



A Guide for Dairy Farm Summer Camp

Connecting Cows, Children, and Community in Vermont



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A warm breeze carries the scent of dry hay and manure through a long freestall barn as a group of campers swarm a round bale, eagerly packing fistfuls of hay against their small bodies. A couple mischievous heifers snatch tongue-fuls of the hay as the kids walk by, much to the campers' delight. This is the start of every day at Fairmont Farm's "Life on the Farm" summer camp: daily chores to help care for the calves that campers will later wash, lead, learn about, and snuggle.

Summer camp on dairy farms is a unique way for kids to connect with animals and their community, and to learn where dairy products come from. Farm camp helps build positive community relationships, introduces young people to career opportunities, provides much needed childcare, and can generate income for the farm. Camp also offers families an honest view of farming, separate from stories or messages in the media. Farmers can demonstrate their deep care for the animals that feed us, for the people who work with them, and for the working lands that sustain us.

This guide aims to help dairy farmers understand how to start a summer camp on the farm, from establishing budgets to identifying activities, and everything in between. Summer camp is defined as week-long daytime programming for 6-14 year olds. Teens ages 15-17 are included as Counselors in Training. While our focus is on dairy farms, this guide will be useful for other types of farms as well, and for various types of farm-based youth programming. Read on!



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Inspiration

Creating a summer camp is a creative process shaped by your unique farm setting. Camp can be structured in countless ways based on the opportunities and constraints of each place. Here are a few examples to inspire your own planning (more in Appendix).



FAIRMONT FARM, East Montpelier, Vermont

A family-owned commercial dairy milking 1,450 Holsteins

Life on the Farm Camp immerses kids in the world of dairy farming with the fun of an outdoor summer camp. Campers do chores, “adopt” calves that they learn to lead, bathe, and care for, and learn dairy facts through engaging games during the week. Guest speakers teach about cow health and wellbeing and introduce career opportunities. Camp culminates in a 4-H style show for families where campers share their learning and love for the farm. The camp has been operating for 10 years, offers six week-long sessions for 25 campers ages 6-12, and has a waitlist every year. The farm’s 4-H members assist with teaching and calf management, and some serve as counselors-in-training (CITs).

AYERS BROOK GOAT DAIRY, Randolph, Vermont

A family-owned commercial dairy milking 300 goats

At Camp Ayers Brook, kids immerse themselves in outdoor games and activities against the unique backdrop of a working goat dairy. Campers can play soccer, create art, hike, bike, and enjoy classic games like tag. Although it’s marketed as “not a farm camp,” children learn a lot about farming by caring for two bucklings, touring the barns, observing milking in the parlor, and helping with a few farm chores—all while learning from their counselor, who’s also the farmer. In its inaugural year, the camp ran three week-long sessions for kids aged 5-6 and 7-9, filling about 80% of its spots and received glowing feedback from both campers and parents.



PLEASANT VALLEY FARMS, Berkshire, Vermont

A family-owned dairy in the community for 38 years

Amanda St. Pierre, who owns the farm with her husband and two sons, got creative when she wanted to continue connecting with local kids but didn’t have the capacity to continue her farm-based camp: she took the farm on the road! Now Amanda and two farm interns bring calves to local summer camps. Kids spend an afternoon getting a hands-on taste of the farm: brushing and leading calves, making ice cream, and learning about animal care. This partnership offers a great farm camp experience that would otherwise not be accessible to the majority low-income families who attend. The farm donates their time, since connecting with their community and educating kids is the purpose of their program.



The Business of Summer Camp

Running a successful summer camp takes significant behind-the-scenes effort. You'll need to develop a clear purpose, manage budgets, secure insurance, and more. This section will guide you through the business side of running camp.

Getting Started

How do you know if summer camp is right for your farm? Use this checklist to consider the minimum that's needed for a successful summer camp:

- **Do you have the time?** Planning usually begins eight months prior to a camp's start date, with additional time spent running the camp. (See [Planning Timeline](#), Appendix p. 41.)
- **Do you want to do this? Does it sound like fun?** Every successful summer camp has a leader who is genuinely interested in having kids on the farm.
- **Do you have safe spaces for children?** For learning and play, campers will need shade, protected space during severe weather, a clean bathroom, a handwash station, and an area to run around. (See [Infrastructure](#), p. 19.)
- **Can you get reasonably priced insurance coverage?** Farm camp creates liability risks so consult with your insurance agent early in the

planning process to understand what's reasonable for the specific camp activities you have in mind. (See [Insurance and Liability](#), p. 5.)

- **Do you have a supportive farm team?** Everyone on the farm needs to be on board with this new venture, especially those who will be impacted by having kids on the farm.

“Starting a farm camp just made sense to me because we have amazing spaces that are unused by the farming operation where I knew kids would love to play and learn. Plus, I get to spend time doing things I love and be creative in ways I can't be in my farm job.”

— Daryll Breau, Ayers Brook Goat Dairy





Business Structure and Plan

Determine the structure of your summer camp business. Will it be a project of your current farm business, a new, separate, Limited Liability Corporation, or a nonprofit organization?

The type of business you choose may impact liability so talk with a lawyer and insurance agent to help you decide what's right for you. The [Legal Food Hub](#) offers free individual legal support services to farms, and has a free [downloadable decision tree](#) to help with selecting a business entity, or see p. 10 of [A Guide to Successful Agritourism Enterprises](#).

Create a plan to help ensure your summer camp is a successful enterprise that will meet your unique goals. You may need an official business plan if you are applying for permits or funding, but in most cases, a simple plan will work well.

A simple summer camp plan should include:

- Purpose, goals, and audience
- Insurance and liability
- Budget
- Marketing and registration
- Staffing
- Camp schedule and activities
- On-farm safety
- [Planning timeline](#) (Appendix, p. 41)

EXAMPLE PURPOSE STATEMENTS

“Our goal is to generate profit to support our farm business while providing needed childcare for our community.”



“Our camp will build community relationships and goodwill to help strengthen support for the farm. We will lose no more than \$500 the first year, break even in year 2, and generate profit starting in year 3.”



“Our goal is to educate local kids about where their food comes from. We will donate 40 hours of time (\$1,000) and aim to make a small profit.”

BUSINESS PLANNING RESOURCES

- The Vermont Agritourism Collaborative's free business planning resources, including a [workshop series](#)
- The [Vermont Farm & Forest Viability Program](#) offers business and transfer planning in which farmers can access up to 2 years of individualized support (\$75 enrollment fee)

Purpose, Goals, and Audience

Write a simple purpose or goal statement to guide your planning process. Why do you want to run a summer camp? Do you primarily want to generate revenue? Create goodwill in your community? Provide childcare? Build a customer base for other farm products? It's important to **clarify your financial goal**, even if it's not your primary goal.

Determine the audience for your camp, including the age and geographic location of potential campers. Your target audience will impact many other steps in your planning process.

“We realize that we have to invest in our community to be able to continue farming in the way that we do. We're trying to give kids a great farm experience to talk about at their dinner tables, creating a network of people who know what we really do and will stick up for us. The budget drives how many spots we offer, but this is primarily about goodwill and education, and we love what we do.”

— Clara Ayer, Fairmont Farm

Here are some key factors to consider:

- Younger campers require higher ratios of staff to campers.
- Older children are generally able to follow more complex directions, which might impact the activities you do or where you go on the farm.
- Demographics, particularly income levels, influence how much you can charge and whether you offer scholarships, discounts, or sliding pay scales.

If you aren't sure of your audience or can imagine different scenarios, that's okay! Keep working through the guide and come back to this question.

Insurance and Liability

“One of the biggest misconceptions about insurance is people thinking, ‘I have an insurance policy so everything is covered.’ They don't realize there are exclusions.”

— Roy Folsom, Fewer Agency

Talk to your insurance agent as soon as possible to make sure you and your campers are protected in the event of an incident. Insurance premiums can significantly impact the financial viability of a program, so it's essential to have this conversation early in the process.

Many factors influence insurability and insurance costs. Be specific with your agent about all the camp activities you're planning to make sure they are all covered, and ask about limitations and exclusions.

ACT 31: LIMITING LIABILITY FOR AGRITOURISM

Farms that offer agritourism activities such as summer camp now have a layer of protection from the state of Vermont through [Act 31](#). Act 31 acknowledges that there are inherent risks in participating in agritourism activities and shifts those risks to properly warned visitors. To qualify, farms must **post a required warning notice** in a clearly visible location at or near the main entrance to summer camp (see photo). Include the same warning notice language in all contracts, and add it to your camp handbook and website. You can't post this

language too much! To ask about physical signs, contact vtagritourism@uvm.edu.

As a farm owner, it is your responsibility to create a safe and secure summer camp experience (see [Farm Safety and Logistics](#), p. 19). Act 31 will not apply if you are negligent or know of any dangerous conditions that could cause harm to a camper or visitor. Read this [FAQ](#) from the Vermont Agritourism Collaborative and talk to your legal advisor.

Permits

Although Vermont does not require a license for summer day camps for children five years old and over, you may need an **Act 143 permit**.

To help farmers diversify operations and revenue streams, Act 143 exempts farmers from local zoning bylaws that might regulate commercial ventures. Farm-based summer camps that feature agriculturally related content are covered under the Act as an [Accessory On Farm Business](#).





Budget

What is the financial viability of summer camp?

The answer to this question is complex. Key variables include number of campers, staffing needs, fee structures, and cost of insurance. For example, increasing camper numbers or fees may boost income but could also require additional expenses like more staff or marketing efforts to fill spots. Farms typically begin seeing profits within three years, and well-run camps can yield significant returns. However, success depends on creating a high-quality, engaging experience rather than solely focusing on profit.



Example Budget

Camp Dairy Days in Anytown, VT, offers 4 weeks of full-day (9am-3pm) farm camp to local 9-12 year olds. Farm owner, Lee, does all the preparation but hires a lead counselor to run camp during the summer, along with a paid intern and an unpaid CIT. The lead counselor has one week of paid training and the intern has two days. The farm is well known, with an active newsletter and social media following, so Lee is paying for minimal marketing. Lee uses Google Sheets and Forms for registration and an existing online store via Square for payment. The camp is not offering discounts or scholarships this first year. Lee's goal is to break even by filling all 12 spots in each of the 4 weeks of camp.

REVENUE		ANNUAL TOTAL
	Camp Fee (\$325 x 12 campers x 4 weeks)	\$15,600
EXPENSES		ANNUAL TOTAL
Capital Expenses long-term	Infrastructure: portable toilet, picnic tables, handwashing station	\$750
Operating Expenses current year	Insurance (\$150/week)	\$600
	Marketing & Registration: Advertising	\$64
	Staffing: • <i>Lead counselor</i> (\$20/hr x 40hr x 5 weeks), • <i>Intern</i> (\$600/week), CIT (unpaid), • <i>Farm owner</i> (\$25/hour: avg 12 hrs/month for 6 months + 30 hours/week 4 weeks)	\$10,940
	Health & Safety: Handwashing supplies, 2 first aid kits and extra first aid supplies	\$80
	Materials & Supplies: snacks, crafts, buttermaking, games, miscellaneous	\$528
	Credit card fees for online registration: 2.5%	\$390
	TOTAL EXPENSES	\$13,352
	TOTAL REVENUE	\$15,600
	NET INCOME	\$2,248

Create a summer camp budget. Whatever your financial goals, the budgeting process will help clarify the optimal structure for your situation. Staffing and insurance are usually the biggest operating expenses;; other operating costs are often quite low. For an accurate budget, count your own planning time as an expense. Your time is valuable!

Additional budget considerations:

- **Camp fees:** Set fees based on your financial goals and what your audience can afford. Compare local camps’ prices, taking camp hours and staff ratios into account, and use a spreadsheet like the given example to run scenarios with different prices and number of campers.
- **Cancellation policy:** Create a cancellation policy that explains whether and how a refund is granted. This can help you recoup some of the administrative costs of issuing a refund and finding a new camper, or the loss of an entire registration fee. See [example](#) in Appendix, p. 33.
- **Discounts:** Discounts for registering multiple children from one family can boost enrollment and make camp more affordable. Early-bird discounts can also help boost registrations.
- **Scholarships or financial support:** Many families across Vermont cannot afford to send their child(ren) to camp. Scholarships can create opportunities for more families to participate. To ensure everyone enjoys the same experience, campers and CITs should not know who has received a scholarship. See some [scholarship models](#) in Appendix, p. 43.

GRANT AND LOAN OPPORTUNITIES

Depending on your need, there are resources for financial support to start or expand a summer camp. Here are a few:

- [New England Dairy](#) provides annual grants for dairy promotion such as summer camp.
- [Vermont Working Lands Enterprise Initiative](#) (WLEI) awards grants and contracts to Vermont farms and service providers. *Fairmont Farm received a 2018 WLEI grant of \$16,000 to upgrade their camp facilities.*
- [Local Economic Development boards](#) may have relevant grant opportunities.
- [Vermont Community Loan Fund](#) offers loans including to farm, food, and forest businesses.

“Be thoughtful about the size of your camp. More campers means greater liability, more staff, and more management. My advice is always to start small and try to break even in the first year then build slowly from there. It’s easy to build on the reputation of a high quality program.

— Eric Tadlock, Cedar Circle Farm

2024 VERMONT SUMMER CAMP RATES

(Rates will change every year)

CAMP	HOURS	CAMPER AGE	WEEKLY FEE
Ayers Brook Goat Dairy, Randolph	8am–3:30pm	5–9	\$250
Fairmont Farm, East Montpelier	9am–3pm	6–12	\$400
Kingdom Corn Maze at Simpson Farm, Sutton	9am–3:30pm	6–12	\$350
New Village Farm, Shelburne	9am–3pm	7–14	\$350
Shelburne Farms, Shelburne	9am–3pm	6–12	\$325
Billings Farm & Museum, Woodstock	9am–4pm	7–10	\$390
Merck Forest & Farmland Center, Rupert	9am–3pm	6–11	\$275



Alternative Camp Models

This guide focuses on week-long day camps for elementary and middle-school aged children but if this model doesn't fit your farm, consider these alternatives.

PARTIAL DAY CAMP

Shorten the camp day, running it 9am–1pm, for example.

Good when: You want to work with younger children whose stamina is limited, or a half day works better for the farm team's schedule.

Challenge: Families with working parents will have a hard time with mid-workday transport.

SINGLE OR MULTI-DAY CAMP

Host camp for one day or a few days per week.

Good when: Content is limited (you can repeat content with different groups across multiple 1- or 2-day camps per week), staffing is limited, or it's hard for families to get to your farm every day.

Challenge: Families with working parents often need childcare for a full week and/or full day.

PARTNER CAMP

Find an organization to bring their campers to your farm for a field trip or a few days. Parks and Recreation summer camps often have budgets for this.

Good when: You're intimidated by the registration and marketing process but have a great summer camp situation.

Challenge: The partner usually gets a portion of the income; staffing is likely still needed.



“I've been building summer camp programs since 2004. The need, enthusiasm, and demand for farm-based summer programming has significantly grown in the last 20 years.”

