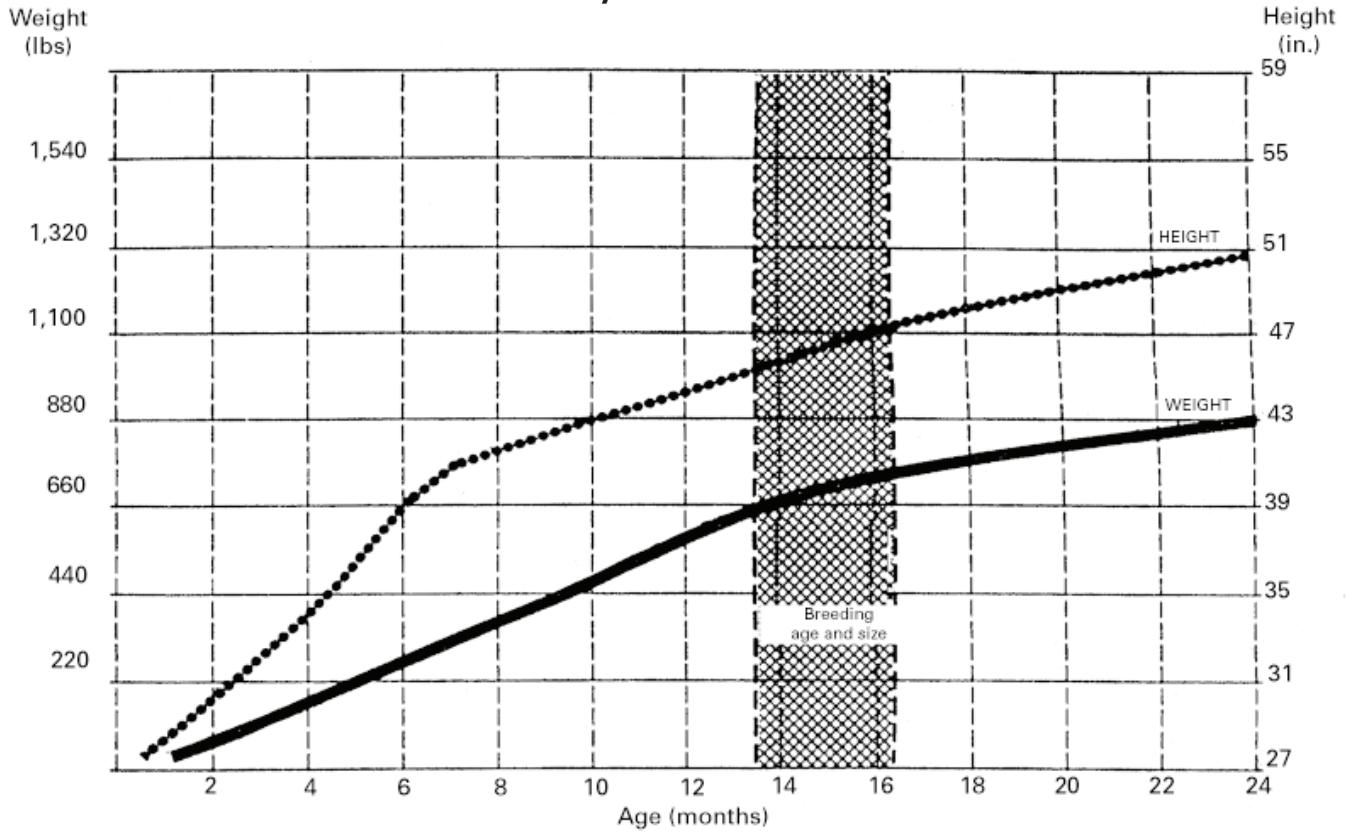
Growth Chart

Three growth charts are given. Select the one for the breed of your animal. Plot the height and weight of your heifer every two months on the chart. Use a solid line to connect the points you plot for weight. Connect the points you plot for height using a dotted line. Compare the growth curve of your animal with the breed average. The lines already on the chart represent the average growth curves for each breed.

