



## 2018 4-H FEEDER CALF PROJECT GUIDELINE

Raising a beef steer to market weight can be an expensive project. A feeder calf purchased at 400 to 800 lbs. and finished to a weight of 1,000 to 1,400 lbs. can add up to an investment of \$1,500 or more. In order to enable more 4-H members to become involved in the beef cattle project at a lesser expense, the Feeder Calf Project was initiated. The purpose of this project is to allow 4-Hers to obtain a young calf and grow it to a 350 to 700 lb. feeder size.

### A. What Kind of Calf Do You Purchase for This Project?



Ideally, the type of calf to obtain for this project would be a beef breed. However, since most beef producers will not sell young calves (normally they stay with their mother until they are 6 months old), you could look for a dairy beef crossbred calf. Some dairy farmers breed their heifers to beef bulls. These calves would make good project animals. Heifer and steer calves are acceptable but remember that only steer calves can be carried over the next year as market steers. Bull calves are not acceptable. Select big, healthy calves that are thickly made and exhibit a large amount of muscling. Delaware State Fair rules require that feeder calves must be owned by the exhibitor by 60 days prior to the fair. In addition, calves must weigh at least 350 lbs. and be no more than 700

lbs. at fair time so plan accordingly. Feeder calf classes will be divided by weight. All castrations must be completely healed by the time the state fair arrives. Feeder calves need to be tagged with a Delaware State Fair ear tag but understand that they are not eligible to participate in the Jr. Livestock Auction.

The dates and locations for this year are as follows:

- Saturday, May 5, 9 am-11 pm – Steve Cook’s Farm 3300 Frazer Rd. Newark **(NC County)**
- Saturday, May 5, 9 am- 11 am - Georgetown Research and Education Center **(Sussex County)**
- Saturday, May 12, 9 am- 11 pm - Delaware State Fair **(Kent County)**
- Friday, May 18, 6 pm- 9 pm- Delaware State Fair **(Kent County Jackpot Show and County 4-H Show Participants Only)**
- Tuesday, May 22, 5 pm- 8 pm - Delaware State Fair **(Kent County)**

*Cooperative Extension Education in Agriculture and Home Economics, University of Delaware, Delaware State University and the United States Department of Agriculture cooperating. Distributed in furtherance of Acts of Congress of May 8 and June 30, 1914. It is the policy of the Delaware Cooperative Extension System that no person shall be subjected to discrimination on the grounds of race, color, sex, disability, age, or national origin.*

Feeder calves can be tagged on the Sussex County date but understand that the scales used at that location are not capable of weighing calves or steers. You must come to a Kent County date if you would like your calf to be weighed and tagged.

## **B. What Do You Need to Raise a Feeder Calf?**

Obviously you are going to need to prepare a place to keep your calf prior to purchasing it. In the beginning, while the calf is still small, it needs a place where it can get out of the wind and rain. A typical dairy calf hutch will suffice (see plans that are enclosed). Later, you will want to allow enough outside lot space for your calf to exercise and possibly graze.

## **C. Health Concerns:**

Baby calves are susceptible to scours and pneumonia, especially during the first few weeks of life. Fortunately as they get older, they become more resistant to these diseases. Things such as viruses and bacteria can cause scours.

Since you aren't qualified to determine what type of scours your calf has, a veterinarian may have to be called in to treat the animal. This is a good management practice to follow whenever your calf is sick.

It should be noted that some scours are the result of over feeding and can be controlled by reducing the feed intake of the animal. The key to distinguishing between disease and over feeding scours is the body temperature and the color of the scours. White scours can be the most severe. The normal body temperature of a calf, as determined by a rectal thermometer, is between 101.5 and 102.5 degrees. When your calf has a fever, it is a sign that the body is fighting some type of infection.

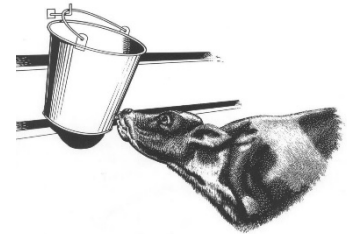
With scours and pneumonia the major problems is a loss of body fluids (dehydration). If this occurs, 4-8 quarts of fluid needs to be administered orally or subcutaneously (under the skin) daily in 2-quart doses. If you do not feel comfortable administering fluids subcutaneously it is a good idea to call your veterinarian.

The keys to preventing health problems are through proper feeding and sanitation. Keep your calf's feed and water buckets clean. In addition, it is a good idea to keep the hutch and the animal dry and clean. Avoid drafts yet make sure the hutch is well ventilated. Calves can do very well raised alone if proper management practices are followed. Please consult the "Vaccination Guidelines for Beef Cattle- A 4-H Primer..." <http://extension.udel.edu/4h/files/2012/02/VaccinationProgramsShowBeef.pdf> for more information specific to types and timing of vaccinations for beef cattle. These guidelines have been developed in response to specific animal health problems that have been observed at the Delaware State Fair and in show stock. Calves should also be dewormed at 2 months or as needed. Spend time daily with your animal so that you become very familiar with its habits and typical behavior. This way you will quickly

realize when your animal is getting sick. It will also make halter training and handling your calf easier.