— Eric Tadlock, Cedar Circle Farm



BERNING ACRES FARM CAMP

2024 Dates & Times: 9 am – 1 pm

Session 1: Thursday & Friday, June 6 and 7

Session 2: Monday & Wednesday, June 10 and 12

Session 3: Tuesday & Thursday, June 11 and 13

Session 4: Monday & Wednesday, June 17 and 19

Session 5: Tuesday & Thursday, June 18 and 20

Session 6: Monday & Tuesday, June 9 and 10

Hurry, register at website!

Marketing and Registration

Create a marketing plan to spread the word about your camp and a **registration process** for smooth and secure camper sign-ups.

MARKETING

A marketing plan will help enroll your camp to meet your financial goals. It involves several steps.

- Understand your market.** Find out what other camps in your area are offering, including their prices, times, and content. How much do they charge? When do they open registration? How do they tell their story?
- Create a camp webpage and marketing materials.** The vast majority of families today expect information to be online, so add a page to your existing farm website, create a new Facebook page, or use a registration site. In your marketing materials, and especially on your webpage, use images and easy to read statements to share critical camp information such as:
 - Location
 - Dates and times
 - Camp description with camper ages
 - Fees and discounts
 - Childcare before or after camp hours, if you offer it
 - Registration instructions, including deadlines
 - Contact information for questions
 - Testimonials, if you have them
 - Act 31 statement
- Decide where to advertise.** Paid advertising is not always necessary but some marketing is important, especially in the early years. Use your existing farm communications, personal friends and family, or signage at a farmstand or farmer's market. Popular Vermont marketing opportunities include:
 - Schools: Most schools create their own lists of summer opportunities and some host in-person summer opportunities fairs. *Free.*
 - findandgoseek.net. *Free.*
 - Community bulletin boards such as [Front Porch Forum](http://FrontPorchForum.com) or [NextDoor](http://NextDoor.com). *Free.*
 - campfindervt.com. *Paid.*
 - Seven Days & Kids VT Camp Guide (in-print and online). *Paid.*
 - Kids VT annual camp and school fair (February in-person event). *Paid.*
 - Local newspapers. *Paid.*



REGISTRATION

Camp registration provides you with information about each child, and ensures that payments are made and waivers and releases are signed. This process can happen using online systems, pen and paper, or a combination. Design a process that works for you and is relatively simple for families.

The key purposes of a registration process are to:

- **Collect camper information** such as personal, health, and safety information (including allergies, emergency contacts, and who is approved to pick them up). See [sample registration form](#) in Appendix, p. 42.
- **Manage payment** with online credit card transactions or clearly explained alternatives.
- **Gather signed waivers and releases** such as medical, liability, and media releases.
- **Introduce yourself**, your farm, and the camp experience to future camp families!

Online camp registration platforms such as ACTIVE or Omella can simplify registration and communications, but they require significant setup time and often charge fees. Instead, many farms use free tools such as Google apps or JotForm, with a custom spreadsheet to stay organized.

Another approach is to ask your local Parks and Recreation department if they'll host your camps on their registration site for a small fee or percentage of sales. You lose some control and income, but it might be worth it to save you the effort of registration.

“It’s important to give parents a sense of what your camp is and is not. It’s a great fit for everyone when camp families are here for the particular experience we offer.”

— Daryll Breau, Ayers Brook Goat Dairy

WAIVERS AND RELEASES

Waivers and releases help reduce your liability by asking parents to acknowledge and accept the risks that farm camp poses to their child. Always get advice on these documents from legal and insurance professionals, especially the liability waiver. At minimum, include the following:

- **Liability Waiver:** Acknowledges camp safety risks and grants permission for participation.
- **Medical Release:** Provides medical information, authorizes first aid care, and approves emergency services if needed.
- **Media release:** Grants permission to use camper images in specified ways.

See [examples](#) in Appendix, pp. 31–33.



Staffing

Decide how to staff your camp. Staff are critical to building a farm camp program that kids love. Counselors, interns, and counselors-in-training drive the camp culture and are responsible for ensuring the safety of campers and the farm.

Consider the role you want to play in the day-to-day of camp. Do you want to lead the whole week, be a “guest speaker,” oversee specific activities, or be completely hands-off? What can you realistically take on given your farm responsibilities? Decide how you fit then identify the other roles you need to fill in order to achieve the ratio that is safe and effective for your situation.

STAFF ROLES

Camp director or leader oversees daily operations, manages staff, ensures camp safety, plans programs, and handles camp administration. They make key safety decisions and support campers and staff, especially during pickup and drop-off. They need to be available at all times when campers are on-site but are not necessarily leading camp activities.

Counselors ensure campers’ safety and lead activities while managing group dynamics and interfacing with parents. They serve as role models, so building a diverse team of counselors who can connect with different kids is crucial.

STAFF TO CAMPER RATIOS

Every camp needs at least two staff members: one to supervise the group and one to manage individual situations that might arise. To **determine the number of staff** you need beyond that, consider a staff-to-camper ratio that will ensure campers are properly supervised and safe. This will depend on the activities you offer and the age of your campers.

For tasks like leading or washing calves, extra adults or skilled CITs are helpful to ensure everyone’s safety. If small group activities or stations are part of your camp day, assign an adult to each.

Know the Law: Anytime you ask someone to do something of value for your business, employment laws come into effect. Details at labor.vermont.gov. Here are a few reminders:

- Hourly employees must be paid 1.5x for every hour worked over 40 hours per week.
- Work in exchange for camp enrollment is possible but should be advised by a lawyer or by consulting Department of Labor laws.
- Volunteers are only allowed in non-profit organizations. No other entity can legally have volunteers.
- Different rules apply based on the category of worker (such as staff, contractor, intern).

Counselors-in-training (CITs) are typically aged 14-17, and they gain valuable experience while helping at camp. Since they may not be much older than your campers, it is essential that you carefully select and train them. This role is sometimes paid.

College interns gain valuable experience while helping staff your camp. Reach out to local college career centers and consult labor laws to learn if interns are a feasible option within your business structure.



Farm camps commonly have ratios of 1:4 when campers are hands-on with animals, and for safety, follow the American Camp Association’s *minimum* day camp staff-to-child ratios:

- **Ages 6–8:** 1:8
- **Ages 9–14:** 1:10

Some insurance companies have specific requirements or guidance for staff-to-camper ratios, too, so ask your agent. Finally, have a plan that allows staff a day off for unexpected and planned absences.

HIRING PROCESS

Although hiring exceptional staff can be time-consuming, a high quality team can make or break your camp. Follow a structured hiring process to keep it fair and professional, including interviewing candidates. Conducting criminal background checks is recommended for roles that interact with children. See [Appendix, p. 36](#).

Experienced educators can be a tremendous asset to your camp team. Classroom teachers, instructional assistants, after-school program staff, and school administrators have valuable skills and strategies for working with children, and may welcome the opportunity to teach at a farm camp during their summer break—especially if you can reserve a spot for their child(ren)!

Some camps require counselors to be First Aid and CPR certified. This requirement can be listed in the job posting, or some camps provide training or offer a stipend for staff to get certified. Ensure that at least one staff member is certified to handle injuries and allergic reactions properly.

COMPENSATION

To set a competitive pay rate for your staff, consult your budget and local market rates, and research job postings from other camps in your area.

2024 hourly staff pay rates:

- Vermont state minimum wage \$13.67
- Parks & Recreation camp counselor . . \$19–25
- Commercial farm camp counselor . . . \$15–17
- Nonprofit camp counselor \$17–25

“Summer camp is only as valuable as the people you hire and the passions they bring to the program. You can’t skimp on investing in staff.”

— Eric Tadlock, Cedar Circle Farm

STAFF TRAINING

Train all camp staff, including CITs, on expectations, roles, safety plans and policies, daily routines, and the culture you’re trying to create. Training helps build staff rapport and can create a healthy environment at camp. Think about incorporating time for staff to practice new camp activities, too.

SUPERVISION

All staff need support to do their best work, especially when they’re new. Commit to providing regular feedback to each person on your team. If an issue arises, it is much easier to give constructive feedback when there is an established process.

To continuously improve your camp, and to give your team a sense of ownership, value, and reciprocity, ask for their feedback about you and/or the program. You can demonstrate how to receive feedback gracefully, gain valuable insights, and set a tone that feedback is welcome and helpful.

PREVENTING CHILD ABUSE

To ensure camper safety, some camps have a Child Abuse Prevention Policy that includes staff background checks, training in appropriate behavior, and bathroom protocols. Research shows that the more child abuse prevention is openly discussed, the less likely child abuse is to occur. The [American Camp Association](#) has some helpful tips.

To help identify children at risk and prevent future harm, Vermont’s “Mandated Reporting” law also requires that summer camp owners and counselors notify trained professionals at the State within 24 hours of observing suspected child abuse or neglect. See Appendix, p. 35 for a [printable notice](#), and the following resources for additional information.

- [Vermont Department for Children and Families](#)
- [KidSafe Collaborative](#)

Campers on the Farm!

A milking parlor, haying equipment, and of course, live animals, can be thrilling for campers. Planning an engaging camp experience means crafting a schedule that blends hands-on learning, adventure, and fun, and that aligns with your goals. This section outlines essential strategies for building a dynamic schedule, incorporating meaningful activities, and managing logistics to keep each day running smoothly.

Schedule and Activities

Create your camp schedule by first defining the core activities that will anchor the camp experience. Then pick activities, games, and adventures to fill out each day of farm fun. The schedule should follow a relatively consistent structure each day with different activities (see [sample schedule](#) in Appendix, p. 44).

“Kids tend to appreciate some flexibility in the schedule. We’ll drop everything to go watch a calving or spend more time than planned in a particular activity if everyone is enjoying it.”

— Jessica Newland, On the Farm Summer Day Camp at Simpson Farm



What activities should you include? Think about:

- What do you want campers to understand or what experiences do you want them to have? Think about your own favorite parts of farming and review your camp purpose and goals.
- Are there people you want them to meet, such as vets, nutritionists, milk haulers, or field crew? Invited guests can help campers learn about the whole farm system as well as future career opportunities.
- Where can campers safely engage in the real work of farming or have hands-on experiences? Kids love to feel like they're contributing.

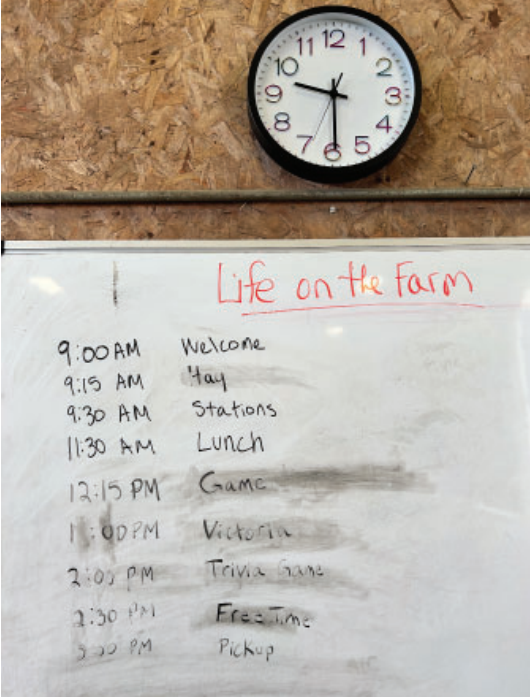
Check out these tried-and-true dairy-themed activities from farm-based summer camps. All are adaptable for different settings and ages, and don't require live animals or hard-to-find materials. See [Appendix for full write-ups](#), p. 48–65.

- **Dress Up a Cow:** Learn about the parts of a cow as one lucky camper or counselor dresses up like a cow! (*Shelburne Farms*) (pictured)
- **TMR for Cows and Campers:** Learn about a cow's diet while mixing familiar snacks together for a kid-friendly "total mixed ration." (pictured)
- **Dairy Trivia Races:** Campers work in teams to test their knowledge and race to the right answer to dairy cow trivia. (*Fairholm Farm*)
- **How Is My Cow?** Learn how to conduct a visual health check on a cow then use a checklist to assess a real cow's health. (*Fairholm Farm*)
- **From a Cow / Not From a Cow:** Sort everyday products based on whether or not they came from a cow to learn how important farms are in our everyday lives. (*Shelburne Farms*)
- **From Rocks to Cheese:** Sequence objects then tell the story of cheese making, starting with the earth. (*Shelburne Farms*)
- **Buttermaking:** Sing along as you shake jars of cream to make (then eat) butter. (*Shelburne Farms*)
- **Ice Cream Making:** Make vanilla ice cream in a bag! It's easy to set up using simple materials that don't create a mess. (*New England Dairy*)

Be mindful of camper health and wellbeing when designing the camp day. Consider how far you'll be from water, bathrooms, and handwashing. Is the distance realistic for campers' age and ability? Well-fed, hydrated campers who've had bathroom breaks are more likely to stay engaged in activities.

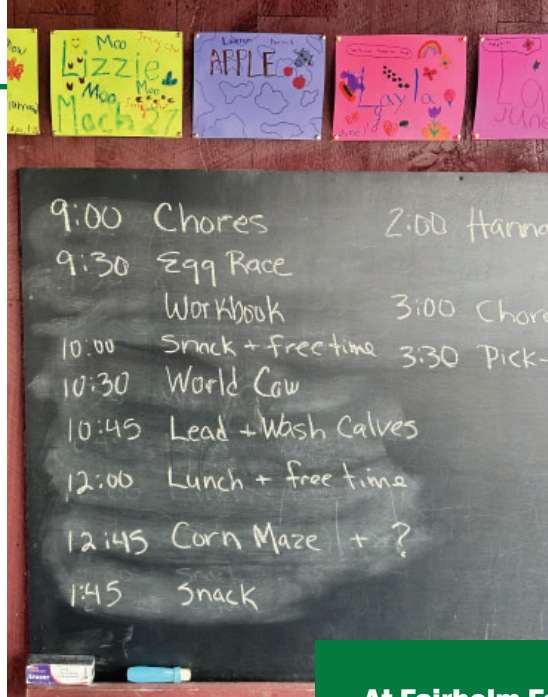


[New England Dairy](#) has amazing dairy-themed activities and lessons, stickers, handouts, posters and more. Download or [order](#) free copies of the *Discover Dairy Activity Book*. It has dairy themed puzzles, games, coloring, and even jokes, and is great for campers who can read and write.



Life on the Farm

9:00 AM	Welcome
9:15 AM	Hay
9:30 AM	Stations
11:30 AM	Lunch
12:15 PM	Game
1:00 PM	Victoria
2:00 PM	Trivia Game
2:30 PM	Free Time
3:00 PM	Pickup



9:00	Chores	2:00	Harna
9:30	Egg Race		
	Workbook	3:00	Chore
10:00	Snack + freetime	3:30	Pick-
10:30	World Cow		
10:45	Lead + Wash Calves		
12:00	Lunch + free time		
12:45	Corn Maze + ?		
1:45	Snack		



PATHFINDERS

9:00am	Drop-off (Morning Circle?)
	→ Chores
	→ Snack!
	→ Games/Activities
12:00pm	Lunch @ Stick Fort
	→ Forest games/Explore
	→ Sprinklers!/Fun in the shade
3:00pm	Clean-up + Pick-up

At Fairholm Farm, each camp week wraps up with a Friday Picnic where everyone enjoys lunch, ice cream, and a wagon ride around the farm. It gives campers the chance to proudly share their favorite spots and experiences from the week. Celebrations like this can be great opportunities to build community, extend the farm experience to adults, and market your farm.

