



Dairy Activity Sheet - 2021

Level 3 - Grades 9-12

Due June 30 to the Extension Office



\$1.00

What you will do in this project:

- Enroll in the 4-H program by January 15.
- Complete a minimum of 2 activities on this Dairy Activity Sheet and turn it into the Extension Office **by the last business day of June, June 30** or earlier. This activity sheet consists of activities, and record sheet.
- Attend County 4-H Dairy workshops when offered.
- Recommend that the 4-H family purchase and review the project resource manual.
- Refer to the Allen County 4-H Rules Book for a complete listing of all regulations concerning this project.
- To show heifers or cows at the County Fair or Indiana State Fair identify animals in Indiana 4honline by May 15.
- To show heifers or cows at the County Fair level complete FairEntry online by published deadline.
- All Dairy Cattle shown at the Allen County Fair and the Indiana State Fair must have an 840 RFID tag.
- To exhibit beef cattle, dairy cattle, swine, sheep, meat goats, dairy goats, poultry and rabbits, 4-H members must be certified through the Youth for the Quality Care of Animals program. This is an annual program that can be completed via online modules or in-person trainings. For more information about in-person trainings in your county, please contact your County Extension Office. More information about YQCA is available at <http://yqca.org/>. **Attach a copy of YQCA card.**

Management Tips:

- Each dairy farm has their own methods of feeding and raising the cattle, make sure you follow carefully the methods and practices of that farm.
- Make sure the cattle are feed twice daily according to their growth rate and condition.
- Provide clean, fresh water to cattle at all times.
- Provide hay for roughage.
- Check daily for sickness, unusual things, or change in behavior.
- If out in pasture, provide protection from adverse weather conditions.
- Make sure pens are well cleaned and bedded at all times.
- Practice washing and brushing cattle before the fair for a soft and shiny coat of hair.
- Clip your show cattle far enough in advance of the fair to give time for the hair to grow back. Full body clipping is usually done 30 to 60 days before the fair.
- Exercise cattle daily in the coolness of the morning and evening, not in the heat of the day to avoid stressing your cattle.
- Practice posing your heifers and cows correctly. Practice leading your cattle with you walking backwards. Walking forward may also be used. Remember to walk slowly.

4-H Member: _____ 4-H Club: _____

Grade in School (January 1, 2021) _____ Years in this project _____

Signature of 4-H Member verifying that you have completed these activities:

Signature of Parent that you have reviewed this information:

• 4001 Crescent Avenue • Fort Wayne, IN 46815-4590 •
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4-H Animal Care:

The Indiana 4-H program strongly supports positive animal care and strongly opposes animal abuse. 4-H is also dedicated to the mission of developing youth and volunteers through “Learning by Doing” programs. 4-H livestock projects teach life skills such as acquiring knowledge, making decisions, and applying leadership skills.

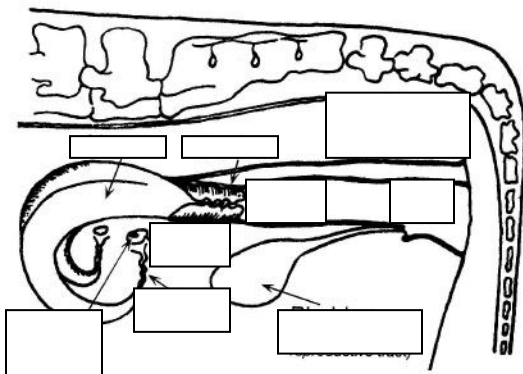
- When working and caring for animals, it is important to insure that appropriate safety measures are in place for both the animals and the persons who care for them. Therefore, there is no substitute for knowledge, common sense, and experience.
- Animal handlers should study and learn to anticipate an animal’s reaction and try and avoid problem situations. It is most important that 4-H members understand an animal’s behavior so one can “outsmart” not “out-muscle” an animal. Foremost in the 4-H’ers mind should always be safety of the handler and the animal. Moving animals is more of an art than a science. Movement of animals requires planning and knowledge to accomplish it with the least amount of time, effort and stress to the animal.
- An animal’s good health is often directly related to the environmental factors associated with its living space. The presence of predators, dust, odors, pests, temperature, and humidity has a direct effect on an animal’s well-being.
- Animals react favorably to daily care and comfortable housing. Consideration should also be given to specific animal needs such as size of their housing space, lighting, and ventilation. The best facilities and equipment cannot and should not be a substitute for daily observation and careful attention to signs of illness, injury, and/or unusual behavior.
- Frequent consultation with your veterinarian is a must. Reasonable attention must always be given to the use of drugs and their approved withdrawal times.



