

Best Management Practices for Feeder Calf 4-H Projects

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In the Feeder Calf project you need to set goals. A goal may be to exhibit and win a class with your project animal. Another goal might be to make a \$400.00 profit after the sale. A third goal may also be to have a feeder calf that will weigh 650 pounds at your county fair. You might set all three of these goals! It all starts with your selection, how much you pay for the calf, and how you care and prepare your calf.

Selection

When selecting a feeder calf for your project, will you pick one from the family herd or will you purchase one? In either case, look for a calf that has correct structure (refer to the Beef Resource Handbook). If you are selecting one from the family herd, it is ideal to start feeding grain while the calf is still on its mother. If this is not an option, wait until the calf is around 90 days of age to wean. If you purchase one from another source, look for a source with a good reputation, check medical records, make sure the calf is weaned and on feed, and look for a calf that will be easy to handle. A tame animal will be much easier to halter break.

Calves will need to be vaccinated, dewormed, dehorned, and if a male calf, castrated. If purchasing a calf, vaccinations and deworming should be done three to four weeks prior to the purchase. Prior to purchasing the animal, keep in mind your goals for the project. Feeder calves have wide variations in prices. Purchasing the best, may cost more than you will receive at the sale.

Feeding

If purchasing a calf, find out what and how much feed was being fed, and mix that feed with your new feed over a three-day period (i.e. 75% old feed first day, 50% second day, 25% third day). Feeder calves are ruminants and require forages. Hay and/or pasture are essential to maintain a healthy, growing calf. Water is critical. Provide fresh water daily and have available at all times.

What type of feed should calves get? There are many sources of excellent formulated feed that can be purchased from feed dealers and stores. The following are guidelines that can be used based on the weight of your calf.

Daily Protein, Energy and Feed Needs of Weights of Feeder Steers

Weight	%CP	%TDN	Targeted Weight Gain	Lb Feed/Day
300 lb	18-20.3%	72-78.5%	3.0-3.5 lb/day	3.0% body wt
400 lb	15.2-16.9%	72-78.5%	3.0-3.5 lb/day	3.0% body wt
500 lb	13.4-14.7%	72-78.5%	3.0-3.5 lb/day	3.0% body wt
600 lb	12.1-13.2%	72-78.5%	3.0-3.5 lb/day	3.0% body wt

Source: *Nutritional Guidelines for Backgrounding Calves*, NDSU AS-1152, August 2008. www.ag.ndsu.edu/pubs/ansci/beef/as1152w.htm

Average Daily Gain

Once you obtain your calf and figure the weight, determine the number of days till the fair and what the weight requirements are. Then you can figure the needed average daily gain. *Example:* You wean a feeder calf June 3 that weighs 300 pounds. Your calf will be exhibited at the local fair September 1. Your fair rules require a weight between 400 and 650 pounds and you want your calf to weigh 600 pounds. So, your calf needs to gain between 100 and 350 pounds in 90 days. Your goal is 300 pounds. Average daily gain will tell you how much your calf needs to gain each day to reach your target weight. Average Daily Gain (ADG) = Gain ÷ Number of Days in the feeding period. For our example: ADG = 300 pounds ÷ 90 days = 3.33 pounds per day.

Using the table above, you can calculate what type and how much feed are needed each day to achieve this goal.

Health Care for Your Feeder Calf

Keeping your feeder calf healthy is critical to a successful project. There are vaccinations and other medicine that needs to be provided to prevent diseases and parasites from harming your calf. Your local veterinarian will provide you with the best recommendations. It is important to establish a veterinarian/client/patient relationship (VCPR) so you can make proper decisions regarding the health of your calf.

As a general rule, it is recommended that your calf receives a “4-way” shot that has vaccines for IBR/PI3, BVD, and BRSV. In addition, the calf should receive a Pasteurella vaccine. It is also a standard practice to give a “7-way” colostridial vaccine. If you purchase a young calf, or the calf has been on pasture, it is recommended to deworm the calf. Once the calf is in the barn it will not be re-exposed to worms. External parasites are rarely a problem with calves, especially if they spend most of their time in a barn. If flies are an occasional problem, a permethrin spray is encouraged.

Housing

Where will you keep your calf? The calf should have shelter from extreme weather that is at least 30-40 square feet per calf plus 400-600 square feet for exercise. Use straw or sawdust/mulch for bedding and keep the area clean and well-ventilated. Remember, your calf will continue to grow, so make sure there is plenty of room. A few days prior to taking your calf to the fair, try to simulate the same conditions that your calf will have at the fair. Use the same buckets for feed and water that you will take to the fair, and possibly use the same water that is available at the fair. (For example, you may have well water at home and the fair has public water. This change in water may reduce your calf’s water intake.)

Will Your Project Make Money?

Whether you select a calf from your family herd or purchase one, the calf has value and costs money. In addition, there will be costs for feed, grooming and show supplies, medicine and other supplies. Your feeder calf record book has charts for income and expenses. It is important to consider income and costs, especially if you purchase a calf. To help estimate income, consider checking how much calves bring at your sale from previous years. Send letters to potential buyers prior to the sale encouraging them to participate. A well-written letter can help improve bidding at the sale, especially for your

calf. Estimating your income and all of your expenses before you obtain your calf can help determine how much you can afford to pay for a calf, and how much profit you hope to make from your project.

Grooming, Fitting, and Breaking a Calf

The Beef Resource Handbook, section nine, provides in-depth information on grooming, fitting, and breaking a calf. It is important to start working with your calf as soon as possible.

Daily Care Practices

Each day it is important to provide fresh water and feed to your calf. Cleaning out the water and feed buckets will improve how your animal grows. If the animal is confined, it is important to remove manure and add fresh bedding. Spending time and working with your calf each day will help calm the animal and show better at the fair.

Sources

Beef Resource Handbook, OSU Extension, 4-H 117R

Nutritional Guidelines for Backgrounding Calves, AS-1152, August 1998. Dr. Greg Lardy, Beef Cattle Specialist, North Dakota State University; Dr. Chip Poland, Area Livestock Specialist. <http://www.ag.ndsu.edu/pubs/ansci/beef/as1152w.htm>

Quality Assurance Guidelines for County Fairs and 4-H Projects. Phil Osborne, Livestock Specialist, WVU Extension Service, May, 2003. <http://www.wvu.edu/~agexten/forglvst/health.pdf>