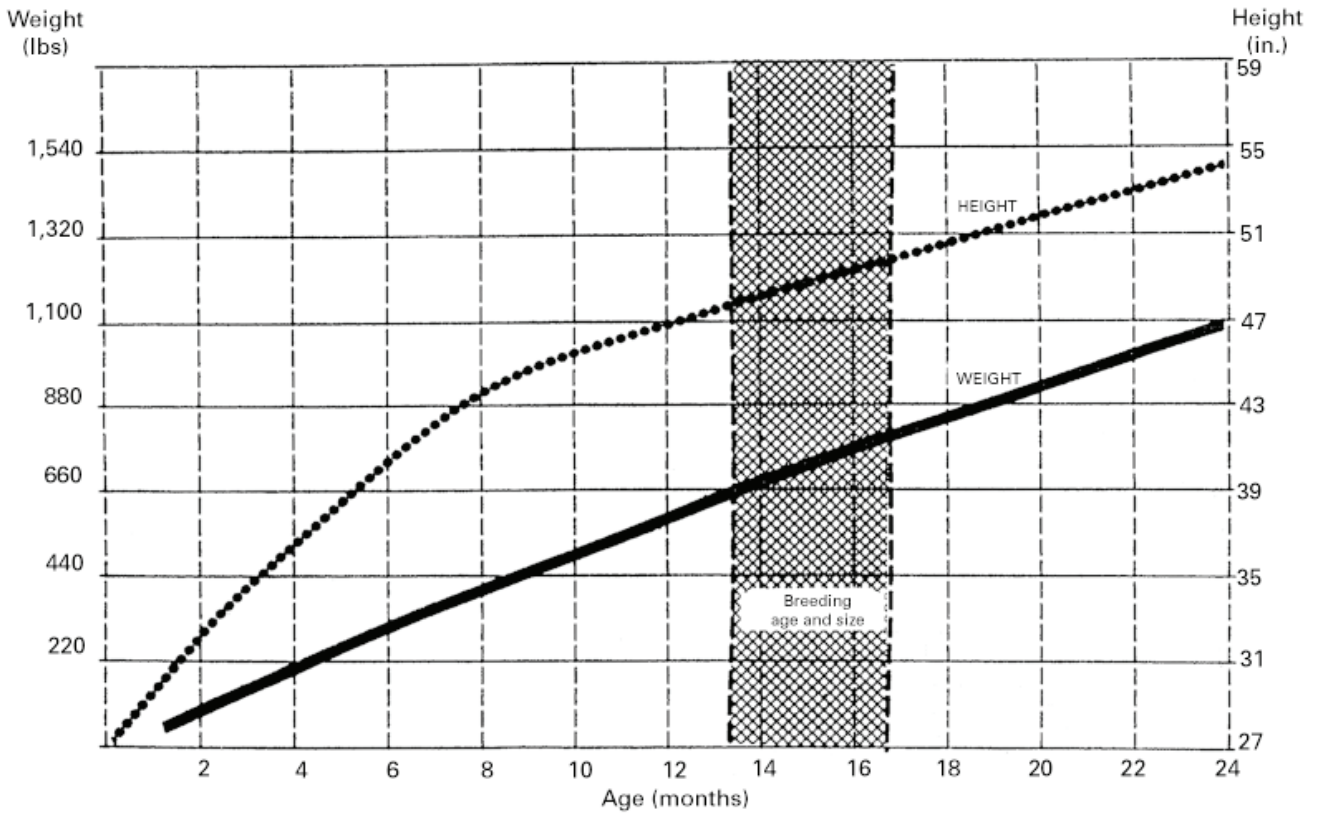
Holstein, Brown Swiss, and Milking Shorthorn Growth Chart



Jersey Growth Chart



Ayrshire and Guernsey Growth Chart



III. Health Record (Dehorning, foot trimming, vaccinations, etc.)

Date	Item	Cost	Date	Item	Cost

IV. Breeding and Calving Record

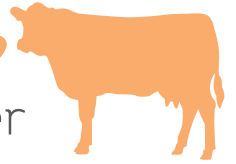
Breeding history for	Date bred	Date bred	Date bred	Date bred	Settled to (sire)	Calving date	Sex of calf	Calf's ear tag number and/or record of disposal	Value
1st Calving									
2nd Calving									
3rd Calving									
4th Calving									
5th Calving									
6th Calving									

V. Production Summary (Fill in one line for each location. The following information can be taken directly from the DHI 203 form.)

Age	Date Fresh	Days	Total production			Value of product	Feed Cost	Income Over Feed Cost	Cow EATA
			Milk	lbs. fat	lbs. protein				



4-H *Club Meeting 2* Selecting Your Heifer



Supplies

- Four tied-up heifers
- Dairy producer
- Pencils
- Paper
- Rope/extra halters
- Parts of a dairy cow labeling worksheet
- Ohio State 4-H Dairy Resource Handbook

PRIOR TO ACTIVITY

1. Contact a local dairy producer for assistance with this activity. If you are unable to find a dairyman, contact your local county agent or Extension office for ideas.

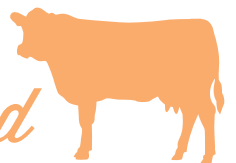
During this activity you will be discussing how to select a heifer. Ask the dairyman if he/she would be willing to separate four heifers from their herd for you to evaluate.

- It would be helpful to have two heifers that are conformationally correct and at least one that is incorrect.

Ask the dairyman if he or she would be willing to stay for the activity, and discuss with members things to look for when selecting a heifer. Their 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 provided with this series. Have members read pages 5, 14-15 and 17-19.

Get *Started*

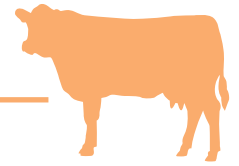


1. REMIND MEMBERS TO BE COURTEOUS AND RESPECTFUL WHILE VISITING THE FARM.

2. HAVE THE DAIRY PRODUCER DISCUSS AND IDENTIFY ITEMS TO LOOK FOR WHILE SELECTING A SHOW HEIFER.

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

Allow members to fill out the Parts of a Dairy Cow Labeling Worksheet. Distribute the Parts of a Dairy Cow Labeling Worksheet and pencils to each member.



Here are a few important thing to look at when selecting a heifer.

- Frame
- Feet and Legs
- Body Depth
- Hips and Pins
- Rib
- Dairy Character



Discuss these and other body parts on a cow. Encourage members and parents to ask questions during this portion of the activity.

3. EVALUATE FOUR HEIFERS.

1. Distribute blank paper.
2. Using the knowledge they just learned from the worksheet and their reading assignment, have each member evaluate the four heifers.
3. Have the members place the animals one through four with one being the best, and four being the worst. Use chalk to number the heifers left to right. Have members write down what is good and what is bad about each heifer. Allow 10-15 minutes for the youth to evaluate.
4. Once the group has finished evaluating the heifers, have the dairy producer give placing on the heifers. Have him/her go through the placings and let the members say why they think he/she placed them that way using the terms they just learned.