3 PRO TIPS FOR GREAT ACTIVITIES

- 1. Make a supply list.** As you plan, keep a running list of what you'll need for safety, first aid, and for each activity. See [sample supply list](#) in Appendix, p. 43.
- 2. Test run activities.** Use new staff or kids as "test subjects" to help you refine directions, try supplies, and assess engagement for new activities. Adapt the activity as needed, and don't hesitate to abandon anything that isn't working.
- 3. Adapt!** Working with children of any age requires constant adaptation—just like farming! A planned activity might not work with the energy level of the group, a weather change, or any number of hiccups. Have alternatives in your mind to adapt on the go. This is one of the many superpowers of great camp counselors.

Camper Dropoff and Pickup

Make a check-in sheet to track who is present at camp each day. If a camper doesn't show up, call to find out if they're coming to be sure you have an accurate camper count to check throughout the day. Some camps invite parents to stay at dropoff until their child feels comfortable. This can smooth the transition for campers and counselors alike.

Create a structured plan for managing camper pickup at the end of each day to ensure everyone goes home with the right people. During registration or at camper dropoff, gather names of anyone authorized to pick up each child, such as grandparents, babysitters, or carpooling families. Use a checklist to track pickups and only release campers to approved individuals.

It's important to have two people managing the pickup process: one person can lead a group activity or supervise free play, while the other manages the pickup process. This helps create a smooth transition for everyone.

“Kids love to be helpful. Specifically 6-12 year olds really love to be involved with the real work of the farm, where they feel like they're contributing to something.”

— Erica Hermonot, Fairholm Farm

Food

The simplest way to manage lunch and snacks is to require campers to bring their own. Some camps provide dairy-themed snacks, such as cheese or ice cream. Check with local creameries, milk co-ops, or businesses about donations. Often they're happy to support healthy snacks for kids.

Making food, like butter and ice cream, can enhance the camp experience, but it's essential to follow good hygiene and food safety practices. ServSafe Certification programs teach proper food handling techniques and demonstrate your commitment to food safety ([servsafe.com](https://www.servsafe.com)).

Remember to check camper allergies. If a camper has an allergy, consult with them and their parents to decide whether to provide an alternative food or modify your activity.

Raw milk should never be served to campers under any circumstances given the real and perceived health risks. Farms are under a different level of scrutiny when it comes to food safety and the implication of a child getting sick from farm food can be very serious for the farm and industry.

Communications

Send a welcome email to families before their camp week (see [email template](#) in Appendix, p. 45). It should have concise but complete information to help them prepare for camp, including:

- Dropoff and pickup location
- Appropriate footwear and clothing
- What to bring (e.g., lunch, water bottle, backpack, extra shoes, layers, raincoat)
- How to prepare (e.g., apply sunscreen at home)
- Camp counselor bios
- Contact information for urgent communications
- Policies or guidelines (e.g., technology usage, camper behavior, road safety, pets, ticks.)
- A link to your website for other policies and additional information

Campers may feel proud to show off the farm they now love with their families, so be clear in your communications whether and when this is allowed.

At Kingdom Corn Maze at Simpson Farm, counselors share daily photos in a private Google Photos album accessible only to that week's campers' parents, who sign a media waiver during registration. Parents enjoy the window into camp life and campers treasure the memories.

Group Management and Engagement

Managing a group of campers effectively keeps everyone safe and supported, engaged in activities, and having fun.

WELCOMING ENVIRONMENT

Campers who feel a sense of belonging are more likely to learn, have fun, make safe choices, and return year after year! To foster inclusivity:

- Hire a diverse group of staff, interns, and CITs who can serve as role models and who will bring various perspectives to the experience.
- Learn everyone's names and gender pronouns. Nametags on the first day can help!
- Be kind when kids are wrong or make mistakes. This helps them feel safe and more able to participate fully.
- Show care for campers by learning about who they are and what interests them.
- Use inclusive language. Avoid stereotypes or assumptions based on factors like gender, race, ability, age, or background. For example, instead of using "he" when talking about a farmer, use "farmer." Instead of inviting the boys to play a sports game, invite everyone. Use "campers" or "everyone" instead of "guys."
- Plan activities for campers to do in pairs or in small groups. Some campers will find it easier to connect and focus in small groups.

ENGAGEMENT

When kids are actively participating in camp activities that excite them, there are fewer conflicts or challenging behaviors to manage. Here are a dozen ways to increase engagement in a camp setting:

- **Create Agreements or Ground Rules** to demonstrate the culture of your camp and set boundaries for what's acceptable. Co-creating those rules with campers can be a powerful process, and can help hold them accountable.
- **Keep kids comfortable.** Are they hot? Cold? Wet? Hungry? Thirsty? If kids' basic needs aren't met, it'll be hard for them to stay engaged.
- **Structure activities, schedules, and language based on the age and developmental stage of campers.** To find out more about "Ages & Stages," Google "Ages & Stages," or see [links](#) in Appendix, p. 30.
- **Tailor activities to the energy level of your campers.** If kids are having trouble sitting still, play a run-around game. If kids are lagging, move to the shade for journaling, crafting, or board games.
- **Pay attention to eye contact.** For many kids, eye contact helps them stay engaged and feel seen; for others, too much eye contact is intimidating or inappropriate.
- **Address your group from a good spot.** Look around ahead of time and stand so that the sun or any big distractions are behind the campers, not behind you.
- **Use distractions as learning opportunities.** Instead of trying to keep kids' attention when it's wandering, shift everyone's focus towards the distraction and engage with it, then get back to the original topic.
- **Create a call-and-response on day one.** (Example: "When I say 'ice,' you say 'cream'.") When you need to get the whole group's attention, shout your call-word ("ice") then let kids respond ("cream"). Do this a few times until all campers are chiming in and paying attention, then give the directions.
- **Use fun and games to keep the group together when traveling around the farm.** Try singing call-and-response songs, playing trivia, or asking 20 Questions.
- **Balance the number of transitions.** Too many transitions between activities can be tiring, but too much time in one activity or place can become boring.
- **Ask questions, lots of them!** Asking questions encourages campers to think and discover on their own and will help you assess what they're learning. For example, "This is the milking parlor. How do you think it works?" Or simply, "What do you notice here?"
- **Try to use positive phrases when campers are not following directions.** Clarify what they *can* do rather than saying what they can't do (e.g., instead of "Stop doing that!" try, "It's time for [activity] now."). Refocus their energy in a positive way (e.g., "Can you run to the wash station to get more brushes?").

See [Forming Ground Rules \(Creating Norms\)](#), Center for Leadership & Educational Equity.

At Fairholm Farm, every camp day ends with 15 minutes of journal time. Campers write or draw about their day, responding to a prompt or writing/drawing something else they remember. This is a great "wind down" for campers, and helps them keep track of all their fun camp experiences to share with their families.

At Camp Ayers Brook, campers enjoyed lunch while listening to a counselor read *Bunnicula* by Deborah and James Howe. The counselors were surprised by how much campers enjoyed this. The expertly animated reading of a great story helped keep everyone calm and engaged.



SENSITIVE TOPICS

Farms are a great place to learn about some of the complex realities of life such as sex and death. If you plan on talking about death, breeding, birth, or other sensitive topics, include a note about this in your registration materials or on a philosophy page of your website. This helps make families aware of your intent, and allows them to opt out of camp if they're uncomfortable with it.

When an event happens that campers may want to share with their families, some camps will send an email to parents explaining what happened and how they've talked about it. Most parents appreciate hearing proactively from camp staff and knowing the specific language that was used.

At New Village Farm, campers are involved in all aspects of farm life including birth and death. The farm has a specific death curriculum to help kids understand and process an experience of death in an individualized, age-appropriate manner.

Camp Evaluation

The final business of every camp season is to evaluate the experience. Consider how it went from the perspective of campers, staff, parents, your farm business, and you. With the data you collect, you can identify reasonable improvements and whether summer camp is a long-term fit for your farm.

Parent feedback helps identify improvements that will keep campers coming back. Create and print surveys to pass out at pickup on the final day when camp is fresh in everyone's minds. Alternatively, use a free survey tool such as Google Forms to include in a follow-up email.

Gather feedback from staff in an open conversation and/or an anonymous survey. It can help you retain great staff for future years, saving you significant effort.

See [sample evaluation and survey questions](#) in Appendix, p. 47.

Farm Safety and Logistics

Get your farm ready for campers! In this section, we'll cover what's needed on the farm for a physically safe camp day.

Infrastructure

The following physical spaces are needed on your farm to keep everyone safe and happy, but exactly what each one looks like is up to you:

- **Headquarters (HQ):** Create a camp headquarters for camper dropoff and pickup. Make it a fun and welcoming space that reflects the ethic of your camp, where kids can engage in informal activities while waiting for the day to start or end.
- **Shade:** Campers need a place out of the sun to continue activities. It could be as simple as a leafy tree.
- **Shelter:** Identify a space that's "high and dry" to keep campers safe during inclement weather. You could hang a temporary tarp roof over an outdoor area or repurpose an existing structure for camp.
- **Bathroom:** Make sure there's a bathroom located near frequently used camp areas such as the HQ. Portable toilets may be a new experience for young campers, so if you have a portable toilet and are hosting young children, it can be helpful to inform their parents ahead of time.
- **Handwashing Station:** Create a conveniently located station for mandatory handwashing before eating and after visiting animals. There are many ways to create a handwashing station if you don't have a ready-made solution. See [Biosecurity](#) on p. 21.
- **Water:** Campers need a safe drinking water source to refill water bottles throughout the day.

A WLEI grant (see p. 7) may be available for infrastructure improvements!



On-Farm Safety

A joyful summer camp starts with creating a safe physical environment for children.

Conduct a farm safety walk-through a few weeks before camp to identify “attractive nuisances” and hidden hazards such as slippery surfaces, manure pits, water troughs, electric fences, etc. Hazards don’t necessarily have to be fixed or avoided, but you’ll need a plan for keeping kids safe around them.

As you identify hazards, evaluate them:

- Does my insurance cover this risk?
- Is the hazard likely to cause an incident or injury?
- How severe would the impact be on the camper if an injury occurred?
- How easy is it to avoid this area?
- Are there reasonable ways to avoid this risk (e.g., signage, fencing, giving verbal directions, asking a counselor to stand in a particular place)?
- Is this an age-appropriate risk? Older campers may be able to safely handle a situation that may be unsafe for younger campers.

RESOURCES

- [SafeAgritourism.org](https://www.safeagritourism.org) has how-tos, printables, and interactive walk-throughs to help build proficiency in safely inviting people to your farm.
- [UVM Extension’s Agritourism Collaborative](#) has links to fact sheets, guides, forms, and more

Learning happens everywhere on the farm, and even safety risks are learning opportunities! If you come across one with your campers, take time to explain what the hazard is, its role on the farm, why it can be unsafe to interact with it, and how to be safe around it.





Biosecurity

The biggest risk of spreading disease at a farm-based summer camp is from what travels *off* your farm into kid's homes. Proper handwashing, especially before eating and drinking, is the most effective way to reduce this risk.

- Make handwashing both mandatory and fun! Teach campers why handwashing matters and how to do it properly. Play games, sing songs, or put on dance music to encourage adequate time spent scrubbing.
- The Centers for Disease Control recommends washing with soap for 20 seconds to properly clean hands. See [cdc.gov/cleanhands](https://www.cdc.gov/cleanhands) for printables and more information.
- Hand sanitizer should never be used as an alternative to handwashing because it does not remove solids or fight all the germs that could cause infection.
- To prevent campers from tracking manure into their cars and homes, where it's more likely to get into kids' mouths, ask them to bring disinfectable footwear with minimal tread, like waterproof boots. Footwear could be left at the farm for the week so kids only have to wash on the last day. (Note: Disposable booties are generally not a good fit for summer camp. They keep footwear free of farm materials, but they are slippery on many surfaces and unwieldy to manage, especially for young campers.)

RESOURCE

- [Build a low-cost handwashing station for food safety on the farm](#)
University of Minnesota Extension

There is a smaller but real risk of campers or families introducing or spreading disease on your farm. Stay apprised of local biosecurity risks and talk with your veterinarian about your plans to host summer camp. Reduce the risk of contamination with basic biosecurity practices such as sanitizing footbaths. Additional considerations for camp:

- Prevent campers from interacting with sick animals.
- Sequence activities between areas of your farm with biosecurity in mind (for example, visit sensitive animals first so that they won't be exposed to the germs that campers could carry in from other areas of the farm).
- When there is high biosecurity risk, ask families about animal contact during the registration process (e.g., "Does your child live on a farm and/or spend significant time on farms? If so, what type of farm and animals?"). Based on the risk, you can create appropriate protocols.

[Healthy Farms Healthy Agriculture](#) is a phenomenal source of information on biosecurity.

Safety Plans

A good safety plan clearly describes how to respond to various incidents that may occur during camp. It will help you train camp staff on their responsibilities during an incident, build parent confidence in your camp (if shared publicly), and may reduce your liability.

Consider writing a plan/protocol for each of these scenarios. See [examples](#) in Appendix, p. 37–40:

- **Severe weather, such as thunderstorms, high winds, or heavy rain:** Who is responsible for tracking the weather? Who decides when campers go to a safe space? What is the threshold for resuming camp activity?
- **Camper injury, accident, or medical event:** Who can provide first aid? Who will call emergency services and communicate with parents?
- **Missing child:** Who will conduct a search and how? Who will supervise the other campers? When should parents and/or emergency services be called?

In case of a significant event, it can be useful to have a communications plan to direct media inquiries to someone who can deliver a clear, consistent message to the public.

INCIDENT REPORTS

Incident reports capture information on injuries and safety incidents, recording what happened for later reference. They help you identify real risks on your farm, and demonstrate professionalism and accountability. See [sample report form](#) in Appendix, p. 38.

Emotional and psychological safety are important to creating a safe farm camp environment, too. See page 16 for [more information](#) on how to ensure your campers feel emotionally safe.

SAFE ANIMAL INTERACTIONS

Hands-on interaction with animals is usually a highlight of summer camp and an amazing learning experience but it requires careful preparation to prioritize safety. Consider these questions to plan safe and fun animal interactions:

- **Are the animals safe for campers?** Carefully select the animals that your campers will spend time with. Train or expose them to people, loud voices, etc. beforehand so that the camp environment is not unfamiliar and scary to them. Avoid contact with animals that have horns or exhibit aggressive behavior.
- **Are the animals healthy?** Only allow campers to interact with animals that are in good health and up-to-date on vaccinations.
- **Do I have enough supervision?** Ensure there are enough adults and CITs to provide oversight and support.
- **Are campers prepared?** Teach your campers about basic animal behavior and establish safety rules before you allow them to be hands-on with the animals. Sequence activities to gradually build camper confidence and skills throughout the week.
- **Is the space safe and secure?** The area should allow free movement without injury risks like trip or fall hazards, and be easy for everyone to get in and out of. Be sure there's a fast way for all animals to be secured in the event of an emergency.

