



Bottle/ Bucket Calf



Hardin County 4-H Bottle/ Bucket Calf Record

4-H'er Name: _____

Club: _____

Grade: _____

Iowa 4-H Teaches Life Skills

The mission of 4-H is to help youth become self-directing, contributing members of society. The Iowa State University 4-H Youth Development Program continues to offer opportunities for youth to practice life skills, the learned abilities they need to develop successful attitudes and behaviors for life.

The 4-H Youth Development Program is based on experiential learning, the idea that people learn best by practicing new information in real-life situations and reflecting on (thinking about) that experience.

Youth need to learn many life skills. The Bottle/ Bucket Calf project focuses on two life skills: decision making and learning how to learn. In 4-H, youth gain life skills while learning project skills. Bottle/ Bucket Calf project skills relate to selecting an appropriate calf, housing, nutrition, observing the calf and using management practices to maintain the calf's health.

With the support and guidance of parents and 4-H leaders, youth involved in 4-H Youth Development Programs are more prepared to grow in personal well-being and to be contributing members of our society. 4-H helps youth gain the most from, and give the most to, life.

Overview

The Bucket/ Bottle Calf project is an opportunity for youth to learn about caring for a young calf. Since this project emphasizes what youth learned through these experiences, success in this project is not based on the quality of the calf.

Please include a picture of your bottle/bucket calf when you received it; include the date the picture was taken and the age of the calf at the time of the picture.

Please include a picture of you and your bucket/bottle calf now; include the date the picture was taken and the age of the calf at the time of the picture.

Selecting Your Calf

Life Skill: decision making, gathering information

Project Skill: selecting an appropriate bucket/bottle calf

Words to know:

Colostrum – the first milk produced by a cow after calving

Disposition – the temperament, or mood, of a certain calf

People make decisions every day. Some choices, such as “Which shirt should I wear today?” are fairly easy to decide. Other decisions are more difficult, such as “Which summer camp should I attend?” or “Which bicycle should I buy?”

Your Bottle/ Bucket Calf project will involve a lot of decisions. Let’s start with the most exciting – “Which calf should I select for this project?”

You will need to gather information before you can make this decision. This process will involve identifying your goal, locating possible calves and choosing one calf.

Clear goals will help you decide what is most important to you. If your goal is to add a calf to your family’s herd, breed and heredity may be the most important factors. If your goal is to learn how to care for a calf, gentleness or cost may be more important.

Think about what you hope to learn from the Bucket/Bottle Calf project. In your goals, include things you want to learn about calves and things you want to learn about yourself. Discuss your goals with an adult and write them in the space below.

Project Goals

(What I want to learn about selecting a calf)

1. _____
2. _____
3. _____

Life Skill Goals

(What I want to learn about decision making and gathering information)

- 1. _____
- 2. _____
- 3. _____

Consider the Calf

You will need to consider many things before you choose a bucket/bottle calf.

Age – A bottle/bucket calf should be in your possession within one week of birth.

Appearance – A healthy calf should have a smooth, shiny coat; a warm, moist nose, and bright, alert eyes.

Colostrum – A newborn calf should have been fed colostrum for the first three days. This special milk gives calves a healthy beginning.

Disposition – Select a calf that is quiet and calm. A wild calf would be a lot of work for you and would be more difficult to manage and show.

Price – Find out the current market price range for newborn calves so you will know how much to spend.

Calf Purchase Record

Calf's ID #: _____ Calf's Name: _____

Calf's birth date: _____ Purchase date: _____

Calf's value/price: \$ _____ Purchased from: _____

Breed of calf: _____ Sex: _____

Other information: _____

Apply Learned Information

What factors did you consider when choosing your calf?

Why do you need to consider your goals while choosing a calf?

Why would it be important to consider more than one calf?

What did you learn that you can use when you make other decisions?

Housing

Life Skill: Learning to learn – using learned information and applying it to own situation

Project Skill: creating healthy, safe and economical place for a calf to be housed

Words to know

Stale – no longer fresh and clean

Stress – tension caused by a new and unusual situation

Resources – supplies that are available to use

Unique – something unusual that is not often seen

The old saying “You learn something new every day,” is true, but it is a challenge to apply all this new information to your life. One way you know if you have learned is to use learned information in new situations. When you use learned information in new situations or to solve problems, you are using an important life skill – learning to learn.