4. INFORM MEMBERS OF SEVERAL IMPORTANT SHOW RULES.

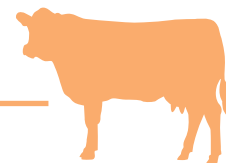
Different shows have different rules. Be sure to check the rules and regulations of the show you plan on attending. Several state rules are:

Age – Exhibitors showing in a 4-H show must be in the third grade, but not less 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. There are open shows in which people of any age are able to exhibit their heifers.



Mission Mandates

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 – Check the rules about ownerships for the show you are planning on attending. Make sure if you purchased your heifer that you are the owner according to the national association your heifer is registered with.

Classes – You will have to register for shows a few weeks prior to the show. You will register your heifer based on her age and she will be judged with other heifers her own age. Always check the due dates of entries. Late entries are often not accepted.

5. DISCUSS THINGS TO KEEP IN MIND WHEN PURCHASING.

Look at the heifer's pedigree. Look at the sire and dam to see if your heifer is likely to be a good cow. If her dam is high producing and was classified excellent your heifer is more likely to be good.

6. DISCUSS PURCHASING A HALTER AND TRAINING TO LEAD.

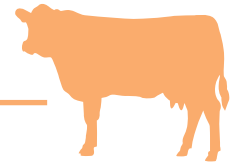
Halter breaking is best done while a heifer is young. Cows are creatures of habit, so if you teach them the habit early they will remember. Use one of the Dairy Producer's heifers to demonstrate how to properly put a halter on a calf. Then teach the members how to properly tie a heifer up. Let the members practice tying a rope to a fence a few times. While halter breaking it is important to tie the heifer with its head up, but still in a comfortable position. Use the same heifer as an example so the members can see how high to tie their calf's head. It is often a good idea the first few days of halter breaking to catch your heifer, tie her up and then pet her, talk to her, and brush her to get to know one another. Never leave a tied animal unattended; strangulation and/or death may occur.

Once a heifer has become used to being tied up, the next step is to lead her. Remember to be patient. Some heifers will sulk and pull back, refusing to walk, while others will bounce around. While leading your heifer keep her head up. Apply gentle pulling to the halter to get the heifer to walk. Always keep her head up. It is much easier to control an animal with its head up. If your heifer refuses to walk, pull hard on her halter. If this is not enough ask someone to walk up behind her and gently smack her butt. Daily exercise is great for your heifer. It is best to take her on walks in the morning or at night to avoid the hottest times of the day.

This is also a good time to talk about safety when working with cattle. Explain to members that cattle are color blind and have poor depth perception so leading them into or out of a barn can frighten them. Also, all cattle have panoramic vision and can see all around them except their blind spot, which is directly behind them. This is not a good place to stand. Teach members about the flight zone of cattle. Walk up to your heifer from her front or side.

7. ASSIGN EACH MEMBER TO READ PAGES 41-43, 50, 52 OF "DAIRY RESOURCE HANDBOOK" BEFORE THE NEXT ACTIVITY.

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

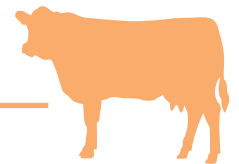


Reflect

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

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 care for 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

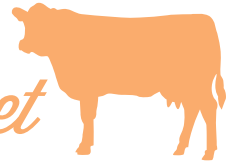
Explain to students that in life many of the choices they make will need to be justified with a reason. Judging dairy cattle is the same way. It is important for them to take notes and be able to explain why they chose the one they did.

References

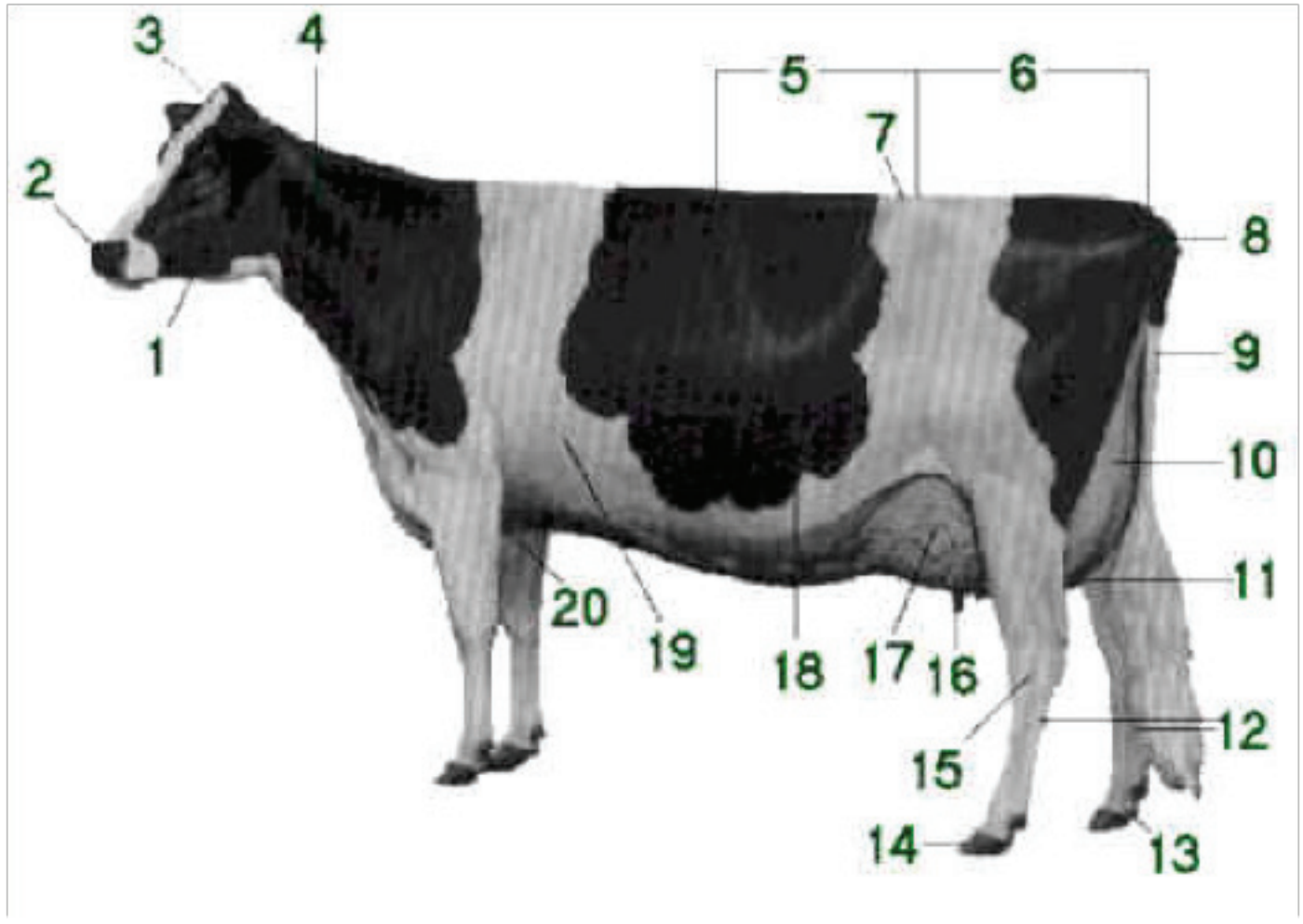
Information retrieved from:

- Ohio State 4-H Dairy Resource Handbook

Matching *Worksheet*



Match the cow body part to its matching number.



- _____ Muzzle
- _____ Hip/Hook
- _____ Teat
- _____ Pastern
- _____ Fore Ribs
- _____ Hoof
- _____ Poll

- _____ Tail
- _____ Chest
- _____ Legs
- _____ Rump
- _____ Neck
- _____ Rear Udder
- _____ Jaw

- _____ Fore Udder
- _____ Loin
- _____ Hock
- _____ Rear Ribs
- _____ Rear Suspensory Ligament
- _____ Pin Bone



4-H Club Meeting 3

Nutrition, Feeding, and Health



Supplies

- Pencils (not pens)
- Paper for note taking
- A bag of balanced grain ration (be sure the feed tag is present and readable)
- Zip lock bags full of different types of feed
- Ohio State 4-H Dairy Resource Handbook

Get Started



1. EXPLAIN ABOUT CATTLE DIGESTION.

Explain that cattle have a special stomach and are part of a group called ruminants. Ruminants quickly eat things like hay and grain, regurgitate it and chew it later. To be able to chew feed later (chew cud) cattle have four stomach compartments called the rumen, reticulum, omasum, and abomasum. Each compartment has a specific job.

- Rumen—first compartment is a large fermentation vat where lots of microbes live and break down the feed cows eat.
- Reticulum—second compartment works with the rumen to store and mix feed. It is also called the honeycomb because it looks like a beehive.
- Omasum—third compartment mainly absorbs water.
- Abomasum—fourth compartment, also called the true stomach. It uses acids like our stomachs do to break feed down into digestible nutrients.



Mission Mandates

2. WATER IS ESSENTIAL FOR SURVIVAL.

It is very important for your heifers to always have access to fresh, clean water. Be sure if any slime or dirt builds up in a watering bucket or trough that it is cleaned out. When cows are making milk they need lots of water because milk is made mostly of water. Plus, 75 percent of a cow's body is made of water. To keep hydrated, a full-grown cow will drink a bathtub full of water each day!

*You cannot over emphasize how important water is to cattle. Compare it to us, we also get thirsty and need a cool drink, too. We also need the same six essential nutrients as cattle: carbohydrates, fats, protein, minerals, vitamins, and water. These nutrients are all important to our bodies and to cattle's to grow and function correctly.



Mission Mandates

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



3. DISCUSS TYPES OF FEED.

There are two categories in a cow's diet.

1. Concentrates—processed feed stuff consists of protein, concentrates, vitamins and minerals. Examples: corn, oats, wheat, protein pellets.
2. Forages—foundation of cow's diet and includes feedstuff that contains leafy part of a plant leaves, stems, and flowers. These are high in fiber. Forages need to be of good quality. Examples: alfalfa hay, and corn silage

*Stress that forages are required for cattle's ruminant digestive system to work properly.

Bring a few buckets or zip lock bags. Fill one with high quality hay, one with corn, one with silage, and one with oats or any other feeds and let the kids guess if it is a concentrate and or a forage.

Also bring a tag off of a calf grain bag and explain to members what everything on the tag means and what types of feed to look for.

4. DISCUSS HEIFER HEALTH.

If an animal is deficient of a certain nutrient they will have problems. All six nutrients are important.

Two common health problems caused by feed issues are:

1. Displaced Abomasum (DA)—Symptoms include eating less and defecating less. Avoid finely chopped feeds to prevent.
2. Bloat—Symptoms include upper left side is extended, the animal is uncomfortable and will kick at its side and perhaps bellow.

5. ASSIGN EACH MEMBER TO READ PAGES 177 TO 180 IN THE "DAIRY RESOURCE HANDBOOK" BEFORE THE NEXT ACTIVITY.

Dairy Bowl *Game*



Questions will be asked about things learned during meetings one, two, and three. Allow the kids a few minutes to review if you would like.