A Final Word

Launching and running a successful farm camp includes thinking through lots of details: how to run the business, how to make the daily experience engaging for campers and smooth for families, and how to ensure camper and farm safety.

But don't overlook the delight of introducing kids to the farm! Whether you run camp from behind the scenes or are hands-on with campers, we hope you take time to play and have fun, too, since joy is the heart of summer camp.

Embrace a spirit of experimentation, too, especially in the early years of your camp. You'll discover the ideal size and setup for your farm and learn valuable lessons along the way. Remember that a small, fully booked camp that delivers a positive experience is a fantastic foundation for growth. Successful farm camps often gain momentum quickly due to the rising interest in connecting kids with farming.



Thank you for being a part of our agricultural community and welcoming others to be a part of it, too. We are excited to hear how your farm camp story unfolds. Good luck and have fun!



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Meet the Farms

In addition to the farms profiled at the beginning of the guide, the following farms and farmers were interviewed or visited during the research for this guide. Here's a snapshot of each camp:



NEW VILLAGE FARM, Shelburne, Vermont

A diversified educational farm that includes small raw milk cow and goat dairies.

New Village Farm's summer camp offers an immersive, hands-on farm experience, where kids ages 5-12 participate in daily farm chores like feeding animals, milking goats, and tending to gardens. Each day blends real work with learning, allowing kids to explore the full cycle of farm life. The camp fosters responsibility, teamwork, and a genuine appreciation for agriculture while addressing the inevitable hardships, too: the camp has a death curriculum to help campers understand and process life cycles. They offer 10 weeks with 2 or 3 camps per week, divided by age, and hire a team of staff as well as three types of CIT positions.

KINGDOM CORN MAZE AT SIMPSON FARM, Sutton, Vermont

Simpson Farm is a family-owned dairy milking 750 Holsteins; Don-Sim Farm is a family-owned dairy milking 135 Holsteins.

Located at the Kingdom Corn Maze, adjacent to Simpson Farm, this summer day camp offers campers a chance to connect with animals, enjoy outdoor fun, and learn about dairy farming. Campers work in pairs to care for calves throughout the week, including feeding, mucking stalls, and leading. They walk to two nearby farms—Simpson Farm and Don-Sim Farm—to learn about different scales of dairy farming. With presentations and activities about cow care, anatomy, nutrition, and more, campers are immersed in dairy-based learning all week. The camp runs for two weeks at the end of summer, accommodating up to twelve children ages 6-12.



SHELBURNE FARMS, Shelburne, Vermont

An education nonprofit whose campus is a working farm and forest that includes a dairy milking 110 Brown Swiss.

Shelburne Farms offers summer camp experiences that immerse children in nature, farming, and sustainability. Campers engage in hands-on activities all over this diversified farm including a market garden, a working dairy, and an educational farmyard. Campers of all ages visit the dairy to meet calves, walk through the milking parlor, and learn all about cows. A weeklong overnight camp for teens invites them to help with morning milking. Shelburne Farms runs 9 weeks of camp with 2 or 3 camps each week (based on age), and a full staff of approximately 15 across all camps.



BERNING ACRES FARM, Galena, Illinois

A family-owned conventional dairy milking 415 cows, mostly Holsteins with a few Jerseys, Ayrshires, and Brown Swiss

Campers dive into the world of dairy farming in this engaging, two-day-a-week camp. Led by a former school teacher, the camp's thoughtfully designed activities keep kids having fun while learning about dairy farming: day one is focused on getting to know the care and needs of calves, and day two is all about cows. Campers also meet the farm's 4-H animals, including pigs, goats, sheep, and chickens. With a maximum of 24 campers per day, supported by 3 staff members and 3 assistants, every camper leaves with a deeper appreciation for agriculture and a joyful farm experience.

FAIRHOLM FARM, Woodstock, Connecticut

A family-owned commercial dairy milking 400 Holsteins as well as raising beef, pork, and poultry sold through a CSA and farm store.

At Fairholm Farm's Kids Camp, children dive into the world of farming, learning firsthand how their food is produced. Each summer, three camp themes run over four weeks, all featuring time for campers to be hands-on with animals. Campers do chores, help ultrasound a calf, check cows' health, wash and lead calves, shear sheep, pick fresh veggies, learn about animal nutrition, as well as play team-building games, enjoy STEM activities, and make art. This popular camp sells out every year with 18 campers per week staffed by 2 adults and 2-3 CITs. Through this summer camp as well as farm tours, Fairholm Farm is committed to providing interested consumers a firsthand look at agriculture.



HART TO HART FARM, Albion, Maine

A family-owned organic dairy milking approximately 45 Jerseys.

Summer camp at Hart to Hart Farm has been educating youth about agriculture and the place they live for 25 years. This camp invites kids to work with animals every day, while learning about themselves, each other, farming and the natural world. Summer camp welcomes up to 24 campers for 9 weeks, and is a key part of the farm's year-round education programming. Campers get immersed in farm life by doing chores, making their own snacks, watching cows calve, cleaning animal areas, and so much more. Two scholarships are supported by their milk co-op, and the camp is staffed by 3 adults including the owner who is actively farming.

Thank you to all the farmers, campers, counselors, and animals!

Online Resources

This list includes all urls referenced throughout this guide.

CAMP, AGRITOURISM, AND FARM-BASED EDUCATION

- American Camp Association: acacamps.org
- The Farm-Based Education Network: farmbasededucation.org
- Vermont Agritourism Collaborative: uvm.edu/extension/vtagritourism/ At this link you'll find:
 - How to Develop a Farm Stand
 - How to Develop a Farm Stay
 - How to Develop a Farm Tour
 - How to Develop a Pick-Your-Own Business
 - How to Host a Farm Dinner
 - How to Host a Summer Camp
 - How to Host Weddings
 - A Guide to Successful Agritourism Enterprises
 - Business Planning for Agritourism Enterprises (webinar series)
- Vermont Food Education Every Day: vtfeed.org
 - A Guide for Connecting Farms to Schools and Communities: vtfeed.org/resources/guide-connecting-farms-schools-communities

LEGAL & BUSINESS PLANNING

- Vermont Law School's Center for Agriculture and Food Systems vermontlaw.edu/academics/centers-and-programs/center-for-agriculture-and-food-systems
- Legal Food Hub: legalfoodhub.org/ and its Resource Library: legalfoodhub.org/resource-library/
- Vermont Housing and Conservation Board: vhcb.org
 - Business advising: vhcb.org/viability/business-advising

INSURANCE, LIABILITY, PERMITS

- Vermont's Act 31: uvm.edu/extension/vtagritourism/act-31 or agriculture.vermont.gov/development/agritourism
- Integrating Safety into Agritourism: safeagritourism.org/insurance
- Vermont Act 143: agriculture.vermont.gov/development/accessory-farm-businesses
- Vermont Labor Laws: labor.vermont.gov

GRANT & LOAN OPPORTUNITIES

- New England Dairy: newenglanddairy.com/for-farmers/farmer-grants/
- Vermont Working Lands Enterprise Initiative: workinglands.vermont.gov/businessgrants
- Vermont Community Loan Fund: investinvermont.org/borrowers/
- LISTEN Summer Camp Scholarship Program: listencs.org/summer-camp-scholarships

HIRING PROCESS

- ADP: Hirings employees. adp.com/resources/articles-and-insights/articles/h/how-to-hire-employees.aspx
- Farm Bureau Financial Services: How to Find Farm Help for Your Ag Business. fbfs.com/learning-center/how-to-recruit-new-employees-for-your-agriculture-business
- American Camp Association: resource library. acacamps.org/resources
- Background check services: TrueScreen (truescreen.com), Verified First (verifiedfirst.com), Kress (kressinc.com)
- Ban the Box: legislature.vermont.gov/statutes/section/21/005/00495j

ACTIVITIES & CURRICULUM

- Dairy in the Classroom: dairy education with lessons and activities including Dress Up a Cow. shelburnefarms.org/educators/school-programs/dairy-classroom
- New England Dairy: lessons, activities, recipes, virtual farm tours, and materials for order. newenglanddairy.com
- Cultivating Joy and Wonder: Educating for Sustainability in Early Childhood Through Nature, Food, and Community: shelburnefarms.org/educators/resources/cultivating-joy-and-wonder-educating-sustainability-early-childhood-through
- Project Seasons: a collection of hands-on activities for exploring the natural world shelburnefarms.org/educators/resources/project-seasons
- The American Camp Association: blogs and written activities. acacamps.org/topics/activities-games
- [Ultimatecampresource.com](https://ultimatecampresource.com): activities, information, tools, and ideas for enhancing camp experiences.
- UVM Extension's Exploring Dairy Agriculture and Careers: activities and information for middle-schoolers to understand the dairy industry: uvm.edu/extension/youth. Contact Vermont 4-H for printed copy: (802) 656-7630.
- North Carolina State Extension 4-H Dairy Quiz Bowl Study Questions: dairy.ces.ncsu.edu/dairy-youth-programs/quizbowl/dairy-quizbowl-study-questions/
- Cornell University's Dairy Quiz Bowl: cals.cornell.edu/nys-4-h-animal-science-programs/state-events/contest-resources/dairy-quiz-bowl
- Center for Leadership and Educational Equity's Forming Ground Rules: clee.org/resources/forming-ground-rules-creating-norms/

ENGAGEMENT AND AGES & STAGES

- South Dakota State University Extension. extension.sdstate.edu/ages-and-stages-youth-development
- American Camp Association. acacamps.org/article/camping-magazine/parachute-pants-pokemon-ip-ods-understanding-your-campers-various-ages-stages
- American Library Association (scroll down to "handouts"). ala.org/yalsa/train-trainer-project/modules/ages-and-stages-youth-development
- VT FEED's A Guide for Connecting Farms to Schools and Communities (page 22). vtfeed.org/resources/guide-connecting-farms-schools-communities

SAFETY & BIOSECURITY

- Integrating Safety into Agritourism: safeagritourism.org/
- American Camp Association: acacamps.org
 - Thunderstorm plan: acacamps.org/article/campline/lightning-safety-outdoors
- KidSafe Collaborative (preventing child abuse): kidsafevt.org
- ServSafe (food safety training): servsafe.com/ServSafe-Food-Handler
- Healthy Farms Healthy Agriculture (biosecurity): healthyagriculture.org/
- The Centers for Disease Control and Prevention (handwashing): www.cdc.gov/clean-hands/about/index.html
- Build a handwashing station: extension.umn.edu/growing-safe-food/handwashing-station
- Vermont Agritourism Collaborative: uvm.edu/extension/vtagritourism/safety-liability-and-regulations

Liability Waiver

This sample is provided for information only; consult a lawyer before using.

[FARM NAME] Liability Waiver

I acknowledge that participating in summer camp activities at [farm name] including but not limited to interaction with animals and engagement in outdoor activities, involves inherent risk of physical injury or accident.

Inherent risks of summer camp activities include risks of injury by land, equipment, and animals, as well as the potential for my child(ren) to act in a negligent manner that may contribute to their injury, illness, or damage, or for other participants to act in a manner that may cause injury, illness, or damage.

I agree to release, discharge, and hold harmless [farm name], its owners, employees, volunteers, and agents from any and all liability for any injuries, losses, or damages arising from participation in summer camp activities.

ACT 31 WARNING: Under Vermont law, an agritourism host is not liable for the injury or death of a participant in an agritourism activity resulting from the inherent risk of the agritourism activity. Inherent risks include the risk of animals, weather, land conditions, and the potential for you as a participant to act in a negligent way that may contribute to your own injury or death. You are assuming the risk of participating in this agritourism activity.

By signing below, I acknowledge that I have read and fully understand this liability release and agree to its terms, and that I have read and understand Vermont's Act 31.

Parent/Guardian Signature:

Parent/Guardian Printed Name:

Camper Printed Name:

Date:

Medical Release

This sample is for educational purposes only and should be reviewed by a lawyer before use.

I, as the parent or guardian of the child named below, hereby authorize [camp or farm name] to seek medical treatment for my child in the event of an emergency or illness. I understand that every effort will be made to contact the child's emergency contact before any medical treatment is sought.

I authorize the diagnosis and treatment by a qualified and licensed medical professional of the minor child in the event of a medical emergency, which in the opinion of the attending medical professional, requires immediate attention to prevent further endangerment of the minor's life, physical disfigurement, physical impairment, or other undue pain, suffering or discomfort, if delayed.

This authorization is granted only after a reasonable effort has been made to reach me. Permission is also granted to [farm name] and its affiliates including staff and members to provide the needed emergency treatment prior to the child's admission to the medical facility.

I accept full responsibility for all medical costs that may arise as a result of illness or injury during camp activities.

I also agree to release, discharge, and hold harmless [farm name], its owners, employees, volunteers, and agents from any liability for any medical treatment or emergency care provided to the participant.

This release is authorized and executed of my own free will, with the sole purpose of authorizing medical treatment under emergency circumstances, for the protection of life and limb of the named minor child, in my absence.

Parent/Guardian Signature:

Parent/Guardian Printed Name:

Camper Printed Name:

Date:

Media Release

I give [farm] permission to take photos [and videos] of my child and to publish my child's image in print [and/or] online [(specific use such as: Facebook, Instagram, farm website, written articles)] for the general promotion of [farm]. I release all claims against [farm] with respect to copyright ownership and publication including any claim for compensation related to use of the materials.

Parent/Guardian Signature:

Parent/Guardian Printed Name:

Camper Printed Name:

Date:

Cancellation Policy

Below are real examples from 2024.



“Cancellation notice given at least 30 days prior to your camp session will receive a full refund minus a \$25 administrative fee. Cancellation notice given within 30 days of your camp session will not receive a refund. Exceptions will be considered in the case of injury or illness.”



“For each registration, there is a \$75 non-refundable deposit built into the cost. If canceling before May 15th, we provide a full refund minus the \$75 non-refundable deposit. Canceling between May 15th and four weeks prior to the camp's start date, we will provide a 50% refund. We do not offer refunds of payment after four week's prior to the camp start date.”



“For registration withdrawals more than 21 days before the first day of a camp week, we will refund your tuition. For withdrawals within 14-21 days of the first day of camp, we will refund 50% of the tuition. For withdrawals within 14 days of the first day of camp, no refund will be given. Refunds will not be given if a camper misses any part of the week due to illness or dismissal.”

Technology Policy

Below are a real examples from 2024.

- “We do not allow cell phones, iPads, and other technology devices at camp. Please leave all cell phones, gaming/music devices, and other technology at home. Exceptions are made for campers who need a device for health reasons.”
- “To foster a deeper connection with nature, each other, and the camp experience, our summer camp maintains a no-technology policy. Campers are encouraged to leave all personal electronic devices, including cell phones, tablets, and gaming systems, at home. This policy allows campers to fully engage in outdoor activities, build lasting friendships, and enjoy a break from screen time. In case of emergencies, parents can reach camp staff, and counselors always have phones for urgent communication. The goal is to create a distraction-free environment where children can explore, learn, and have fun.”

Mandated Reporting of Suspected Child Abuse or Neglect

Summer camp counselors are required by state law to report suspected child abuse or neglect. “Mandated Reporting” helps identify children at risk and prevent future harm by notifying trained professionals at the State.