Before you bring your calf home, you will need to decide where your calf will live. In this section, you will learn calf housing guidelines that will help you create a good place for your calf to begin life.

Individual Pens (Birth to three months) – Individual pens reduce the chance of spreading disease from one calf to another.

Adequate Space – Create a house with three solid walls using materials you have available (fiberglass, plywood, scrap lumber, or baled hay). Provide a 4-foot x 6-foot house with a 4-foot x 2-foot outside fence run (or the animal can be tied or tethered).

Bedding – Bed calves deeply in clean and dry straw, shredded newspaper, or wood shavings. Add new bedding when bedding becomes wet or soiled. Place the calf house in a well-drained area, away from standing water.

Protection – Protect calf from drafts to reduce problems with pneumonia and other respiratory problems. Face hutch fronts toward the south or east in cold climates, so the calf is protected from cold northwest winds and storms.

Group housing (3 to 5 months) – After your calf is on all dry feed, it can be housed with a few other calves. This will help each calf adjust from a single pen to a group setting with minimal stress. If you only have one calf, it would be fine to house the calf by itself. Calves should be close to the same age and size. Make 25 to 30 square feet of bedded area available for each calf.

Apply Learned Information

Think about the calf housing guidelines, and then consider the resources (space, materials, money, time, etc.) that are available to you. Create a place for your calf to live that includes adequate space and that is dry, clean and free from drafts.

Describe the details of your calf's new home, including size, materials, location, etc.

What resources did you use to create housing for your calf?

How did you create a house that was free from drafts?

Nutrition

Life Skill: learning to learn – breaking information into parts and creating a sequence of steps

Project Skill: developing a plan for providing adequate nutrition for a calf

Words to know

Calf milk replacer – dry (powdered) milk that is added to water before being fed to calves

Nutrient – an ingredient that promotes growth

People often have a BIG problem when they are trying to learn something new – there is too much information! One way to make learning easier is by organizing a lot of information into smaller pieces or steps.

Researchers have collected a lot of information about feeding calves. How can you find and use the appropriate information for your calf? It's easy to apply information when you break the task into parts and decide which information you will need first, second, third, etc.

Step 1: Feeding your newborn calf

Colostrum is the first milk produced by a cow after calving. It provides nutrition and antibodies to protect calves from disease. Calves should receive colostrum within 10 to 15 minutes after birth. Calves should be offered 4 to 8 pounds (2-4 quarts) of colostrum from a clean nipple bottle or nipple pail.

Step 2: Feeding your 1-3 day old calf

Fresh, lukewarm colostrum from your calf's mother should be fed for at least 3 days. Your calf should be fed twice each day. Do not over feed your calf. If your calf's mother is not available, there are dry mix versions of colostrum you can purchase from a feed store.

Your feeding plan

After carefully reading the research about how to feed your calf at 1-3 days, use this information to plan how you will feed your calf.

Supplies you will need: _____

What you will feed: _____

When you will feed: _____

Step 3: Feeding your calf after 3 days

Feed calves for the best growth at the least cost. Excess colostrum and waste milk are the cheapest needs for your calf. Whole milk from a dairy herd is excellent feed, but a calf milk replacer may be less expensive.

Your feeding plan

After carefully reading the research about how to feed your calf after 3 days, use this information to plan how you will feed your calf.

Supplies you will need: _____

What you will feed: _____

When you will feed: _____

Step 4: Feeding your 1-3 month old calf

A calf is ready to be weaned when it is eating 1 ½ or more pounds of calf starter daily. This change should be made slowly, gradually reducing the amount of milk. Fresh, clean water, fresh calf starter and fresh hay should be available every day. A calf should be fed 2-4 pounds of calf starter each day. A quality calf starter provides energy, protein, minerals, and vitamins. A calf can have as much fresh water and good quality hay as it wants.

Your feeding plan

After carefully reading the research about how to feed your calf at 1-3 months old, use this information to plan how you will feed your calf.

Supplies you will need: _____

What you will feed: _____

When you will feed: _____

Step 5: Feeding your 4 month old calf

A calf should be growing well and eating plenty of hay and hay silage. If a calf is put on pasture or fed corn silage, it also will need grain to keep it growing properly.

