Ideas for Dairy Heifer Learning Activities

Advanced Level

Need more ideas for your dairy heifer project? There are hundreds of things you can do! You are being asked to complete at least five activities each year. Use this list, the 4-H Dairy Heifer Resource Handbook, and your imagination, and then write your ideas in your Dairy Heifer Project and Record Book. Have fun!

- Help a new 4-H member select an animal for his or her dairy heifer project.
- List the top 10 milk production and cheese production states.
- Visit one of the following: milk processing, ice cream, or other dairy product manufacturing facility. Give a brief report to your club about your visit.
- Explain how fluid milk is processed from the cow to the grocery store shelf.
- List five common diseases in diary heifers and for each provide a list of symptoms, treatment methods, and preventative measures.
- Name the six classes of nutrients and describe their roles in the dairy heifer diet.
- Explain why vitamins and minerals are important in a heifer’s diet.
- Explain how the digestive system of a newborn calf differs from that of a mature animal. Tell how the differences influence what the animals is fed up to weaning.
- Demonstrate how to save and preserve colostrum using the method of your choice.
- Explain how and why antibiotics may be added to feed or milk replacer.
- Develop a ration for your heifer using a ration balancing computer program.
- Calculate how much energy (Mcal) your heifer is receiving in her ration.
- Demonstrate how to determine forage quality.
- Learn to identify at least four types of grasses or legumes commonly used in pastures for dairy cows or heifers in your area.
- Describe how poor nutrition can influence the growth, health, and reproductive performance of a heifer.
- Explain why it is important that heifers be the appropriate age and size at first breeding. List the appropriate age and size at first breeding for your favorite breed.
- Explain what an estrus synchronization program is and describe two types of estrous synchronization programs that may be used for heifers.
Using a model or a live animal, demonstrate how to artificially inseminate a heifer or a cow.

List at least three advantages of using artificial insemination vs. natural breeding.

Explain to younger members how to read a pedigree.

List five characteristics that you would look for when selecting a bull to breed your heifer.

Using a model, demonstrate how you would ear tag or tattoo a heifer.

Using a model or diagram, demonstrate two techniques that may be used to remove horns from a heifer.

Hold a training session about dairy heifer management for younger 4-H members.

Demonstrate that you can identify the parts of the mammary gland.

Explain at least three advantages and disadvantages of using custom heifer growers to raise replacement heifers.

Explain the importance of environmental assurance to younger members.

Describe housing requirements for a heifer at birth, weaning, one year of age, and two weeks prior to freshening.

Select a type of manure management system for a facility that raises 100 dairy heifers from birth to freshening. Tell why you selected that system.

Prepare a skit demonstrating how to handle questions about dairy heifer production practices from people who are not familiar with animal agriculture.

Help a new 4-H member with a dairy heifer project prepare an animal for show.

Judge a class of four dairy heifers and give oral reasons (explain your placings).

Help teach younger members to judge.

Help a new member update his or her records.

Give a presentation to the younger members of your club about careers in the dairy industry.

Help younger members prepare for a dairy quiz or knowledge bowl.

Complete the Project Picture pages in the Quality Assurance section of this book.

Exhibit your heifer at the county fair.

Send a thank you note to award donors and anyone who helped you with your project (advisors, older members, parents, etc.).