What is my responsibility? By state law, if camp staff reasonably suspect child abuse or neglect, they are required to **make a report within 24 hours** of the time they first observed or received information about the suspected abuse or neglect.

Who makes the call? The person who received the information or observed something that created suspicion of abuse or neglect.

If you suspect something, make a call. No one (e.g., a supervisor, or other staff) can prevent another person from reporting abuse, and **all reports are anonymous and confidential**.

The law protects you, as the person reporting suspected abuse, from liability if the report is made in good faith. Failing to report suspected abuse or neglect has serious consequences including fines and imprisonment.

Print the info below and post in a place visible to staff:

Mandated reporting to prevent child abuse and neglect

Camp owners and counselors are legally required to make a report within 24 hours if you reasonably suspect child abuse or neglect.

To Make A Report

1. Gather as much information as possible before you call.
2. Call **1-800-649-5285** — 24 hours a day, 7 days a week.
3. A social worker will:
 - a. Ask you about the situation.
 - b. Record the information you provide.
 - c. Ask you to submit a written report.
 - d. Ask you to gather more information if it's needed.

If multiple people need to report the same information, please report as a group by phone or in writing. **No one can prevent you** from making a report including other staff and supervisors.

You cannot be held liable when making a report in good faith and all reports are **anonymous**.

When in doubt, REPORT.

More information is available at dcf.vermont.gov/ and kidsafevt.org

Criminal Background Checks

Criminal background checks are common for roles that involve working with children. However, they are not legally required and should be handled carefully to ensure equitable hiring practices. New hires must complete an authorization form *after* they've been hired. Review [Ban the Box](#) for a readout of the applicable law.

Within the job posting, notify applicants that clearing a background check is required for the role and provide some information about the type of background check that you'll be running and why. For example:

- **For roles working with children:**

“Completing a background check is a condition of employment, including a national and state criminal records search, SSN search and sex offender registry search.”

- **For roles operating equipment:**

“Must have a valid driver’s license with the following requirements:

- No more than one at-fault accident, two minor moving violations, or two non-moving violations within the past year AND
- Zero major moving violations within the past three years (examples: driving with suspended/invalid license, DUI, reckless driving). No more than two major moving violations in the past 10 years.”

Select a background check service either with your payroll provider or by using websites such as [TrueScreen](#), [Verified First](#), or [Kress](#). The service will walk through the process and identify the authorization forms required from the employee. Some forms can be signed online; others must be downloaded, printed and signed, then scanned and uploaded.

Safety Plans

Here are examples of safety plans. A template for an incident report form is on the next page.

Thunderstorms

The ACA [advises](#) a “30/30 rule.” Campers and staff should seek shelter as soon as threatening clouds, lightning, or thunder are present. Everyone should be in a safe location before the time lapse between visible lightning and audible thunder is 30 seconds or less; then stay inside until 30 minutes after the last rumble of thunder is heard. Here is a sample policy:

Camp has a designated indoor location for shelter in the event of thunder or lightning. At the sight of lightning or sound of thunder, campers will go indoors to participate in activities until 30 minutes after the last thunder. All counselors are trained and empowered to make these decisions throughout the course of camp.

Camper Injury

All camp counselors are trained in basic first aid and CPR, as certified by the Red Cross or similar certification. In the event of an accident or injury, the camp counselor who witnessed or was responsible for the child at the time, will:

1. Assess the situation and call 911 if needed or in doubt.
2. The second counselor will manage the group, ensuring their safety and minimizing stress, and will inform the camp director who will arrive at the scene promptly.
3. Provide care to the extent of their training or until someone with more advanced training takes over or the issue is resolved.
4. As soon as possible, the counselor or camp director will call the parent/guardian.
5. The counselor will complete an incident report and file it with the camp director.
6. The counselor or camp director will follow up with the parent/guardian.

INCIDENT REPORT FORM

Complete this form as soon as possible during or after an incident.
Send the completed form to the Camp Director as soon as possible.
*If a *staff* person is injured, please also fill out a Worker's Compensation Form.

Report Completed by: _____ **Date Report Completed:** _____

Date of Incident: _____ **Time of incident:** _____

Injured/Impacted Person's Information

NAME: _____ PHONE: _____

MINOR (under 18)?: Yes No

Injured/Impacted person is a:

- Camper Parent/Guardian of Camper Counselor in Training Staff Member*
- Other (describe): _____

Witness Information

NAME: _____ PHONE: _____

RELATIONSHIP TO INJURED PERSON: _____

INCIDENT INFORMATION

Location (describe):

Describe the incident in detail (additional space on the back):

Actions Taken: *check all that apply*

- Called **911** Called Non-Emergency Police line Administered First Aid**
- Other (describe): _____

CONTINUE ON BACK

****If First Aid was administered:**

Name of person administering First Aid: _____

Time of First Aid: _____

Describe the First Aid that was provided including medicine and dosage, if applicable:

Result of Incident: Check all that apply

- Person resumed normal activities
- Person went home
- Person was monitored on-site then resumed normal activities
- Person received medical attention by staff
- Person went to a medical facility w/out ambulance (urgent care, doctor's office, emergency room, etc.)

- Person was brought to the hospital via ambulance
- Police responded
- Other, please describe:

Follow Up

Is follow up required? YES NO Who will follow up: _____

Describe necessary actions or notes for future communication:

Additional Notes (optional)

Return completed form to Camp Director as soon as possible.

Missing Child Protocol

Complete the template below to create a protocol in the event of a missing child during summer camp. When the missing person has been found, file an Incident Report to properly document the event.

Procedure

This procedure begins as soon as someone becomes aware of a missing camper. This person is the **First Responder**.

1. The **First Responder** will immediately call all staff to inform them.
 - a. Language should be direct and plain as to not alarm other campers.
 - b. Describe the missing person including name, age, size, perceived gender, appearance, clothing as well as:
 - relevant health related information
 - when and where this person was last seen
2. The **First Responder** becomes the **Onsite Manager** until the Camp Director arrives to assume this role. The Onsite Manager determines and communicates the Central Meeting Location, and will manage the situation from this location until closure. All information and people supporting the search report to this person and location. All campers go to a safe location with a staff member until the situation is resolved.
3. **Onsite Manager** assigns staff to check specific locations and report back via phone or text at short, specified intervals.
4. After [] minutes have passed, the **Onsite Manager** calls all available farm staff to aid in the search.
 - a. If no additional staff are available or after [] minutes without locating the camper, call parents/guardians and 911.
5. When located, the missing person should be brought back to the central meeting location. The Onsite Manager will communicate with all staff that the person is found.
6. Onsite Manager and First Responder file an Incident Report.

Planning Timeline

Here's an example of a planning timeline for hosting July summer camps. It can be condensed or expanded based on your preferences or other time commitments. Some farms plan a year in advance, while others get it done within six months.

OCTOBER TO DECEMBER	Business	<ul style="list-style-type: none"> • Create plan: business structure, camp purpose, budget, permits. • Connect with insurance agent. • Talk with farm team. • Create policies and safety plans; contact lawyer about waivers and releases.
	Marketing & Registration	<ul style="list-style-type: none"> • Create marketing plan, update timeline with specifics. • Create marketing materials (flyer for online or print). • Update website, create social media posts, decide where to advertise. • Create registration process (purchase online system or create your own).
	Staffing	<ul style="list-style-type: none"> • Build staffing plan, update timeline with specifics. • Write job descriptions, post jobs.
	Camp Prep	<ul style="list-style-type: none"> • Build a basic camp schedule of activities.
JANUARY TO MARCH	Marketing & Registration	<ul style="list-style-type: none"> • Advertise camp. • Open registration. • Send welcome email to families who register. • Answer questions (ongoing).
	Staffing	<ul style="list-style-type: none"> • Evaluate candidates, conduct interviews, make offers. • Complete contracts, hiring paperwork, and background checks. • Remove job posting when satisfied with candidate pool.
	Camp Content	<ul style="list-style-type: none"> • Reserve portable toilet(s). • Add details to the camp schedule. • Build materials list.
APRIL TO JUNE	Marketing & Registration	<ul style="list-style-type: none"> • Continue to advertise, answer questions, welcome families who register. • One week prior to camp, send prep email.
	Staffing	<ul style="list-style-type: none"> • (April) Communicate with staff in prep for camp • Train and onboard staff.
	Camp Prep	<ul style="list-style-type: none"> • Finalize camp schedule. • Conduct safety walk through. • Finalize supplies list and purchase supplies. • Prep camp spaces: dropoff/pickup locations, camp HQ, bathroom, handwash stations, etc. Post info for staff (e.g., mandated reporting) • Communicate with farm team.
JULY		Have fun at Camp!!!
AUGUST TO DECEMBER	Business	<ul style="list-style-type: none"> • Evaluate camp enterprise. • (Rest!)
	Marketing & Registration	<ul style="list-style-type: none"> • Send thank you and evaluation to families. • Select camp dates for next year, decide on date to open registration, email families with this info.

Registration Form

Include the following fields at minimum.

Camper information

1. Child's name
2. Optional: does your child have a nickname or preferred name other than their legal name?
3. Child's age during camp
4. Child's grade (starting in Fall)
5. Birth date
6. Street address
7. Gender identity (Female, Male, Non-binary/third gender, Prefer not to say)

Parent/Guardian Information

1. Parent/Guardian's Name
2. Primary phone number
3. Alternative phone number
4. Email address
5. Additional parent/guardian email address
6. Address
7. Other adults permitted to pick up my child from camp such as babysitters, grandparents, or carpool parents. Please list all adults and inform them to bring a photo ID at pickup.

Health and Safety Information

1. Emergency Contact #1 Name
2. Emergency Contact #1 Phone number
3. Emergency Contact #2 Name
4. Emergency Contact #2 Phone number
5. Child's physician's phone number
6. Child's medical insurance carrier and policy number
7. Please share any information regarding your camper's medications, allergies, dietary restrictions, physical/mental/emotional abilities, or anything else that our staff should be aware of.
8. To ensure that your child has a safe and fun experience, please share any thoughts about your child's learning or communication styles and educational or social needs that you feel are important for us to know in advance.

Waivers and Releases

1. Act 31 statement ([here](#))
2. General Liability Waiver
3. Medical Release
4. Media Release
5. (others as needed)

Scholarship Models



Create a scholarship fund by setting your registration fees above what's needed to meet your financial goals, then setting that "extra" aside for scholarships. For example, in a camp with capacity for 12 kids, increase the registration fee by \$25 for 10 full-paying campers. This will yield \$250 to distribute between two scholarship spots.



Some areas offer school-based funds. Tell a guidance counselor about your camp and its experiential and educational benefits to students. Ask whether the school has an existing fund or would be willing to provide financial support for this type of summer enrichment program, and ask if they have any students in mind.



Some towns and non-profits have scholarships for non-school summer programs. For example, the [LISTEN Summer Camp Scholarship Program](#) provides assistance to children in the Upper Valley to attend one-week of camp.

Whatever your model, create a simple process for inviting families to request financial support, and a distribution process that is fair and equitable.

Materials and Supplies

Here's a sample supplies list for items not related to activities, which will need their own lists.

SAFETY AND FIRST AID RELATED SUPPLIES

- Check-in and check-out sheets, including a list of approved adults for pickup of each camper.
- Quick reference health information (e.g., allergy information, emergency contact number(s)).
- Bug spray, especially if campers will be visiting areas with mosquitoes and ticks.
- Extra hand soap, towels, toilet paper, and hand sanitizer (if using a portable toilet).
- Signs, cones, flagging tape, etc. for marking pickup and dropoff locations
- Radios (walkie-talkies) can be useful for large camps to communicate between counselors at long range.
- First Aid Kits, one for each group of campers. Pre-stocked kits are available online for less than \$30.
- First Aid extras: bandaids of various sizes, cold compresses, and antibiotic ointment.
- Accident report forms and a pen in each first aid kit for counselors to fill out at the time of an incident.
- [Tecnu](#) or something similar if you have poison ivy or poison oak on-site.

FREE OR UNSTRUCTURED PLAY ACTIVITY IDEAS

- Board or card games (e.g., [Spot It](#), [Uno](#), [Jenga](#), Sorry)
- Farm-themed games (e.g., [Cow Pie Catapult](#), Farm Bingo, Poop Bingo)
- Books! Review the content to ensure age-appropriate messages and language.
- Craft supplies (e.g., paper, nontoxic markers or crayons, painting supplies, modeling clay, word searches).
- Exploration tools (e.g., magnifying glasses, binoculars, egg cartons for collecting treasures, paint swatches for color matching games).

OTHER

- Printed feedback surveys for final day of camp.

Camp Schedule Template

Use this example to fill in your weekly schedule. Start with Core Activities then fill in the rest for a full and joyous camp week.

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
9:00 – 10:00 Welcome & Check-in Free choice activities Name tags, Name game	9:00 - 9:30 Dropoff and free choice entry activities	9:00 - 9:30 Dropoff and free choice entry activities	9:00 - 9:30 Dropoff and free choice entry activities	9:00 - 9:30 Dropoff and free choice entry activities
	9:30 - 10 Check-in & Game	9:30 - 10 Check-in & Game	9:30 - 10 Check-in & Game	9:30 - 10 Check-in & Game
10:00 Snack	10:00 Snack	10:00 Snack	10:00 Snack	10:00 Snack
Core Activity	Core Activity	Core Activity	Core Activity	Core Activity
12:00-12:30 LUNCH	12:00-12:30 LUNCH	12:00-12:30 LUNCH	12:00-12:30 LUNCH	12:00-12:30 LUNCH
Core Activity	Core Activity	Core Activity	Core Activity	Core Activity
2:30 Snack	2:30 Snack	2:30 Snack	2:30 Snack	2:30 Snack
Game/Activity	Game/Activity	Game/Activity	Game/Activity	Game/Activity
3:15 Pack bags, cleanup. Free play.	3:15 Pack bags, cleanup. Free play.	3:15 Pack bags, cleanup. Free play.	3:15 Pack bags, cleanup. Free play.	3:15 Pack bags, cleanup. Free play.
3:30 Camper pick-up	3:30 Camper pick-up	3:30 Camper pick-up	3:30 Camper pick-up	3:30 Camper pick-up

See [Camp Games for Summer Fun](#) from Ultimate Camp Resource for game ideas by theme, e.g., high activity games, large group games, nature games, or cooperative games.

Email: Welcome to Camp!

Here's a template welcome email sent to families approximately one week before camp starts.

Subject: Welcome to Camp [name]!

Dear Families,

Happy Summer! Welcome to summer camp at [farm name]! We are excited to share this week on the farm with your camper. Campers will *[briefly describe core activities and experiences]*. As your camp session approaches, we want to provide you with information to prepare you and your camper(s) for a great week.

- Camp Dates:
- Time:
- Drop-off/Pick-up Location:
- Ages:

WHERE TO PARK & MEET

- *[describe dropoff location]*
- At Monday morning check-in, we will review your camper's health notes and pick-up permissions with you. Campers will only be permitted to leave camp with the adults listed on this form. You can edit this list as needed on Monday and throughout the week. Please plan accordingly, as this may require a longer drop-off process for you on the first day of camp.

REQUIRED ITEMS (PLEASE LABEL EVERYTHING!)

