<u>Self-Guided Tour – Map of the Miller Farm</u>



You are here: Visitor Parking and farm information booth in the Arena

As you begin your tour, please MOOve around the farm in this order \bigcirc

- 1: New Maternity Barn (Babies!)
- 2: Coverall (pre-teens)
- 3: Arena (Pregnant or soon to be)
- 4: CREAM Milking Barn (Milking Ladies see info sheet about CREAM program)
- 5: Pasture (summer camp)



Miller Research Farm SAFETY MEASURES

MANDATORY PLASTIC DISPOSABLE BOOTS

• For the duration of your visit, please wear the disposable boots provided. This is for the safety of both yourself and the animals, to prohibit the possibility of anything pathogens spread. At the end of your visit, please dispose.

WASH YOUR HANDS

 These are farm animals, and naturally carry diseases that have the potential to spread to humans or other animals. At the end of your visit, please wash your hands located next to the Arena.

MOVING FARM EQUIPMENT

• This is a fully operational farm, with vehicles often coming in and out at all hours of the day. PLEASE be cautious and move out of the way if you notice a vehicle. These vehicles are large and have poor visibility; you can see them but they might not be able to see you!

RESPECT

- Please treat our staff and university students with respect. Adhere to the hours of operation posted and DO NOT enter any prohibited barns on this farm.
- Be quiet and respectful to all of our cows, this is their home! No running, yelling, or inappropriate behavior will be tolerated.

If you have any questions or concerns, please ask a farm staff member or student for help, we will be glad to assist you!

ENJOY YOUR VISIT!



Arena

University of Vermont Miller Research Farm

Considerations:

- Do not enter the pens.
- Be quiet and respectful to all of our cows, this is their home!
- To avoid spreading disease:
 - PLEASE WEAR PROVIDED DISPOSABLE SHOE COVERS!!
 - Refrain from eating or drinking.
 - Watch where you step! Do not step on the cow's food.
 - There are farm staff and moving vehicles around all day, so please be cautious when walking around the facilities.
 - At the end of your visit, **DISPOSE** of the shoes covers and **WASH** your hands!

- This barn houses our dry cows and heifers!
 - Dry cows: They are our pregnant cows that are taking a two month vacation from being milked to get ready to give birth! They can be found in the right hand pens when coming from Spear Street.
 - **Heifers:** They are our young animals who have not yet had their first calf yet, they are growing and getting bred for the first time to become a member of our production herd! Heifers in this barn range anywhere from 1 to 2 years old. They can be found in the left hand pens when coming from Spear Street.
- Cows in this barn may be very close to giving birth, or even actively in labor. Located in the farthest right pen from Spear Street, please be extra respectful to these cows, as they are undergoing a lot of changes and we want them to be as relaxed as possible.
 - Signs of Calving:
 - "Bagging Up": Their udder, where milk is made, will get large
 - Mucus/Discharge
 - Swollen and pink vulva

- Weird behavior: They will lie down and stand up repeatedly in attempts to get comfortable, separate themselves from the group, stop eating and drinking
- All of the cows in here are at different stages of their life, hence the varieties between their food!
 - Dry Cows: Their diet is mostly composed of hay. They are on a vacation and their metabolic needs are lower compared to our other cows.
 - Heifers: Their diet is high in grain. They are not mature yet and need a high nutrient diet to grow big and strong.
 - Close-up Cows: These cows are roughly 3 weeks out from giving birth. At this
 period, they need a high nutrient diet to fuel not only their body, but their baby as
 well.





Coverall

University of Vermont Miller Research Farm

Considerations:

- PLEASE DO NOT PET THE HEIFERS OR ENTER THIS BARN WITHOUT A STAFF MEMBER OR CREAM STUDENT!
 - Diseases can be brought *to calves and older animals* on the UVM farm.
 - Diseases can be brought to or from animals on other farms.
 - Zoonotic diseases can be spread to humans interacting with these heifers.
- There are farm staff and moving vehicles around all day, so please be cautious when walking around the facilities.
- Be quiet and respectful to all of our cows, this is their home!