Your feeding plan

After carefully reading the research about how to feed your calf after 4 months of age, use this information to plan how you will feed your calf.

Supplies you will need: _____

What you will feed: _____

When you will feed: _____

Apply Learned Information

How old was your calf when you weaned it? How did you know it was time?

Why is colostrum important?

How does it help to break a task into steps?

Please include a picture of you caring for your calf (washing, feeding, administering medication, etc.; include the date the picture was taken and the age of the calf at the time of the picture.

Health

Life Skill: learning to learn – observing to gain new information

Project Skill: carefully observing a calf and calf management practices to make sure the calf’s health is maintained

Words to know

Diagnosis – identifying a disease from its signs and symptoms

Vaccination – a medication administered to help prevent infection or disease

Veterinarian – a doctor who treats diseases and injuries of animals

One of the main responsibilities in the Bottle/ Bucket Calf project is keeping your animals healthy. Careful observation of the way your calf looks, acts, and is treated will help identify problems early – when they are easiest to solve. Observation is an important part of the learning to learn life skill. You can learn a lot of new information by using your five senses:

Touch can help you identify a piece of silk fabric.

Sight can help you learn the characteristic markings of a monarch butterfly.

Smell can help you determine if your lawn mower is using too much oil.

Hearing can help you identify the melody in a jazz performance.

Taste can help you know if the white grains in your kitchen canister are salt or sugar.

Observe your calf

You will need to use three of your senses when you observe your calf and calf management practices. By looking, listening, and touching, you can determine if your calf appears healthy. If you notice a problem, you may need to contact a veterinarian.

What could you learn about your calf’s health by listening?

What could you learn about your calf's health by looking?

What could you learn about your calf's health by touching?

Observing a Healthy Calf

Ears – Look at your calf's ears. They should stand up and not appear droopy.

Eyes – Look at your calf's eyes. Healthy calves have eyes that are alert and bright.

Nose – Touch your calf's nose to make sure it is moist and warm.

Coat – Touch and look at your calf's coat. It should feel smooth and appear shiny.

Breathing – Listen to the way your calf breathes. You should hear your calf taking breaths in a regular, comfortable rhythm. Your calf should not be coughing, wheezing or taking labored breaths.

Bowel movements – Look at your calf's fecal material. It should be solid, with no signs of diarrhea.

Eating and drinking habits – Look to see what your calf eats and drinks each day. Healthy calves have a good appetite and consume water.

Observing Healthy Calf Management Techniques

Housing – A calf’s house should have clean, fresh bedding, with no accumulated wastes or standing water. Good ventilation is also necessary.

Feeding – Fresh food and water should be available every day. The same person should feed the calf at the same time everyday to lessen stress.

Horns – A calf’s horns should be removed when horn buttons form at about 2 weeks. An adult should use dehorning equipment for this task.

Flies and insects – Try to limit the number of flies and insects in your calf’s house.

Vaccinations – Calves need to be vaccinated for brucellosis between 3 and 6 months.

Calf Management Techniques

Write a brief statement of how you managed your calf.

Housing _____

Feeding _____

Horns _____

Flies and insects _____

Vaccinations _____

Apply Learned Information

Why is it important to observe your calf often?

What is another situation where you can use your senses to identify problems?

Did you need to contact your veterinarian about any problems? If so, what were they?

What did the veterinarian diagnose as the problem? How was it treated? How could it have been prevented?

Financial Summary

	Date	Item	Amount
Cost of Calf			
Cost of Housing			
(Materials or rent, bedding, etc)			
Cost of Nutrition			
(Bottle, nipple, feed, etc)			
Cost of Health Care			
(Vaccinations, dehorning, etc)			
Other Expenses			
(Halter, show expenses, etc)			

Total Expenses = \$

Income			

Total Income = \$

Income minus Expenses = \$

Summary

What were your goals for the bottle/bucket calf project?

How did you accomplish these goals?

What was the most important thing you learned about your calf?

What was the most important thing you learned about yourself?

What might you do differently next time?

What are your plans for your calf after the fair?

What are your future plans in the bottle/bucket calf project or in the beef or dairy project?

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