- Backpack
- Snack and Lunch: Please pack plenty of food [we recommend an ice pack as there's no refrigeration available.]
- Sunscreen: Please apply to your camper before camp starts each day. We will reapply as needed.
- Hat
- Filled water bottle
- Waterproof shoes or boots
- Rain gear
- Extra clothes in case we get wet and layers based on weather predictions (recommended)
- Mosquito and tick repellent (recommended, not required): Please apply before camp starts each day. We will reapply as needed. Please check for ticks daily after camp.
- (optional) An extra bag or box: You are welcome to leave your camper's extra belongings at camp all week in an extra bag or box.

TECHNOLOGY POLICY

- We do not allow cell phones, iPads, and other technology devices at camp. Please leave all cell phones, gaming/music devices, and other technology at home. You will always be able to reach our staff during the camp day (see the "Communication" section below).
- Exceptions are made for PCAs with devices to support communication with campers and for campers that need a device for health needs. Please let us know if this is the case so we can best support your camper.

BEFORE AND AFTER CARE

[insert if applicable - available times, how to register, cost per camper]

CAMP STAFF

[briefly introduce camp staff]

WEEK-OF OR DAY-OF CAMP COMMUNICATION

- During the camp day, please call [phone]
- Outside of camp hours, please email [insert] or call [insert]

HEALTH, SAFETY, ACCESSIBILITY, & INCLUSION

The health and safety of our campers is our number one priority. If you have any questions or suggestions about your camper's allergies or safety, please contact [name] by [deadline] before camp to give us time to prepare as needed.

CANCELLATION POLICY

- [insert policy]
- If you need to cancel due to COVID-19, illness, or any other reason, please contact [name], [contact info].

Your questions, comments, and concerns are always welcome. We look forward to seeing you soon!

Thank you,
(your signature)

Camp Evaluation and Parent Surveys

Camper Survey

- What did you like about camp?
- What was your favorite place or activity on the farm?
- Would you like to come back next year? Why or why not?
- What could we have done to make camp more fun or exciting for you? Was there anything you didn't like doing?

Parent Survey

- On a scale of 1-5, rate your child's experience at camp.
- What worked well about this camp?
- What memories did your child share with you?
- What would you like to see change in the future?
- Anything else we should know?

Staff Survey

- Did you feel that the training adequately prepared you for your role? What did we miss?
- What activities would you recommend for next year (what worked well that we should continue)?
- What recommendations do you have for improving the safety of camp?
- Did you need any support in your job which you didn't receive?
- What was the hardest part of the job?
- What was the best part of the job?
- Is there anything else you'd like to share?

Camp Director / Farm owner survey

- Did we achieve the original purpose or goal?
- Did we meet the financial goals?
- How much total time did I put in this year? How could we improve efficiency in camp administration? How could we increase the profit margin?
- What did I learn about creating a safe camp environment and how can I improve?
- What level of enjoyment did this provide me?
- Did this camp successfully fit with the culture and mission of our farm?
- Overall, was this worth the investment of time and resources?

WHO LIVES HERE?

SUMMER 

Dress up a Cow

WHAT'S THE Big Idea? Interdependence

Materials

- **How Now, Brown Cow?** by Alice Schertle

Gather the following materials into a large bag. Each item represents a part of a cow.

- **udder:** cool whip container with baby bottle nipples for the teats with a string for tying around the waist
- **tail:** fly swatter with string for tying around waist
- **horns and ears:** headband with cardboard ears and horns attached
- **hooves:** 4 socks with hoof prints on the bottom
- **tongue:** sandpaper cut to the size of a real cow's tongue, with a clip to attach somewhere around their neck area
- **stomachs:** laminated picture of a cow's stomach, see Appendix p.236, with a string for tying around the waist.

Enduring Understandings

- All animals have certain characteristics such as how they look, what they eat and how they behave.
- Observing and learning about animal characteristics can help us better understand them, and how we are all part of a community and interdependent.
- Dairy cows have unique body parts.

Objectives

- Children demonstrate an understanding of why farmers raise milk cows.
- Children show interest and curiosity in the body parts of a cow.

Directions

1. Read a few poems from *How Now, Brown Cow?* by Alice Schertle to give your students an idea of the many types of cows. Explain to the students that they are going to dress up one of their classmates or an adult helper as a cow. Ask them to try to imagine what a cow looks like and what special parts it has. Show them a few pictures of cows so that even if they have never seen one, they can participate. What makes a cow unique?
2. Pick a volunteer from the class to be dressed up. Let them know that they are going to look silly and the others may laugh at them. Are they okay with that? Have him or her stand where everyone can see.
3. Ask the students to suggest how to make the volunteer look more like a cow. As they come up with ideas, pull the appropriate prop that you have made from your bag, and dress up the volunteer with the prop.
4. After you have dressed up the volunteer with all the cow props you have, ask the





A cow's tongue feels like sandpaper!

students what they could add to make the student look even more like a cow (e.g., fur, eyes on each side of their head, big wet nose, teeth).

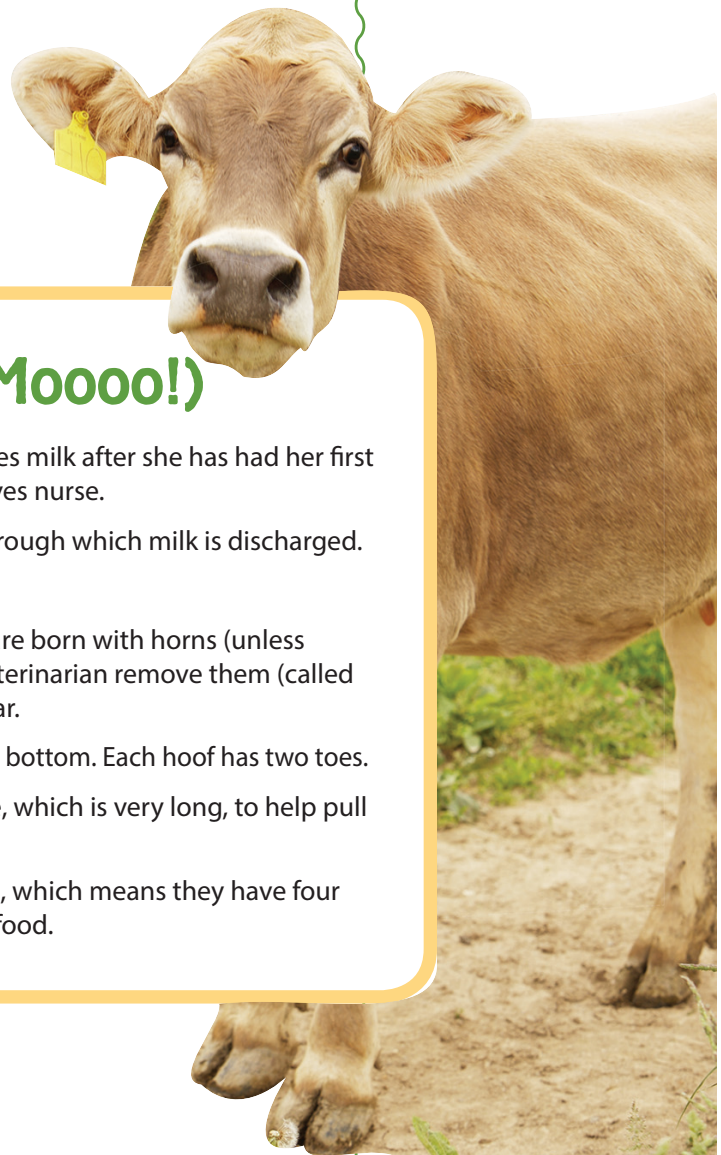
5. Process and reflect on the experience with the children by engaging in a conversation guided by the discussion questions.

Discussion Questions

- Discuss how are we different from cows. How are we similar?
- What other animals are similar to cows?

Extensions

- Have several bags of Dress up a Cow props so that children can use them during free choice time. Include farmer-type clothes, heavy boots, long pants, hat, flannel shirt, so others may dress up as farmers to tend the cows.



Vocabulary (Click Clack, Mooooo!)

Udder: A female cow has an udder that produces milk after she has had her first calf. The udder has four teats from which the calves nurse.

Teats: Any of the projections from the udder through which milk is discharged.

Tail: Cows use their tails as fly swatters.

Horns and ears: Both male and female cows are born with horns (unless they are a polled breed), and the farmer has a veterinarian remove them (called dehorning). Cows have big ears to help them hear.

Hooves: Cows have four legs with hooves on the bottom. Each hoof has two toes.

Tongue: Cows use their sandpaper-like tongue, which is very long, to help pull in the grass and hay that they eat.

Stomachs: Unlike humans, cows are ruminants, which means they have four parts to their stomach to help them digest their food.

TMR for Cows and Campers

PURPOSE

Campers understand the components of a **Total Mixed Ration (TMR)** in a dairy cow’s diet.

OVERVIEW

Campers create their own edible TMR by following a recipe of snack foods to represent components of a cow’s TMR. **Note:** Always check camper allergies prior to purchasing ingredients.

MATERIALS

- Measuring cups
- Containers with tight fitting lids (e.g. quart deli containers), 1 per camper
- Written recipe of the farm’s TMR ingredients, or use examples below
- Kid-friendly snacks (e.g., pretzels, popcorn, Chex Mix, M&Ms), one for each TMR ingredient.

MATERIAL SETUP

- Create a clean surface for eating.
- Wash hands.

ADAPTATIONS

- Discuss the different nutritional needs of a heifer, pregnant cow, and dry cow.
- Ask a nutritionist to bring their TMR shakerbox for kids to try. Discuss what you find in each layer.
- Discuss how cows are great recyclers because they can eat byproducts from human foods.

DIRECTIONS

If possible, before starting, find TMR on the farm. Let kids examine it then ask what they notice. Do they recognize any of the components? What does it smell and feel like? How is it different from what we eat and why?

1. Ask whether anyone knows what TMR is. Explain that TMR stands for “Total Mixed Ration,” and is a special recipe for putting everything a cow needs to stay healthy into one tasty meal. Just like in any recipe, different ingredients make up the ration, or meal. Each ingredient serves a different purpose in the cow’s body.
2. Explain that we’ll be creating a total mixed ration, or TMR, for humans! (The ingredients may be different from the ingredients in a cow’s TMR!)
3. Ask if anyone has a guess for what goes into a TMR for dairy cows. Using your written recipe, explain what each ingredient is and the job it does in the cow’s body. For example, in recipe A below, corn silage is about half of the total mix and provides energy and fiber. Energy helps a cow do everyday things like walking around and breathing, and she needs extra energy to do her job on the farm: growing a calf to make milk. Fiber helps keep her stomach healthy. (You could explore cow digestion here. Ask if anyone knows what’s special about a cow’s stomach. It is huge and has four compartments, each with a different job and set of tools to help a cow digest—that is, turn her food into energy!)
4. Now choose a snack to represent each TMR ingredient or refer to a recipe below. Scoop each snack into each kids cup, attempting to match the ratios of the TMR ingredients. Ask campers to wait to eat their ration until it’s complete.
5. Continue adding ingredients to each camper’s TMR as you discuss the cow’s TMR, until you’ve gone through all ingredients.
6. When all ingredients have been added, ask campers whether they know what the last step is before they and the cows can eat. There’s a clue in the name: you have to *mix* each ration. Secure the lids to each container, set a timer for 1 minute and have everyone shake their snack container to ensure the TMR is properly mixed. Discuss how long the TMR is mixed on this farm and why it’s important.

RECIPE EXAMPLE A

50% Corn Silage.....	2 cups popcorn
30% Haylage.....	10 pretzels
19% Grain.....	½ cup Chex
1% Vitamins & Minerals....	¼ cup M&M’s/raisins

RECIPE EXAMPLE B

65% Baleage	2 cups popcorn
35% Grain	1 cup trail mix

Dairy Trivia Race

PURPOSE

Teach and test camper's knowledge of dairy farming.

OVERVIEW

Counselor asks the group a multiple choice trivia question, then campers race each other to the cone that they think represents the right answer (A, B, C, D).

Note: This game works well at the middle or end of a week, after campers have had a chance to learn a lot about dairy farming and are not simply making guesses.

MATERIALS

- Eight cones:
 - Four labeled A, B, C, D
 - Four as a starting line
- Trivia questions about dairy farming.

SETUP

In a yard or lawn with some room to race, place four cones along a starting line, then set out the A, B, C, D cones in order, some distance opposite the starting line.

TRIVIA QUESTIONS

Create your own multiple choice trivia questions that align with what you hope campers will learn. For inspiration, see:

- [4-H Dairy Quizbowl Study Questions](#), North Carolina State Extension
- [Dairy Quiz Bowl](#), Cornell College of Agriculture and Life Sciences

DIRECTIONS

1. Divide campers into four teams by having them stand in a circle and count off 1, 2, 3, 4. Have each camper indicate their number with their fingers to help them remember, then have all the 1's gather as a team, all the 2's, etc. .
2. Have each team line up behind one of the starting line cones.
3. Explain to campers that you'll ask the group a trivia question and then read out multiple choice answers. Each team can help the person at the front of their line decide on the correct answer, and as soon as they have a guess, that person (the runner), races to the cone that corresponds with the team's answer (A, B, C, D).
4. Begin the game. Read your trivia questions and answers until everyone on each team who wants to has had a chance to go at least once.

ADAPTATIONS

- Instead of racing, have each group sit in a circle with one person as the writer. Each group has 10 seconds to decide the correct answer and write it down. Then each group shows their answer. If you want to keep score, give each team a point for a correct answer.
- For an indoor, seated version of this activity, ask your local 4-H educator if you can borrow a quiz bowl buzzer set.

How Is My Cow?

PURPOSE

Campers understand how and why farmer's prioritize cow health and wellbeing.

OVERVIEW

Campers learn how to do a basic visual health check on a cow then use a checklist to observe and record signs about a particular cow's health. **Note:** This activity is intended for a freestall or bedded pack barn but also works in a tie stall.

AGE / STAGE

Able to write and to read numbers. See Adaptations below.

MATERIALS

Clipboards (one per cow or one per camper)

Pencils

Worksheets (next page)

MATERIAL SETUP

Preload worksheets onto clipboards.

DIRECTIONS

1. Ask campers the following questions: What does it mean to be healthy? How do you know when an animal such as a dog or deer is healthy? How do you know when it's sick or stressed out? What happens when an animal or a person is sick or stressed? Can they do their job well, like learning, playing, or helping others? Since a cow's job is to make milk, when she is sick or stressed, she won't make as much milk.
2. Explain how a farmer's job is to take really good care of their cows and why that matters. If possible, ask the farmer(s) why it is important.
3. For career learning: ask campers, who else helps keep cows healthy on the farm? Tell them about the roles of veterinarian and nutritionist.
4. Explain what a cow health check is and why it matters to the cows and the farmer. Connect the cow's wellbeing with her milk production. Make it clear how much farmer's care about their cows!
5. Explain that each camper will be helping the farmers with health checks this week/day. They will be assigned a cow to check on every day, just like farmers do. (This can also be done in pairs.)
6. Show campers the clipboard and worksheet. Describe how they'll conduct a health check and use the worksheet to record information. Explain how they'll identify their cow, and that if they've completed their health check, they can continue observing their cow and taking notes until the whole group has finished.
7. Explain how the presence of campers could cause stress to cows and ask for their ideas on how to keep cows comfortable (e.g., stay calm, be quiet, stay out of feed). Remind them about safety and boundaries.
8. If working in pairs, assign partners to your campers.
9. Pass out clipboards and pencils and invite campers to go find their cow!
10. Mingle with campers to answer questions and provide encouragement.
11. After campers have completed their checklists, come together for a discussion. How are the cows today? Are there any concerns we should report to the farmer(s)? What was something interesting or strange you observed? How does she seem compared to yesterday? What new behaviors did you notice? Ask them to come up with questions they'd like answered in tomorrow's assessment.