Divide the group up into teams of four. Make sure to divide by age and knowledge of the members. Have the kids sit in their groups. This game will be run as a quiz bowl game. For the first round ask each member one question worth one point. If he or she gets it right they earn a point and there is no chance for opposing teams to steal points. After each member of each team has had the chance to answer one question, round two begins. In round two anyone on the team can answer a question but he or she cannot receive help from teammates. During this round players must raise their hand and wait to be acknowledged before answering. These questions are worth two points. Bonus questions can be given during round two if three of a team's members correctly answer a question. Bonus questions are worth three points and can be discussed with the team. Go until you run out of time or questions.



GAME QUESTIONS

1. Name three of the six nutrients required by us and by cattle.
A: water, fat, protein, carbohydrates, vitamins, minerals
2. Where is a cow's blind spot?
A: directly behind it
3. Name three body parts it is important to pay attention to when selecting a show heifer.
A: feet, legs, rib, depth of body, frame, hips, pins, withers
4. Which ruminant stomach compartment is referred to as "The True Stomach?"
A: abomasum
5. True or False—Alfalfa hay is a forage.
A: True
6. True or False—Concentrates are often high in fiber and are most critical for cattle digestion.
A: false
7. What is the nutrient that is required to constantly be available to cattle (and all animals)?
A: water
8. What is one of the two diseases of concern for calves?
A: scours, pneumonia
9. What percent of a cow's body is made of water?
A: 75%
10. What is another word used instead of hips?
A: hooks
11. What allows for the milk that calves drink to bypass the first three stomach compartments?
A: esophageal groove
12. True or False—While leading a heifer you should walk on the left side of the heifer?
A: False
13. What is weaning?
A: removing milk and starting a calf on solid feed



GAME QUESTIONS CONTINUED

14. Where is a cow's hock?

A: rear leg

15. Which ruminant stomach compartment has live microbes that live inside of it?

A: rumen

16. What body part is the point of balance on a cow's body used to move animals?

A: the shoulder

17. When should a heifer be dehorned?

A: once the horn bulbs are visible

18. Why is colostrum important for a new born calf?

A: it provides antibodies and nutrients to the calves (Passive immunity)

19. Within how many minutes should a calf receive its first feeding of colostrum after being born?

A: 15 to 30 minutes

20. True or False—Cattle are color blind.

A: true

21. What are two possible bedding materials that can be used?

A: sawdust, sand, or straw

22. What is one of the common diseases that have to do with nutrition?

A: displaced abomasum (DA) and bloat

23. What type of vision do cattle have?

A: panoramic vision

24. What is the first milk a cow produces called?

A: colostrum

25. Why is a pedigree important?

A: it provides genetic information about the animal's parents



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



Reflect

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

Apply

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



Independence

Encourage youth to use what they have learned about nutrition to decide what type of feed they will purchase for their heifer.

References

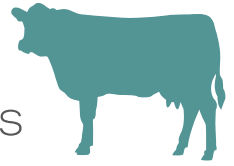
Information retrieved from:

- Ohio State 4-H Dairy Resource Handbook



4-H Club Meeting 4

Showmanship Basics



Supplies

- Halters
- Heifers
- Outdoor area large enough to hold a mock show
- Copies of "Quick Tips for Showmanship" Handout
- Ohio State Dairy Resource Handbook

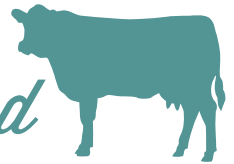
PRIOR TO ACTIVITY

Contact a local dairy showman in your area, maybe a senior 4-Her 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 when the temperature is cool. This will prevent heat exhaustion and stress.

Members will need to arrange transportation for their heifers to and from the activity. If someone cannot bring their heifer, ask the dairyman whose farm you are at if members may use one of his/hers or they could practice using another member's heifer.

Get *Started*

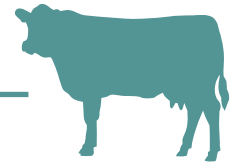


Learning proper showmanship techniques helps make your heifer look its best in front of the judge. It is not only important to feed and fit your heifer properly, but also to show your heifer well. After all of the hard work you have put into your heifer project, now is your chance to show it off.

During this activity have the local showman do the demonstrating. Be sure that the showman is aware that any advice or tips he or she has 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 A HEIFER WITH THE HEIFER'S HEAD UP.

- A. The exhibitor should walk on the left side of the heifer and pay attention to where the judge is standing.
- B. Enter the ring walking forward in a clockwise circle. When the last animal enters the ring, turn around and begin showing your heifer.
- C. Your left hand should be used to hold the halter. Hold the chain but do not put your fingers in the ring. Use the right hand to hold throat if necessary.
- D. When walking move slowly and smoothly, keeping a nice constant speed that is natural for the heifer. Leave about 5 feet between your heifer and the next. Also leave about 5 feet between your heifer and the edge of the show ring.
- E. If the heifer resists walking, tug on the halter and remain calm. A ringmen can tap your heifers' butt to move forward.



2. PRACTICE LEADING THE HEIFERS.

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

3. DEMONSTRATE HOW TO SET A HEIFER UP IN A SIDE-BY-SIDE LINE.

The goal is to have the front feet square and placed evenly with the other heifers in line and back feet placed solidly to show off your heifer to the best of her ability.

- A. Maintain control of your heifer with your left hand holding the halter, with the heifer's head up.
- B. Use your right hand to make any adjustments to your heifer such as positioning the tail, pinching the top line down or holding throat.
- C. When setting the heifer's legs, try to walk into the correct position. The back feet should be set up so the inside hind leg is back and the opposite leg is forward. Do not use your feet to reposition the back legs, although it is alright to use them to move the front legs.
- D. Once your heifer's legs are set and you have made any needed adjustments, use your right hand to either hold throat or place it on the heifer's shoulder to steady her.
- E. Make sure when you line up side by side there is room between your heifer and the next one to allow the judge to see the heifers well.
- F. Note that if you show a cow, her feet are set up opposite with the inside leg forward and the outside leg back.

