

## **Explore Your Spark!**

# **Beef Project**



The 4-H beef project is part of the animal science education program. The program will teach you how to select, manage, and harvest market beef and raise breeding stock. Learn basic principles of animal science by owning, caring for, and keeping records on one or more head of beef. Demonstrate knowledge for feeding, breeding, and managing beef animals. Learn valuable scientific research and its influence on animals and the meat industry. Practice the 4-H life skills of decision-making, communicating with others, leading self and others, planning and organizing, and learning to learn.

## Starting Out Beginner

- Know your beef breeds.
- Understand the different types of feed and quantity to feed.
- Recognize a healthy animal.
- Train your calf to lead.
- Learn to groom and show your animal.
- Exhibit your animal at county or state shows.
- Identify parts of the animal and cuts of meat.

## Learning More Intermediate

· Learn appropriate han-

dling techniques and

Become familiar with

Understand the diges-

tive system of a rumi-

nant and identify com-

mon external parasites

and other health issues.

Understand medication

the medication, and its

uses, storage, how to

properly administer

effect for food safety.

behavior of cattle.

housing for beef cattle.

## Expanding Horizons Advanced

- Discover the diversity of the cattle industry.
- Balance a beef ration and understand feed quality.
- Learn about breeding and reproduction techniques.
- Learn about EPDs and how they impact beef breeding herd selection.
- Identify and learn to treat and prevent common diseases.

# **Inspire Kids to Do**

## Explore

#### "I might like to do this."

Youth who explore a variety of interests before high school, through experiences like 4-H camps and educational events, can develop early interest in a career path and improve their academic performance.

## Learn

#### "I can do this."

4-H project-based learning, guided by adult volunteers, improves youth understanding of skills and concepts, as well as their ability to problemsolve and collaborate.

## Practice

#### "I'm interested in this."

Youth who have participated in sustained hands-on learning and engaged with professional mentors and volunteers before entering high school are more likely to explore studies and potential career paths.

## Experience

#### "I will be this."

Real-world application is key — 91% of Kansas 4-H members have a plan for reaching their goals. Youth that have been active participants in hands-on learning, combined with strong decision-making skills, are more able to effectively navigate life.

## Beef Project

# Expand Your Experiences!

#### **Healthy Living**

- Record the health contributions gained from grooming, walking, and caring for beef cattle.
- Study the nutritional benefits beef provides in a healthy diet.
- Test different ways to prepare meat: grilling, braising, broiling, roasting, baking, stewing, sautéing.

## **Science and Agriculture**

- Study the body and skeleton structures of the steer or heifer.
- Research the digestive, respiratory, organ, and endocrine systems of cattle.
- Measure food intake to calculate the Average Daily Gain and adjust ration as needed for efficiency.

#### **Community Vitality**

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**Research and Extension** 

- Serve as a junior/teen leader mentoring others in the beef project.
- Plan and lead a beef grooming and showmanship clinic for 4-H members.
- Coordinate an educational tour of a feedlot facility or meat locker.

#### Communication and the Arts

- Create a poster showing the different breeds of beef cattle.
- Write a story on the importance of following drug labels.
- Teach a younger 4-H member important traits in selecting a beef steer or heifer.

## **Career Development**

- Visit a feedlot to discover employment opportunities.
- Research Breed Associations.
- Explore K-State Animal Science Department, visit Beef Facility and Meats Lab.
- Interview a meat scientist.
- Ask a chef about preparing meat and careers in food service.
- Consult with veterinarian about cattle diseases, vaccinations plans, and career options.
- Learn about majors in the K-State Department of Animal Sciences and Industry.

## Local Contact Information

Resources and Events	Curriculum and Resources	4-H Record Keeping	Project Exhibit Ideas
<ul> <li>Participating in educational events and learning oppor- tunities will expand your knowledge and skills in the project area. Contact your local K-State Research and Extension office for local opportunities.</li> <li>Read your monthly 4-H newsletter for regional, state, and national oppor- tunities.</li> <li>Participate at your county fair and Kansas State Fair</li> <li>Attend the Kansas State 4-H Livestock Sweepstakes.</li> <li>Attend Beef Producer Days.</li> </ul>	<ul> <li>Check out the Kansas 4-H Beef Project Page: https://www.kansas4-h. org/projects/animals/beef. html</li> <li>State 4-H Livestock Sweep- stakes page: https://www.asi.k-state. edu/research-and-exten- sion/youth-programs/4- h-livestock-sweepstakes. html</li> <li>K-State Animal Sciences and Industry: https://www.asi.k-state. edu/research-and-exten- sion/beef/</li> </ul>	Learning to keep accurate records is a life skill. The fol- lowing forms can help you: • Setting 4-H Project Goals (4H1100) • Kansas 4-H Record Keep- ing	Design a poster explaining: • beef breeds • body structure, systems • meat cuts • show equipment • feed rations Do an exhibit on feeding rations. Make a book that shows your daily routine in caring for animals.
Kansas State University Agricultural Experiment Station and Cooperative Extension Service			

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