ADAPTATIONS

- For children who cannot read or write, add images next to the words on the worksheet, and/or add symbols for health (green check mark=healthy; red question mark or x=unhealthy) that they can circle.
- Use partnerships or small groups when not everyone can read and write. One person can be the recorder; the others can be observers.
- Depending on the number of cows, it may be

faster and easier for campers to pick a cow to observe rather than to find an assigned cow, although the challenge of finding one cow among many can be engaging and fun!

- Use campers' observations to lead into other learning about cows such as nutrition, digestion, or feed production.
- To increase the sense of real work on the farm, write a note to the farmer every day with their observations. Make it official with date, time, cows observed, and comments.

Cow Health Worksheet

COW NAME/ID:				
COW BIRTHDATE:				
YES OR NO	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
Bright alert eyes				
Ears are up				
Walking around				
Eating				
Sleeping				
Chewing cud				
(Fill in the blanks)				

TUESDAY NOTES:

WEDNESDAY NOTES:

THURSDAY NOTES:

FRIDAY NOTES:

From a Cow?

WHAT'S THE Big Idea?

Interdependence

Enduring Understandings

- Food comes from nature: from plants and animals.
- People depend on cows and cows depend on people.
- All living things are connected.

Objectives

- Children demonstrate an understanding of the food cycle.
- Children consider how humans use cows to meet our needs.
- Children play with animal products, identifying cow products.

Directions

1. Read *No Milk!* by Jennifer Ericsson. Discuss with children the different kinds of products that we get from a cow.
2. Tell the children you have a bag filled with four products that come from a cow. Invite a few children to reach into the bag and pull an item out. Ask the children to identify the item and how it comes from a cow.
3. Lay the cow products out. Hold each product up one at a time and ask, “What are some items that we can make from each of these?”
 - **Milk:** cheese, butter, yogurt, ice cream, etc.
 - **Meat:** sirloin steak, ribs, hamburger, etc.
 - **Leather:** shoes, belts, purses, coats, etc.
 - **Manure:** fertilizer, potting soil
4. Divide the children into two groups. Explain that they will compete in a relay race as they identify animal food products that come from a cow.
5. Take out the bin of food items. Have each team form a line. Ask the first child in each line to pick an item out of the bin. He or she should determine if it comes from a cow, seeking help from teammates if necessary. Children who can read can be encouraged to look at the ingredient labels.
6. Explain that once the child decides if it is from a cow, or not, the child should run and place the item in either the bin labeled “From A Cow,” or labeled “Not From A Cow.” The child drops the product into the appropriate bin, runs back to the line, taps the next child to go.

HOW ARE WE CONNECTED?

EVERY SEASON



Materials

- **No Milk!** by Jennifer A. Ericsson

A bag of cow products (pictures of each item would work as well):

- **milk:** milk carton
 - **meat:** rubber steak dog toy
 - **leather:** piece of leather
 - **manure:** a bag of dark soil
- basket or bin of general food items, some that include cow products, others that don't
- bin labeled: “From a Cow” (or with a picture of a cow)
 - bin labeled: “Not from a Cow” (or with a picture of a cow with an “X” through it)



A bag of cow products representing: milk, meat, leather, and manure

Extensions

- Make ice cream (p.213), butter (*What's Happening?* p.133), or cheese (p.178) as a way to make the connection that milk provides many food products for humans.
- Invite a dairy farmer to your class to explain what is involved with his or her profession.
- Make a class recipe book of favorite cow products.

7. Once everyone in a line has had an opportunity, the line sits down and waits for the other line to finish.
8. Once everyone has finished, the entire group should go through the bins to explain their choices.
9. Finally, process and reflect on the experience with the children by engaging in a conversation guided by the discussion questions.

Discussion Questions

How do humans depend on cows?

How do cows depend on humans?

What do humans do if they cannot tolerate cow's milk?

Can you think of any other ways people use cows or products from cows?

From Grass to Milk



Objective:

Students will learn how a cow processes food and makes milk.

Grade Level: 4-6

Groupings: Nine groups

Materials: *Grass to Milk cards*

Answer cards (write the name of the part on one side and its role in digestion on the other. This information is in italics beneath each of the Grass to Milk cards, p. 45-48);

9 packets of props including:

MOUTH: tongs, mortar and pestle, Alka Seltzer;

RUMEN: egg beater, small plastic bag labeled bacteria filled with colored confetti, sponge;

RETICULUM: egg beater, small plastic bag labeled bacteria filled with colored confetti, sponge, ruler, tennis ball;

OMASUM: funnel, egg beater, sponge;

ABOMASUM: vinegar, sponge;

SMALL INTESTINE: sponge, small Slinky;

LARGE INTESTINE & CECUM: large Slinky, sponge, small plastic bag labeled bacteria filled with colored confetti, small bag of composted cow manure;

BLOODSTREAM: paper heart cut-out, toy train car;

UDDER: empty milk carton, blown up rubber glove with one finger missing.

Directions:

1. Ask the students for their impressions of the saying "You are what you eat." What happens to the food they eat? Discuss the amazing transformation of food into the basic nutrients our body needs for growth and development. In the case of mammals, food they can also be transformed into milk to feed to their babies.

2. Divide the class into nine groups. Explain that each group will represent a part of the cow involved in the transformation of green grass to the milk we drink. Using the cow diagram and background information on page 44 briefly describe digestion in the dairy cow.

3. Pass out a Grass to Milk card to each of the groups. Ask them to read their cards carefully. Point out that the words in italic provide valuable clues to the function(s) of their part.

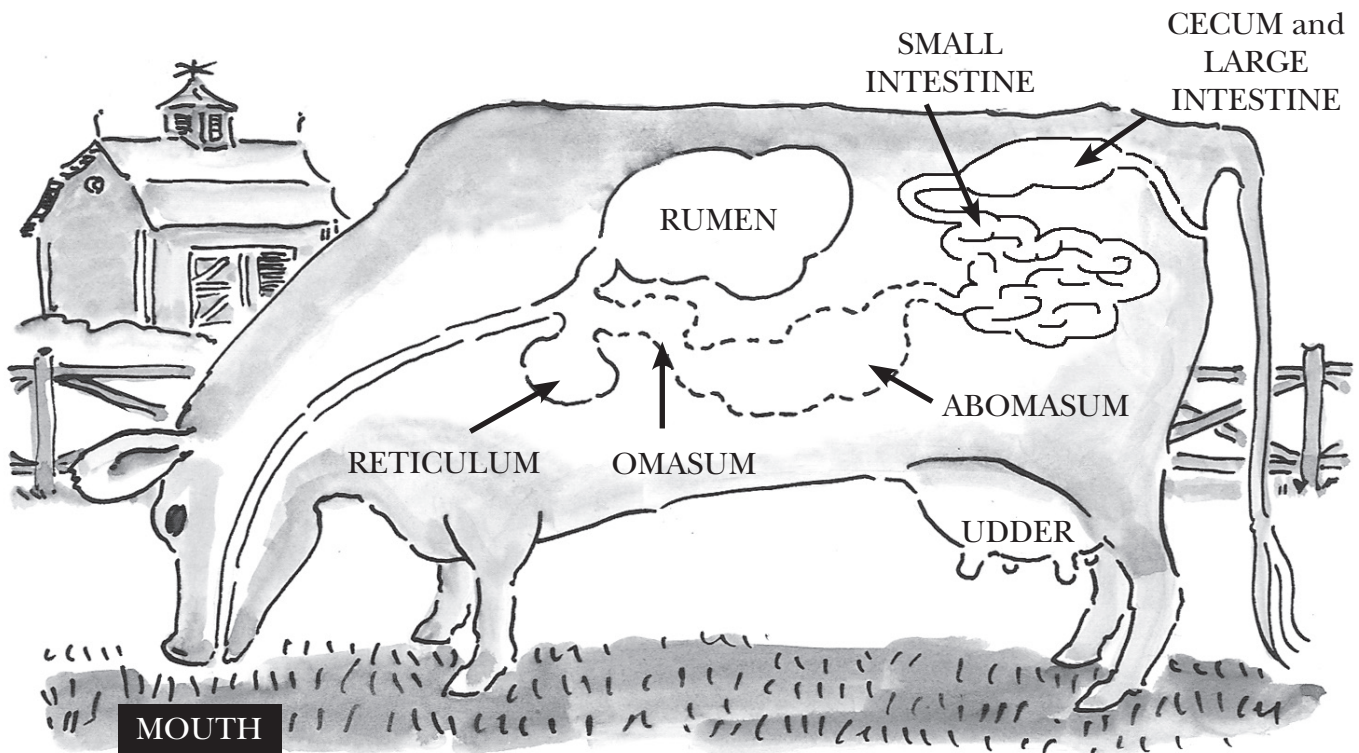
4. Show the students the nine packets of props. Explain that they represent the various roles each of the nine parts plays in the milk making process. Have groups select the bag of props that best matches the function of their part.

5. Now ask each group to select an answer card listing their identity. Before making their selection, encourage groups to share the information on their Grass to Milk cards with other groups. Point out that important clues are found on cards other than the one they received.

6. Now ask the groups to put their answer cards and props into the sequence of the grass to milk story. Remind the class that two end products are formed, so that at some point the sequence will branch.

7. Review the sequence giving each group a chance to describe and demonstrate their role in the milk making process using the props. Then enjoy a glass of milk!

Time Allotment: 30 minutes



GRASS to MILK BACKGROUND

The secret to turning green grass into white milk lives in a cow's stomach. Make that stomachs, cows have four! They are part of a group of animals called ruminants. Thanks to microbes that live in their first two stomachs — the rumen and reticulum — cows can digest plant materials many others cannot.

The rumen and reticulum are two separate organisms connect by a large opening between which food passes constantly. Since they serve one function they are often referred to as the reticulo-rumen. The microbes in them break down plant material through fermentation, releasing nutrients important for milk production.

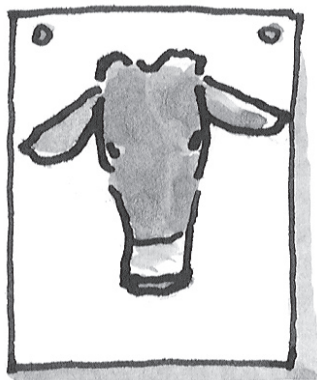
Only particles under than a certain size can pass through the small opening into the third stomach or omasum. The omasum recycles water and minerals and passes the food to the fourth stomach, the abomasum. The abomasum works much like the human stomach, secreting strong acid and enzymes to break down any undigested food.

The food is further broken down, nutrients absorbed and waste consolidated as it passes through the small and large intestines. The small pouch off the large intestine, known as the cecum, contains microbes that ferment undigested food one last time to extract remaining nutrients.

The nutrients released by these organisms are carried through the cow's body by the bloodstream. Some are delivered to the udder where they are transformed, drop by drop, into milk.

Unused material is passed from the cow in the form of manure. Rich in minerals and organic material, manure makes an excellent fertilizer for green grass. Not only does the cow provide us with nutritious milk, but it also can fertilize the fields it eats to produce more milk!

Grass to Milk Cards



Grass to Milk Card

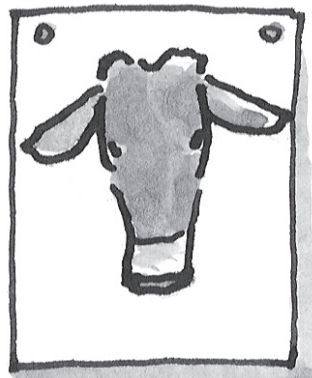
Cows are notorious for eating on the run. While out grazing in the field they use a strong muscle to *grab some vegetation* and swallow it whole! Then they moo-ve onto the next clump. Now what would your parents say about such table manners? Tell them not to worry, the food gets chewed up eventually. Later the cow burps up a ball of food, called a *bolus* or *cud*, which it then chews and chews. Cows can spend up to eight hours a day chewing their cud or ruminating.

The food is then *ground up* and mixed with a white foamy froth. This froth acts like an antacid to keep the acidity level in the first stomach, the RUMEN just right for digestion.

What am I?

How do I begin the digestive process?

Answer: I am the MOUTH. I grab food with my tongue (represented by the tongs), grind it up with my single set of bottom teeth (represented by the mortar and pestle), and buffer it with my saliva (represented by the Alka Seltzer).



Grass to Milk Card

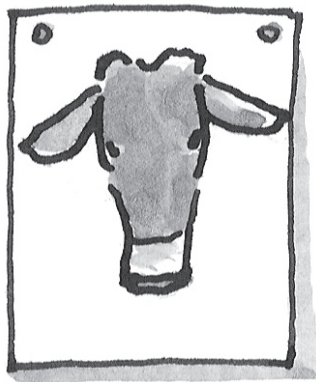
I am a very large organ and can hold up to 25 gallons of food. Most of the vegetation a cow eats comes to me looking much like it did when it was growing in the field. I work like a large fermentation vat along with my partner in digestion, the RETICULTUM. We have a whole colony of microscopic organisms living inside of us that breaks down tough plant fibers without oxygen! My muscles work to mix, moisten, *churn and blend* the food with these microbes. Important nutrients are then released and *absorbed* by the bloodstream.

They are a major energy source for the cow and are important in milk production.

What am I?

What is my role in digestion?

Answers: I am the RUMEN. I blend and churn food (represented by the egg beater) with bacteria (represented by a plastic bag filled with colored confetti labeled bacteria) which break it down through a process called fermentation. Important nutrients are then released and absorbed by the bloodstream (represented by the sponge).



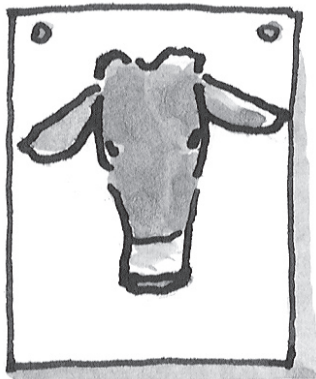
Grass to Milk Card

I am a team player in digestion. Food comes to me from my big buddy the RUMEN and I *mix it* with more microbes. We work together and pass food back and forth almost continuously. Important nutrients are also *absorbed* through my walls into the bloodstream. To keep moo-ving through the digestive tract food must *measure up*. If it can fit through the opening to the next organ in line, it is on its way. If not, lumps the *size of tennis balls* are formed and sent back, one at a time, to the mouth for more chewing and processing. Whenever you see a cow burp, a bolus or cud is on its way up to be re-chewed.

What am I?

What is my role in digestion?