Reproductive Systems and Breeding

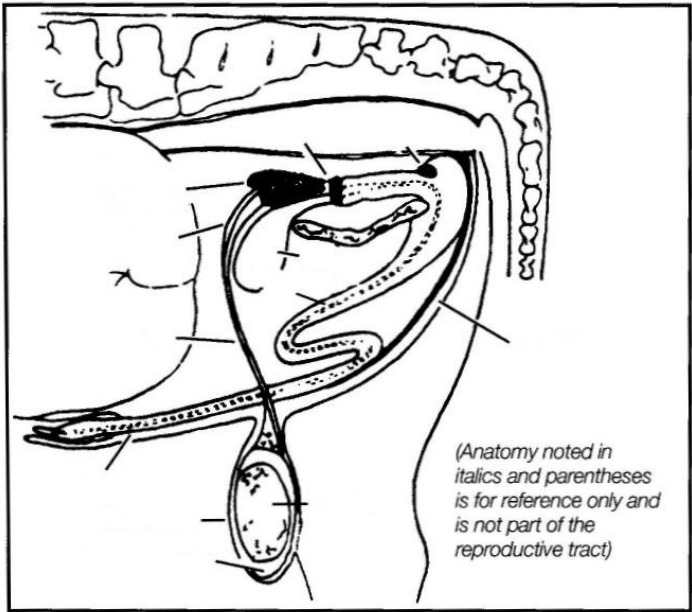
Reproduction is the process by which animals produce young or offspring. Successful reproduction in cattle requires proper function of the reproductive systems of both males (bulls) and females (heifers or cows). Knowledge of these systems and their functions in cattle, as well as an understanding of useful reproductive management tools, can help you successfully care for your dairy animal.

Label the parts of the female reproductive system



Uterus
Rectum
Cervix
Ovary
Oviduct
Follicle
Bladder
Vulva
Vagina

Label the parts of the male reproductive system



- Ampullae
- Cowpers
- Epididymis
- Penis
- Prostate
- Retractor Muscle
- Scrotum
- Seminal Vesicles
- Testis
- Vas Deferens
- Urethra

Figure 4-4. Male Reproductive System.

(Reference: OSU Dairy resource handbook – Chapter 4)

Answer the following questions on breeding:

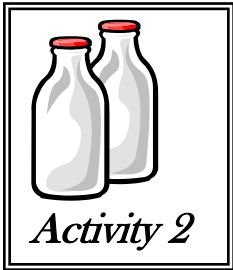
1. At what age and or/weight are heifers generally bred at? _____
2. What is the average standing heat time? _____
3. Ovulation does not occur until approximately 18 hours after the beginning of standing heat. How many hours does the egg have life? _____
4. How long can sperm live in the female reproductive tract? _____
5. After a cow has had their calf, how many days later should she be bred for the next calf? _____ This time frame is known as what?

6. List some ways you can detect signs of heat in a cow

7. Name some heat detection aids

8. Define artificial insemination (AI)

9. Explain what the estrous synchronization program is _____



Working Safely with Dairy

The flight zone is an animals' own space in which it doesn't want any people or foreign objects. The size of the zone is controlled by the animal's wildness or tameness. When working with dairy cattle, there are many opportunities for an accident to occur because of so much animal contact, such as milking in a parlor, feeding, breeding, and health check.

Most animals have a strong territorial instinct and develop a sense of "homeland". Name a few of these areas.

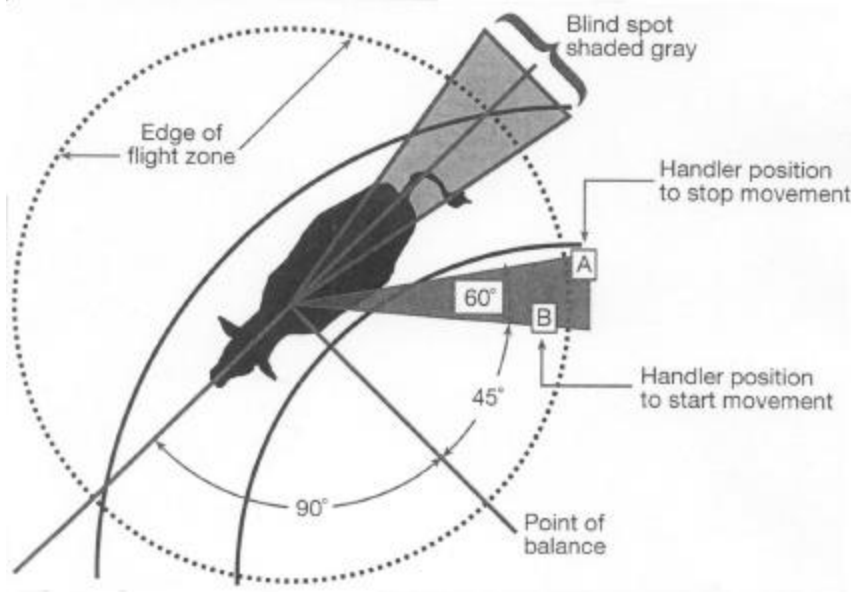
Cows with new calves may be difficult to handle, especially first-calf heifers that have never experienced the removal of a calf. The cow may become _____ and _____, trying to defend her calf.