4. DEMONSTRATE HOW TO SET UP A HEIFER IN A PROFILE LINE.

When lining up in a profile line, or head to tail, be sure to leave a few feet between your heifer and the one in front of her. The goal is get her front feet even and her back feet with the inside leg back and outside foot forward. Use the same process to set up your heifer as you did to set her up in a line.

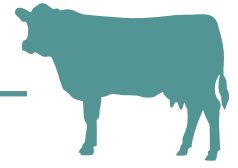
5. DEMONSTRATE FRONT VIEW.

If the judge walks in front of your heifer whether lined up side by side or head to tail or if you are walking around the ring, allow the judge to get a good front-end view of your heifer. To do this, face the judge and do not stand directly in front of your heifer.

6. PRACTICE.

Allow members to practice walking into setting up their heifer. While members are practicing have the local showman watch the youth and give advice and tips.

7. PEN HEIFER UP ALLOWING TIME FOR REST; MAKE WATER AVAILABLE TO HEIFERS AND HAY IF POSSIBLE.



8. DISTRIBUTE AND DISCUSS “QUICK TIPS FOR SHOWMANSHIP” HANDOUT.

The last two sections are review. Read through the “In the Ring” section and have the local showman demonstrate. Encourage members to keep this handout and practice showing at home.

9. HOLD A MOCK SHOW.

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

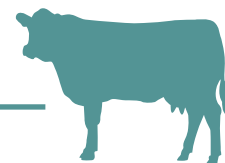
- Walk in a clockwise circle several times.
- Bring the heifers into a line side by side and profile.
- Have the “judge” walk up and down the line allowing youth to practice watching the judge.
- Have the “judge” handle each heifer.

During this mock show, encourage the local showman to give as much critique and advice as possible. This show can serve as a great learning tool.

10. ASSIGN HOMEWORK.

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

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

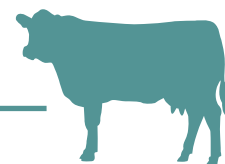


Reflect

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

Apply

- The more you practice with your heifer, the more comfortable she will be with you and the more comfortable you will become with her. What other skills in your life are improved upon if you practice?
- What have you learned from raising your heifer so far that you can use in your every day 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:

- "Leading to Win" Holstein Canada



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 heifer between you and the judge. (Make a showman judge sandwich where you are a piece of bread and the judge is a piece of bread and the peanut butter or the heifer must always stay in the middle).
- If you are in a line up and need to rest your heifer you can walk forward, do a quick circle with your heifer, go back through the hole you came out of, do another circle, and pull the heifer back into her spot in line. This should not be done often, but it is an option if you get in a bad position with your heifer.
- Be alert at all times.
- Always keep one eye on the judge and one eye on your heifer.
- 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 congratulate the class winner. If possible shake his or her hand.
- Be prepared to answer the judges questions.
 - A list of sample questions is provided. Familiarize yourself with the answers.

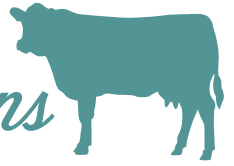
LEADING YOUR HEIFER

- The exhibitor should always walk on the left side of the heifer, even if the judge is on the left side.
- The left hand should be used to hold the heifer's head up with the halter.
- The right hand should be used to make any correction to your heifer and to hold throat if needed.
- Walk slowly and smoothly, keeping a nice constant speed. Once you are pulled, move quickly into line.
- When entering the ring walk forward until the last animal has entered the ring.

SETTING UP A HEIFER

- Keep control of your heifer by keeping her head up.
- Try to walk into having your heifer set up.
 - Set the rear legs first by walking into position. This will come naturally with enough practice.
 - Use your foot if necessary to square the front legs of your heifer. Try to line them up with the heifers who are already in line.
- Once your heifer is set up, do not move her. Keep her head up. Be confident. Keep one eye on the judge and one on your heifer. If she moves, simply set her back up.

Common Showmanship *Questions*



1. Who is your heifer's Dam (mother)?
2. Who is your heifer's Sire (father)?
3. When was your heifer born? (Know the exact date e.g., March 1, 2014)
4. Is your heifer bred? If yes who is she bred to?
5. If she is bred, when is she due?
6. What breed is your heifer?
7. What would you change about your heifer? (This could be asked about any heifer in class.)
8. What is the best feature of your heifer?

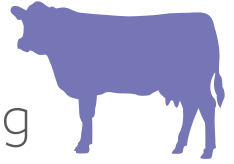
If you are showing a cow the judge may ask:

9. How many times she has calved?
10. When did she freshen (calve)?



4-H Club Meeting 5

Clipping and Fitting



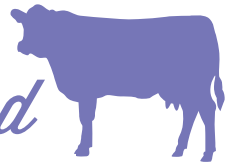
Supplies

- Electric clippers
- Top line comb or brush
- Chute
- Oil
- Blow dryer
- An expert clipper if needed
- Soap if washing a heifer
- Electrical extension cord

PRIOR TO ACTIVITY

If you are not an expert at clipping, it is a good idea to call someone who is. They 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 dairy heifers in your area.