- Nicknamed our "teenagers", these heifers range from 3 months to 10 months old. The youngest are in the farthest pen from the entrance while the oldest are in the closest pen to the entrance.
- In this barn, they focus their time on growing and learning how to interact in a free-stall pen with other heifers their age.
- They are moved in here when they are officially weaned from milk replacer, and solely eat grain and hay. At this age, they start ruminating.
- Have you ever been to a local fair? We show a lot of these heifers in this barn! You can usually catch us at the local cattle shows such as Addison County Fair, Champlain Valley Fair, and Tunbridge Fair. We encourage you to swing by the cattle barns at your local fair to come check us out!



New Maternity Barn

University of Vermont Miller Research Farm

Considerations:

- Newborn calves have a less developed immune system and are particularly susceptible to gastrointestinal and respiratory illnesses.
 - O Diseases can be brought to calves from older animals on the UVM farm.
 - O Diseases can be brought to or from animals on other farms.
 - O Zoonotic diseases can be spread to humans interacting with calves.
- Due to the calves being immunocompromised, PLEASE DO NOT ENTER WITHOUT
 A STAFF MEMBER OR CREAM STUDENT!

- This barn houses the calves that range from newborns to 3 months old.
- What happens during their time here?
 - Calves get weaned! This is the transition from being fed milk replacer to grain.
 During this time, it allows the rumen to develop.
 - Holstein heifers get an ear tag. This helps us identify them and allows us to more easily keep record of their life events, health history and family line.
 - We have genomic sampling done on our calves to analyze their genetics and improve our herd genetics over each generation.
 - Calves get humanely dehorned with local anesthesia and pain medication, to ensure safety of other animals on the farm as well as workers.



Milking Barn

University of Vermont Miller Research Farm

Considerations:

- Be quiet and respectful to all of our cows, this is their home!
- To avoid spreading disease:
 - PLEASE WEAR PROVIDED DISPOSABLE SHOE COVERS!!
 - Refrain from eating or drinking.
 - Watch where you step! Do not step on the cow's food.
 - Please be cautious when you are walking around, often cows may be walking to get milked. If so, wait for a staff member to assist you to a safe area to look at the cows.
 - At the end of your visit, **DISPOSE** of the shoes covers and **WASH** your hands!

- This barn has our lactating cows and a parlor; where they go to get milked. We have 56 registered Holstein cows milking at a time. They get milked 3 times a day; 3:30 AM, 11:30 AM, and 7:30 PM. Our herd average is roughly 90 pounds of milk per day!
- Cows vary on the amount of milk they make based on their genetics, age, and stage of lactation. In our barn, our cows are separated into four different groups.
 - High-group: These cows are at the beginning/peak/mid of their lactation. The
 feed in front of them is very nutrient rich as they need a high energy diet to
 produce lots of milk.
 - **Low-group:** These cows are typically nearing the end of their location; they typically make less milk as they go later in their pregnancy and are preparing to get dried-off (a period of time where they stop milking).
 - **Heifer group:** These cows have had their first baby, and are getting used to their life as the lactating animal. They are in a separate group to be able to eat food

high in energy to finish growing as well as spend time with cows their age.

- The style of barn design we have here is called a tie-stall barn, where each cow is clipped into an individual stall. This is for the safety of the CREAMers and the cows. You'll notice many cows laying down, most likely. Cows thrive on being bored, having a set routine, and are happiest sleeping, or relaxing and chewing their cud! You may even notice some cows grooming each other—many of our cows have best friends! See if you can spot them!
- All of our cows have a name and a unique number! Looking at her ear tag, you can see her number, her mother's (dam) name, her birthday, and father's (sire) name right above her number. All of our cow's names share the first letter of their mother's name, creating extensive lineages that can be traced back to when CREAM first started!
- This farm is a member of the Agrimark Cooperative. They come pick up our milk and distribute it to their subsidiaries such as Cabot. Our high-quality milk is used to make Cabot cheese. You may have eaten some cheese products from our lovely cows!