Answer: I am the RETICULUM. I also mix food (represented by the egg beater) with more bacteria (represented by the small plastic bag with colored confetti labeled bacteria) and release important nutrients which are absorbed (represented by the sponge) by the bloodstream. Food must be below a certain size (represented by the ruler) before it can pass on to the next stomach in line. If it is too big, cuds (represented by the tennis ball) are formed and sent back to the mouth to be re-chewed.



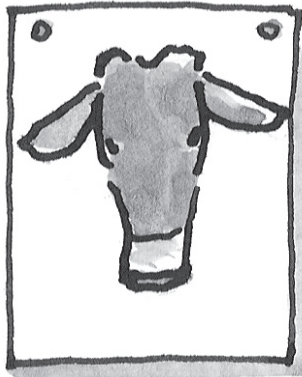
Grass to Milk Card

I have a *small opening* that lets me be selective about the size of food particles entering me. It's almost like the doorman at a fancy hotel. Once inside, the food is further *mixed* and softened. Water and minerals are *absorbed* from the food through my walls and pass into the bloodstream. The rest of the food move to the true stomach or ABOMASUM.

What am I?

How do I function?

Answer: I am the OMASUM. My small entrance (represented by the funnel) limits the size of food particles that can enter me. I further mix and blend the food (represented by the egg beater) and absorb water and minerals (represented by the sponge).



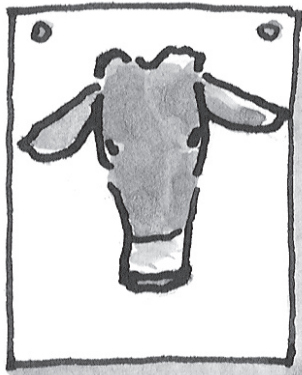
Grass to Milk Card

I am often called the true stomach and I work much like your stomach does. I contain *special enzymes and acids* that completely break down the food that comes to me from the OMASUM. Here more nutrients are released, *absorbed* through my walls and passed into the bloodstream.

What am I?

What is my role in the digestive process?

Answer: I am the ABOMASUM. With my special enzymes and acids (represented by the vinegar) I further break down the food, releasing more nutrients. The nutrients are then absorbed through my walls (represented by the sponge) into the bloodstream.



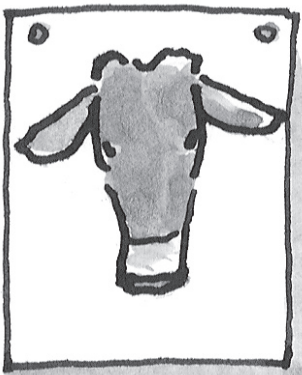
Grass to Milk Card

The true stomach sends digested food and waste my way. More nutrients and water are released and *absorbed* through my walls into the bloodstream. I *expand and contract* to moo-ve the leftovers along my twisting path to my larger neighbors and relations, the CECUM and LARGE INTESTINE.

What am I?

How do I function?

Answer: I am the SMALL INTESTINE. I absorb remaining nutrients (represented by the sponge) and pass them into the bloodstream. By expanding and contracting I move leftovers along my long twisting path (represented by the small Slinky).



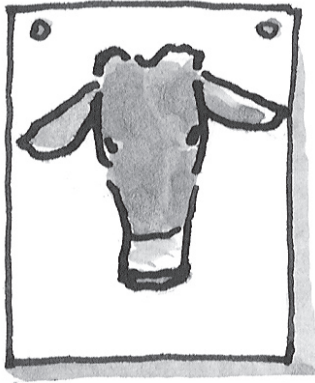
Grass to Milk Card

The SMALL INTESTINE passes the leftovers to me. These are *fermented by bacteria* in the CECUM and any remaining nutrients and water are *absorbed* through my walls into the bloodstream. I *expand and contract* to moo-ve the remaining unusable material to the end of the line. It comes out as *cow manure* or a cow pie, rich in minerals and organic matter. It fertilizes the green grass that can then be turned into more milk.

What am I?

What is my role in digestion?

Answers: I am the LARGE INTESTINE and CECUM. I expand and contract to keep unusable food moving along (represented by the large Slinky). The CECUM, a small pouch like extension, with its associated bacteria ferments the leftovers one last time (represented by the plastic bag of colored confetti labeled bacteria) and any remaining nutrients and water are absorbed (represented by the sponge). The final product is manure (represented by the bag of composed cow manure), a rich fertilizer.



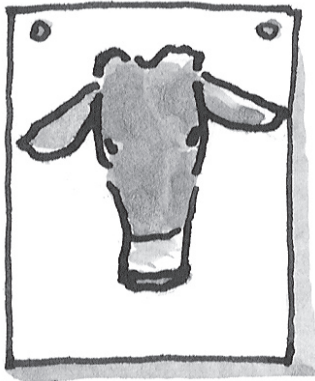
Grass to Milk Card

I take all the nutrients absorbed from the RUMEN, RETICULUM, OMASUM and ABOMASUM and carry these throughout the cow's body. Think of me as a *mass transit system*, powered by a *strong muscular pump* that keeps nutrients moving continuously along. In a mother cow, I deliver important nutrients to the UDDER where they are used to make milk for her new calf.

What am I?

What is my main function?

*Answer: I am the **BLOODSTREAM**. My hear (represented by the red heart cut-out) pumps the blood, which carries important nutrients (represented by the toy train car) throughout the cow's body.*



Grass to Milk Card

When a cow has a calf I kick into action to feed the little tyke. The BLOODSTREAM delivers nutrients through tiny capillaries to each of my four chambers. The milk making alveoli within these chambers use the nutrients to *form milk*, drop by drop. It takes 50-70 hours for a cow to turn green grass into white milk. The milk is stored here until it is needed. Then sensitive nerves within me trigger a series of responses making this milk available to whoever *squeezes my teats*, either the calf or the dairy farmer.

What am I?

What do I do?

*Answers: I am the **UDDER**. I make and store milk (represented by the empty milk carton) until the calf or farmer milks it out of my teats (represented by the rubber glove with one finger missing.)*

Butter Making



Objective:

Students will learn how to make butter.

Grade Level: K-3

Groupings: Two or three groups, 8-10 students per group

Materials: An old-fashioned butter churn or picture of one. Per group: whipping or heavy cream at room temperature, approximately one cup or a half pint; plastic peanut butter jar or other container that seals securely; two or three marbles; colander; bowl; wooden spoon; butter knife; crackers; small paper cups.

Time Allotment: 20 minutes

Directions:

An hour before beginning this activity, remove the cream from the refrigerator. Cream at room temperature will turn into butter more quickly than cold cream.

1. Tell the students that many food products are made from milk. Ask them to list as many as they can. Explain that you will be reading a few riddles and they need to guess which milk product you are describing.

*Cold and creamy,
A frozen treat,
In a cone or a shake,
It can't be beat! (Ice cream)*

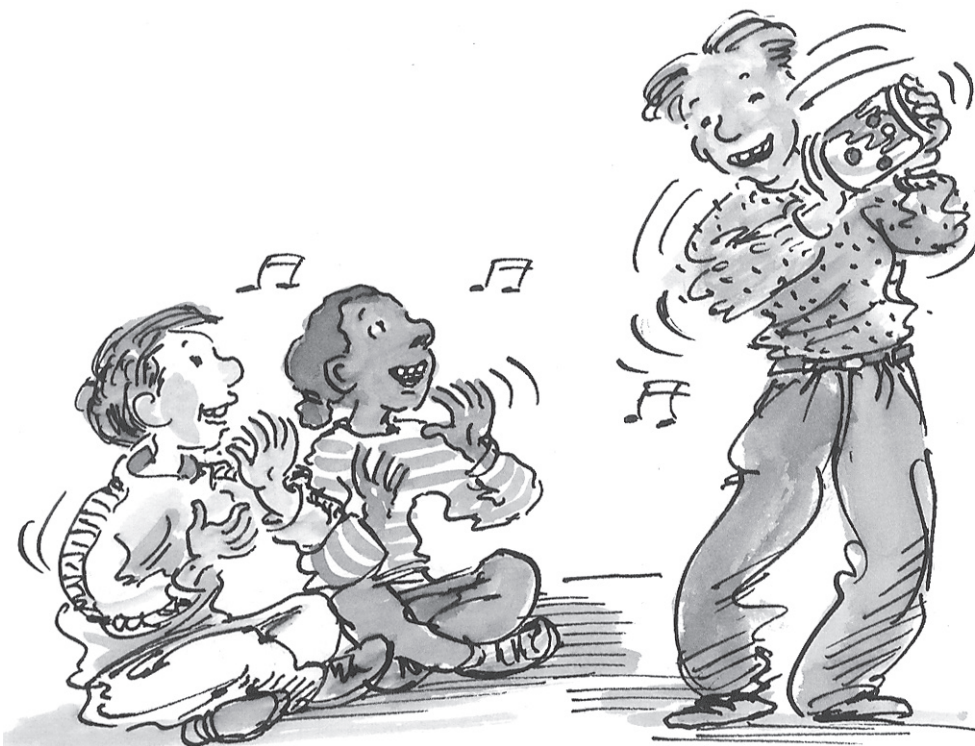
*A thick, tart, custard,
Fruit flavored or plain,
Curdled and cultured,
With a funny name. (Yogurt)*

*Rich, creamy, yellow,
Salted or sweet,
On toast or corn,
It's good to eat. (Butter)*

2. Explain they will get a chance to make their own butter. Ask the students how they think butter is made. What ingredients are needed? Record their ideas. Show them an old fashioned butter churn or a picture of one. How was it used? What did it do?

3. Divide the class into two to three groups of eight to ten students each. Give each group a half-pint of cream, a plastic peanut butter jar and two to three clean marbles. Direct them to add the cream and marbles to the jar and fasten the lid securely. Ask the students why marbles are put in the container with the cream.

4. Now it is time to begin shaking. Have one student in each group shake their jar and ask everyone to



Extensions:

a. Do *From Farm to You* (page 37) using only dairy products. Have the students use their descriptive words and phrases to make short poems or riddles similar to those used at the beginning of this activity.

b. Make several flavored butters to sample. Honey butter is made by adding some honey to your butter. Try raspberry butter and add fresh or frozen raspberries and a bit of sugar. Chill them in small crocks and serve with homemade bread or rolls. You can even make bright red tomato butter that tastes great on corn on the cob by mixing 1 tablespoon of tomato paste to 1/4 lb. of butter.

c. Have the students chill their butter in old fashioned butter molds. Or have them decorate their butter with sprigs of fresh herbs, clover or edible flowers. Invite another class or parents in for a sample.

d. Try making yogurt or ice cream with your class.

Directions: (continued)

listen to the sound of the cream and marbles in the jar. What do they think will happen to the sound as the cream begins to thicken? Ask the students to predict how long it will take to make butter. Have each group record their predictions and starting time.

5. Since it can take 5-10 minutes to make a batch of butter, teach the class a traditional butter making song to sing while shaking (see *Butter Cake* page 51). Explain that as the butter was passed from child to child they sang this song, changing the name each time. When the next verse begins, the jar is passed to another student who continues the shaking. Or teach the class a more lively modern song, *Shake It!* (page 51), passing the jar after each chorus. Take breaks periodically to listen to the sound of the marbles in the jar. When do they notice a difference in sound? You can also turn the process into a competition to see which group can make butter first.

6. When the students see a lump of butter surrounded by a thin liquid, have them record the finish time. Ask whether they know the name of the liquid that is formed when making butter? (Buttermilk!) Direct the students to place a bowl beneath a colander and carefully pour the buttermilk off. Pour the buttermilk into another container and chill it for tasting later.

7. With the colander over the bowl, have the students wash the butter by pouring cold water over it to rinse off any traces of buttermilk. Direct them to gently press the butter against the side of the colander with a wooden spoon to be sure all the water is out. Then have them place their butter in a small bowl. A half-pint of cream will make approximately a quarter of a pound of butter.

8. Now it's time to enjoy the taste of fresh homemade butter. If the students will be eating the butter on salted crackers, they do not need to add salt. Otherwise, each group can add a pinch of salt and mix it into the butter.



ALL BUTTERED UP

How would you like a cluster of fat globules spread on your breakfast toast? Doesn't sound very appealing first thing in the morning, does it? Yet a piece of buttered toast is just that. Butter is made from cream which is liquid milk high in butterfat. The percentage of butterfat varies among the different types of milk and cream you buy. Whole milk has 4% butterfat, whereas heavy cream has at least 36% butterfat. That's why it's so thick and rich. Butter is made by shaking or churning cream. The butterfat particles in cream are wrapped in a coating or membrane. When you shake the cream, you break the coating around these fat particles, and they start to stick together. As you continue shaking, the particles completely separate from the liquid in the cream and form larger and larger fat clusters. When most of these fat particles are stuck together, you have a lump of butter floating in a sea of buttermilk. Just pour off the buttermilk (chill it to enjoy later), then dip your knife into some fresh creamy butter.

BUTTER CAKE

*Come butter come
Come butter come
(Student's name) is at the garden gate
Waiting for a buttered cake
Come butter come*

SHAKE IT!

(Sung to the tune of the "I Have Something in My Pocket" or the "Brownie Smile Song." Post the verses on the wall for the class to follow.)

*We're going to make some butter,
Rich and creamy too,
With milk from a cow's udder
Before you can say moo.*

Chorus:

*So shake it, shake it, shake it,
Shake it if you can
Shake it like a milkshake,
And shake it once again.*

*Put some cream into a jar,
You can add a marble or two,
Make sure the lid is on tightly,
That's all you have to do.*

Chorus

*We're learning while we're churning,
Hey this is lots of fun!
It's easy to make butter,
Let's eat it when it's done.*

Chorus

*Oh listen very carefully,
It's sounding different now,
Hooray it's finally butter!
Be sure to thank the cow.*

Chorus

HOW TO MAKE ICE CREAM IN A BAG

INGREDIENTS

- 1/2 cup Cream
- 1/2 tsp. Vanilla
- 1 Tbsp Sugar
- 1/3 cup Salt
- 4 cups Crushed Ice

MATERIALS

- (2) quart size ziploc bags
- (1) gallon size ziploc bag
- Hand towel or paper towels

STEP 1

Mix the cream, vanilla and sugar together in a quart size bag. Seal the bag tightly and make sure there is no air inside.

TIP: Double bag to avoid spills.



STEP 2



Put the bag inside a gallon bag and fill the bag with ice and salt. Seal the bag tightly and wrap in a towel.

STEP 3

Shake the bag for 4-5 minutes.



STEP 4

Remove the quart size bag and throw away the gallon size bag.

STEP 5

Spoon into a bowl and enjoy this delicious dairy treat!
Add fresh berries for added nutrients!



For additional resources visit:
www.NewEnglandDairy.com

SCIENCE BREAK: CHANGES IN MATTER

What phase of matter did the cream start in?

- a) Liquid
- b) Solid



What phase of matter did the cream end in?

- a) Liquid
- b) Solid



What state of matter is ice cream?

- a) Liquid
- b) Solid



Name 5 ingredients we used to make the ice cream.

Name 1 liquid and 1 solid we used to make the ice cream.



Bonus question

Ice cream is made with cream. What dairy product is frozen yogurt made with?



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