Get *Started*



1. DISCUSS WASHING YOUR HEIFER.

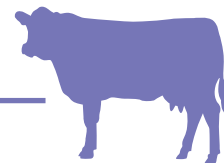
Before clipping begins you will need to wash your heifer. Spray her off. Use a gentle soap, shampoo, or dish soap. If you have a white heifer do not use a dark colored soap. It can dye her hair. Once your heifer is all wet, fill a small bucket with soapy water and dump it over her body. Use a scrubber to scrub off any dirt or manure that is caked onto her body. Once she has been scrubbed, completely rinse the soap off her body. Be sure not to spray into your calf's ears. You may want to use a paper towel to clean the inside of her ears, but it is not good for water to be sprayed into her ears. Allow a sufficient time for your heifer to dry before you begin to clip.

2. DISCUSS REASONS FOR CLIPPING.

You will probably want to clip your heifer before you go to the show. Any touch ups can be done at the show. The purpose of clipping your heifer is to accentuate her good points and de-emphasize her flaws.



SCIENCE – Animal health is a topics that is studied in animal science. Rinsing the heifer with cool water when the weather is warm will help her stay healthy in the heat.



3. DISCUSS DIFFERENT FITTING TECHNIQUES.

Fitting the hair begins at home. You should be working with your heifer and doing your best to keep her clean. You should be cleaning her pen daily and rinsing her off often. Rinsing her off and brushing her hair will get her used to you touching her and will be beneficial while clipping.

Clipping is easiest to accomplish if the heifer is restrained in a chute. The heifer should be freshly washed and thoroughly dried. Make sure all dirt and manure is out of the heifers hair so you do not dull your clippers.

4. GATHER ALL SUPPLIES BEFORE STARTING.

- If you are proficient in clipping, have your supplies and materials ready.
- If you have a professional come, provide as many materials as you can.

5. IDENTIFY AND DISCUSS SUPPLIES.

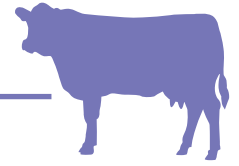
- Ask whoever is clipping to quickly identify the equipment they will be using and discuss what each item is used for.

6. BEGIN CLIPPING.

Caution! It is important to note that when clipping heifers you are using many sharp tools. Be careful not to injure yourself or any of the exposed areas of the animal. Also be aware that heifers may kick while being clipped.

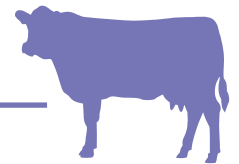
Even though the members are not yet able to clip on their own heifers, encourage them to ask questions, take notes, and learn as much as possible about the clipping and fitting process.

- Begin by clipping your heifer's tail. Going upward, begin clipping at the top of the switch and continue up the tail. Stop once you reach the vulva. Later you will blend this in and shape the top line.
- Continue clipping the calf's body. **Do not clip any hair off the calf's top line or belly.** Clipping in an upward direction, clip all the hair off the calf's legs and ribs. You can even go up the calf's neck and do its head.
- It is best to put your heifer in the head lock and take the halter off while clipping her head. Be patient and clip all of the hair off of her head including in the ears. If you have access to smaller, less noisy clippers for the head and ears, it may be a good time to use them.
- Have your fitting professional demonstrate how to clip the top line of the heifer. Start by using a top line brush and a hot hairdryer. Do not point hairdryer down directly on the calf's skin, instead aim it horizontally so the air blows through her hair and comb the hair forward. Once the hair is standing up you may begin to shape the top line into a point. This is done to give a more straight appearance to the calf's back.



- Have the professional also show where to leave the belly hair. We usually do not clip the calf's belly. A fluffy belly will give the calf the appearance of a deeper body.
- Final preparations begin several hours before the show. You should wash your heifer and allow her to dry. Then you will need to set her top line. Like before, you will need to use a top line brush and hot hairdryer to comb her hair forward. Once the hair is standing up use your preferred type of show day hair spray and pinch the hair so it makes a straight line down the heifer's spine. Then use the show day spray paint and paint the top line. Comb the belly hair forward and fluff it up. You may use more hair spray on the belly hair. You will also need to fluff her tail. Pick up her switch and comb it up to make it full. This is another useful time for hair spray.

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

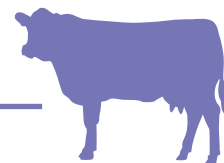


Reflect

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

Apply

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



Generosity

If you have a heifer fitting 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.

Independence

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

Belonging

This activity provides a great opportunity for your club to have some fun and get better acquainted! It is likely that only one or two members will be clipping or learning to clip on the heifer at the same 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.

References

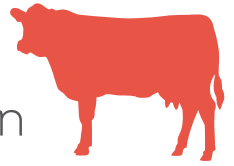
Information retrieved from:

- Ohio State 4-H Dairy Resource Handbook



4-H Club Meeting 6

Fair Preparation



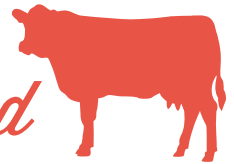
Supplies

- Copies of "Fair Checklist" handout
- Supplies needed to create fair displays
- Dairy party supplies
- Ice cream
- Bowls
- Spoons

PRIOR TO ACTIVITY

Find out what time heifers should be to the show.

Get Started



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

- Touch up any spots that were missed while clipping.
 - This should be done the day before or the day of the show. This clipping is to further blend the hair.
- Make sure that you wash your heifer well, hours before the show.
- Don't forget to set the topline and fluff the belly hair and tail.
- Get out a leather show halter prior to the show beginning and make sure it fits your heifer properly.

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 that 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 either a trailer or has made plans with others to get their heifers to the show.
- Heifers have to be to the show at _____ o'clock. Inform members and parents of this time. DO NOT BE LATE!!
- Once at the show get your heifer settled into her pen or stall and give her some hay.
 - Some shows assign pens. As a club you may want to get pens near each other.
- Make sure members understand appropriate show attire—white pants, white collared shirt, boots, and a 4-H patch.

