4-H Dairy Cattle Project



WHAT'S IT ALL ABOUT?

One of the foundations of agriculture, the dairy industry consists of so much more than just producing milk. It's become a sophisticated business, and there's a lot to learn beyond exhibiting your project.

- » Acquire skills in dairy production through ownership and care of dairy animals.
- Learn about marketing, processing, distributing, consuming and using dairy products.
- **»** Practice principles of cleanliness and sanitation in production and care of dairy products.
- » Learn nutritive value of dairy products and promote their use.

THE BIG PICTURE

Starting out:

- **»** Learn the breeds of dairy cattle.
- » Select a project animal.
- Identify parts of the animal.
- Explore milk production systems.
- Demonstrate how to groom a dairy heifer.
- Demonstrate dairy showmanship techniques.
- >> Learn to evaluate your animal.
- Explain the difference between the digestive tracts of a calf and of a cow.

Learning more:

- Judge a class of cows and present oral reasons.
- Demonstrate how to select calves based on desirable dairy traits.
- Discuss ethical situations in the dairy industry.
- Describe signs of health and illness in dairy animals.
- Properly identify the components of an animal's medication label.
- **»** Analyze dairy cattle behavior.
- **»** Judge and give oral reasons on hay quality.
- Compare the digestive systems of a pig and of a cow.
- **»** Demonstrate proper milking procedures.

Expanding horizons:

- Identify parts of the Dairy Herd Improvement (DHI) record.
- >> Learn about and debate animal well-being.
- Inspect a dairy for quality indicators.
- Explore the various career choices within the dairy industry.
- Perform a California Mastitis Test (CMT) and interpret results.
- **»** Give a presentation on embryo transfer.
- **»** Detect heat in dairy cattle.
- Demonstrate how to detect pregnancy in cattle.
- **»** Demonstrate how to deliver a calf.



CURRICULA & RESOURCES

Michigan 4-H Curricula

- Michigan State University 4-H Youth Development Dairy Cattle: http://4h.msue. msu.edu/4h/dairy cattle
 - 4-H Animal Project Record for Beginning Members (4H1457)
 - 4-H Livestock Record Book for Intermediate and Advanced Members (4HI177)
 - Feed Record Card (4H1277)
 - Member's Personal 4-H Record Book (4H1192)
 - Michigan 4-H Judging Cards (4H1193-1296)

Curricula – Other States

>> Cornell University Dairy Youth Recommended Resources: http://www. ansci.cornell.edu/4H/ dairycattle/dairyresources.html

National 4-H Curricula

- » Dairy Cattle http://www.4-h.org/resourcelibrary/curriculum/4-h-dairycattle/cowabunga/
 - 1 Cowabunga (08161)
 - 2 Mooving Ahead (08162)
 - 3 Rising to the Top (08163)
 - Helper's Guide (08164)

Continued on back side

4-H Dairy Project Snapshot



FOCUS ON DAIRY

Science

- Investigate and compare the different types of milk - whole, 2 percent and skim.
- » Observe and record normal behavior of a dairy animal and compare it to abnormal behavior.
- » Research the technological advances in the dairy industry.

Citizenship & Leadership

- Volunteer your animal for a petting zoo to share the importance of dairy.
- Participate in a dairy promotion event.
- Mentor a cloverbud 4-H member new to a dairy project.

Communication

- Create and present a poster on dairy breeds.
- » Participate in a dairy quiz bowl contest.
- Teach others about showmanship techniques.
- **»** Give a speech on the importance of the dairy industry.

Life Skills

- Use critical-thinking, problemsolving and decision-making skills to help you make good decisions about project management.
- **»** Keep records on your project expenses and income.
- Practice personal resiliency through successes and challenges in your project.



HOW CAN YOU GET INVOLVED?

- Contact your local Michigan State University (MSU) Extension office for workshops, activities and events
- If you are interested in a college education in animal science or veterinary medicine, visit MSU's website at www.msu.edu to explore those majors.
- » Join a local 4-H club.
- Tour a dairy farm. Try the MSU Dairy Teaching and Research Center, open daily 8 a.m. to 5 p.m.
- Attend a dairy show and observe the techniques of the participants and judges.

- **»** Write an educational article for publication in your local newspaper about a specific topic relating to the dairy industry.
- Participate in a dairy quiz bowl or judging contest.
- **»** Job shadow a local veterinarian to learn more about animal health.
- Attend a state level 4-H dairy event; visit http://www.ans.msu.edu/ans/youth_ extension_programs for many more opportunities.
- Complete a dairy project record book to track your experiences in 4-H.

Curricula & Resources, continued

Other Resources

- **»** The Dairy Site: http://www.thedairysite.
- » Holstein Foundation: http://www. holsteinfoundation.org/
- Michigan State University Department of Animal Science, Youth Dairy Cattle Programs: http:// www.midairyyouth.ans.msu.edu/
- » National Dairy Herd Improvement Association: http://www.dhia.org/
- National Milk Producers Federation: http://www.nmpf.org/
- **>>** World Dairy Expo: http://www.worlddairyexpo.com/

Adapted with permission from "4-H Dairy Cattle Project," by Iowa State University Extension, 2011, Iowa 4-H Project Hot Sheet. Retrieved from http://www.extension.iastate.edu/4h/projects/

MSU is an affirmative-action, equal-opportunity employer, committed to achieving excellence through a diverse workforce and inclusive culture that encourages all people to reach their full potential. Michigan State University Extension programs and materials are open to all without regard to race, color, national origin, gender, gender identity, religion, age, height, weight, disability, political beliefs, sexual orientation, marital status, family status or veteran status. Issued in furtherance of MSU Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Thomas G. Coon, Director, MSU Extension, East Lansing, MI 48824. This information is for educational purposes only. Reference to commercial products or trade names does not imply endorsement by MSU Extension or bias against those not mentioned. The name "4-H" and the emblem consisting of a four-leaf clover with stem and the "H" on each leaflet are protected under Title 18 U.S.C. 707. (4H1615 1P-WEB-2:2013-PA) Produced by ANR Communications.