Cattle have a very good and long memory. They will respond to the way they are treated and remember past experiences when reacting to a situation.

Tell how a calf that is handled with kindness and gentleness might react?

Tell how a calf that is yelled at, hit or frightened might react ?

Notice the following areas of a flight zone.



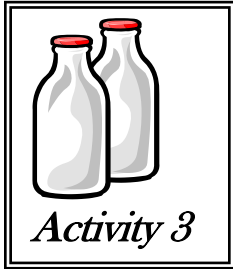
Special care should always be exercised when working with bulls. List three or more things you should do

1. _____
2. _____
3. _____

When entering a parlor during milking or when working in the parlor what events should you remember not to do?

The events in the parlor need to be gentle so to as to provide a consistent, non-threatening environment. Always be prepared for a cow to kick. What two ways may a cow most commonly kick?

(Reference: OSU Dairy Resource Handbook; Chapter 3)



Milking Parlors and Milking Procedures

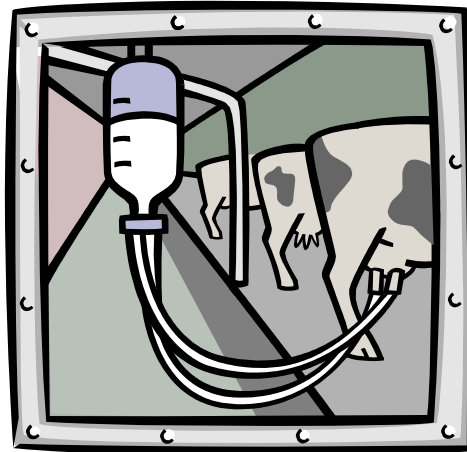
There are three main types of milking parlors. The difference between the parlors are the set up and how the cows are stationed and move through the parlor. Describe each of the following:

1. Parallel Parlor _____

2. Herringbone Parlor _____

3. Rotary Parlor _____

When cows enter the parlor or milking center, workers are there to harvest milk. To ensure a market for the future, dairy producers must always be aware of what the consumer would think of their farm and their milking procedures. Proper milking procedures, good management, and a clean environment combine to help ensure that quality milk is harvested, cow and udder health remains good, and the dairy operation can be as profitable as possible. Standard milking procedures should be developed so each milker is preparing and milking the cows in a similar manner.



ALLEN COUNTY 4-H LIVESTOCK RECORD



Records serve as a way to measure your own success with a project. When answering these questions, you should be able to see where improvements can be made for next year and if you wish to continue with this project for another year.

For this Project Record:

Why did you choose to raise and care for these animals this year?

How many animals did you manage during the past 12 months? _____

How many were market animals? _____

How many were breeding animals? _____

How many animals did you purchase or add during the past 12 months? _____

Did you purchase these animals alone or in partnership with someone else? _____

If you did purchase animals, why and how did you determine which animals to buy?

Did you sell any of your animals during the past 12 months? _____

If yes, how did you find a buyer for your animals?

Describe improvements you made to your animal's housing during the past 12 months.

(Include equipment, buildings, land, etc...)

List two new things that you learned about your project animals or the breed that you did not know before.

1.

2.

Where did you go to find more information about the care of your animals?

What health practices did you use with your animals the past 12 months?

In regards to raising these animals, what is one thing you will do differently the next 12 months that you did not do this past 12 months?

Premise ID Number where cattle are coming from _____

____ Completed 4honline enrollment by January 15, 2021

____ Completed Animal ID in 4honline by May 15, 2021

____ Completed Fair Entry on line by June 30, 2021

____ Copy of YQCA card attached