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 heifer 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 and stalls are clean
 - Heifer is clean and well cared for
 - You behave respectfully
 - You are on time to all scheduled events
 - Thank those who work at the fair
- Keep your feed away from your neighbor's pen.
- Start early on show day. Give yourself more time than you need to get your heifer ready. This will make your day less stressful.

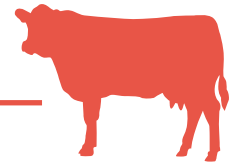
5. CREATE CLUB DISPLAY.

This is a chance for you and your club to get creative! Each member taking a heifer to the fair should create a sign to put on the pen that at least has the exhibitor's name on it and the heifer's registered name and what class she will be showing in. Depending on the show, you may also want to include pedigree information on the sign like her sire, dam, and if she has any high classification generations behind her. You may also want to include pictures of members working with the heifers. 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, and names of each of the members.

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 heifers or that they could potentially eat.

6. REMIND MEMBERS TO FILL OUT THEIR RECORD WORKSHEETS FROM ACTIVITY #2. THIS INFORMATION CAN THEN BE TRANSFERRED TO THEIR 4-H PORTFOLIOS.

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

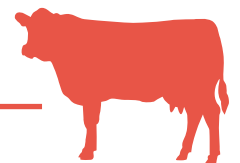


Reflect

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

Apply

- How can you apply what you have learned while raising your heifer 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 heifer? How can you apply this knowledge in your everyday life?
- Where does your club go from here?
 - Continue focusing on raising heifers in more depth or
 - Begin a new Discover 4-H project area



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.

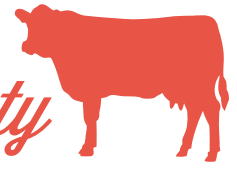
Independence

Now that you have completed the activities provided, it is important to allow members the opportunity to plan where they as a club want to go from this point forward. Be sure to listen to each individual's ideas and help them realize their thoughts to 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 are heard and considered instead of one or two members controlling the direction of the group.



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

End with a *Dairy Party*



While it is important for 4-Hers to have knowledge about their animals, it is also important for them to realize what products their animals will provide. Depending on your club you could make homemade ice cream during the meeting or simply buy ice cream, cheese, milk, or any other dairy products for the members to enjoy while you teach them about dairy products and they work on their display.

MILK FROM THE COW TO YOU.

If you have access you could show a video. Just search YouTube for one or you can go through the steps of how milk is processed.

1. The cows are milked two or three times a day depending on the farm. They walk to the milking parlor. Once there, their udders are cleaned and sanitized with an iodine solution. The farmer will attach the milker to the teats. This is like a little vacuum that gently sucks the milk out of the udder.
2. The milk travels down stainless steel pipes through some filters and a cooling system then into the bulk tank. The milk is stored and cooled in the huge bulk tank until the milk man comes.
3. Once the milk man arrives he attaches a hose from his truck to the bulk tank and the milk is pumped directly into his truck. He drives the milk to a milk plant.
4. Once the milk truck gets to the plant, samples of the milk are taken and then tested to ensure that the milk is safe and of the highest quality. If it does not pass the tests it is thrown away.
5. Once milk has passed these tests it is then pasteurized, which is a process of heating milk up to kill any germs that may have been in the milk. It is then homogenized. This breaks down the fat in the milk so that all the cream will not rise to the top of the milk.
6. After that it is packaged into containers or made into cheese or other dairy products.
7. Now the milk is loaded onto another truck and taken to the retail store for everyone to enjoy. This whole process is completed in three days so when you buy milk it is very fresh.

Explain to the members that their heifers will grow up and become cows soon and the milk they produce will go through this process.

WHY MILK IS GOOD FOR YOU.

Give the club members a quick explanation of why milk is so good for them. Tell them it is recommended they receive at least three servings each day.

- Each 8 ounce serving of dairy contains eight essential nutrient. (calcium, protein, potassium, riboflavin, niacin, phosphorus, vitamins D and A).
- Flavored milk has everything your body needs after a workout with protein carbs and sugar, which is required for your muscles to repair themselves and for your body to recover after you work out.
- Flavored milk, like chocolate and strawberry, is just as nutritious as white milk.
- If you do not like milk, there are many options to consume your three servings a day.

NAME SOME DAIRY PRODUCTS.

Ask group members what their favorite dairy products are, other than milk. There are many dairy products and 4-Hers should realize what they are. Milk, including flavors, cheese, and yogurt are the most nutritional dairy products, but others include ice cream, butter, and cream.

THANK YOU.

Thank your 4-H club members for being a part of your dairy heifer club. Remind them to tell their parents thank you for all of their assistance and you cannot wait to see everyone at the heifer show.

ANIMAL CARE ITEMS

- Neck ties or halter to tie up your heifer
- Plastic fork to clean up manure
- Wheelbarrow to haul manure
- Square nosed shovel
- If there isn't enough sawdust you may want to bring your own or haul more into your stalls
- Feed pan
- Feed scoop
- Water bucket
- Hose with a nozzle
- High quality hay
- Calf grain

FITTING ITEMS

- Soap and scrub brush
- Clippers for any touch ups
- Blow-dryer that gets hot
- Top line brush
- Hair spray/glue
- Leather halter
- Brush to brush any sawdust off
- Paper towels to wipe out ears or anywhere that gets dirty
- Extension cord

OTHER

- Bring a water bottle and snack for you
- Lawn chairs
- Don't forget your show clothes and 4-H Patch



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>