#### **D. Feeding Your Calf:**

The objective in feeding your calf is to provide the proper nutrients to grow a calf as fast as possible. With young calves, you'll need to feed milk replacer while allowing the calf access to high quality hay and a grain ration. It is a good idea when your calf is young to feed a ration that contains a coccidiostat. Coccidiosis is a common cause of scours in young calves. This will offer you protection against coccidiosis. Offering access to a grain ration and some quality hay while your calf is still on milk replacer will permit the calf's digestive system to develop properly. You should realize that the calf will not eat much hay and grain until it is approximately a month old. The grain should contain around 14% protein, 2% fat and 9.5% fiber. Let the calves eat all that they want of the grain so that they may be weaned as early as possible. One advantage of bottle-feeding is that it allows for closer contact and easier halter training.



A week old calf should be eating about .7 lbs. of dry milk replacer per feeding. Amounts vary as the calf gets older. The following chart should be helpful as a guideline for comparison.

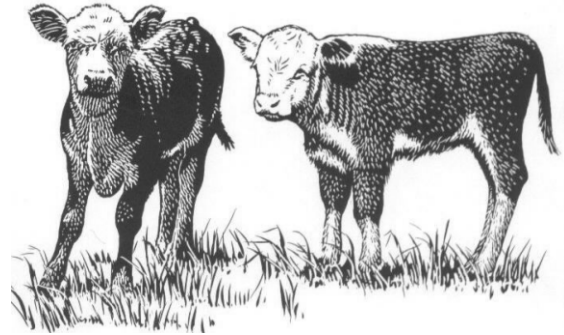
<b><u>Age of Calf</u></b>	<b><u>Pounds of Dry Powder</u></b>	<b><u>Amount of Water</u></b>
1 to 3 Days	calf is with cow or hand feed colostrum	
4 to 7 Days	1.4 lbs.	0.35 gallon
Second Week	0.7 lbs.	0.6 gallon
Third Week	1.2 lbs.	0.9 gallon
Fourth Week	1.5 lbs.	1.1 gallons
Fifth Week	2.1 lb.	1.3 gallons
Sixth Week	2.6 lbs.	1.6 gallons

Feed the milk replacer two times per day. In addition, allow the calf access to the 13% grain ration and hay. Don't put a lot of grain and hay in the calf pen at any one time because the freshness of these feeds will affect the rate of consumption.

Develop your feeding routine and stick to it! The best way to insure minimal stress is by sticking to your feeding routine. If you normally feed your calf at 7:00 a.m. and 6:00 p.m. during the week, make sure you feed at 7:00 a.m. and 6:00 p.m. on the weekends too. When you begin to notice your calf eating more grain and hay, begin reducing the amount of milk fed to encourage weaning at about 2 months of age. In addition, provide plenty of clean, fresh water and a trace mineralized salt block (4lb. brick). If you purchase an older beef calf that has been weaned from its mother then there will be no need to feed any milk replacer at all. Just be sure to transition the calf gradually from what it was eating the breeder to what you will be feeding it.

### **E. Marketing:**

Even though your feeder calf can be sold as a feeder calf after the fair, if it is a steer, it can also be kept to finish out as a market steer for next year's fair. Either option is available to you but remember that this is a feeder calf project. A feeder calf is not ready to slaughter for meat.



### **F. Costs:**

Buying and raising a feeder calf is more expensive than a hog, goat or lamb project. Here is a general outline of costs you might incur while raising a feeder calf.

Cost of Calf (400 lbs.)	\$600.00
Cost of Milk Replacer (50 lbs.)	\$70.00
Cost of Grain	\$400.00
Cost of Hay	<u>\$150.00</u>
<b>TOTAL</b>	<b>\$1,220.00</b>



It is important to realize that costs will vary depending on where you get your calf and how big it is when you purchase it. Typically a beef breed of calf will cost more than a dairy beef crossbred calf. Cost for a beef breed may run as high as \$700 - \$850, depending on the size and where you decide to purchase it. The cost of milk replacer may vary as well depending on the quality of the ingredients and any medication that may be added. Any costs associated with the building, fencing, health costs, and show equipment would have to be added to this general budget.

### **G. Showing:**

One nice thing about raising a younger, lighter calf is the ease of halter breaking. Make sure your calf is exposed to the halter early. The sooner you begin, the easier it is. Be sure that you are gentle with the calf, it's only a baby! It is also important to be patient. Junior exhibitors must show their own animals in the Junior Show. There is no assistance permitted in the show ring at any time in all junior livestock classes except assistance from a designated ring steward. All animals will be weighed on Saturday, July 21<sup>st</sup> immediately following a mandatory barn meeting for all livestock exhibitors

beginning at 8:00 am in the Kent Building. Exhibitors or a designated individual must be present to bring your feeder calf to the scales.

There is a dress code for exhibitors showing livestock at the Delaware State Fair and in 4-H related shows. The State Fair rulebook states that all showman will wear appropriate show attire.

Pants- clean, neat jeans or slacks pants (no shorts)  
Shirt- with a collar and sleeves (no T-shirts or tank tops)  
Shoes- hard soled shoes or boots (no sneakers or sandals)

This type of attire will tell those watching the show that we take pride in our projects and it will keep members from unnecessary injury.

Exhibitors may remove up to 1/3 of their beef cattle from 12:00 a.m. to 6:00 a.m. Thursday, July 26th. Please notify your superintendent before removal of any animals and remember to clean any vacated area. All remaining animals may not leave the grounds before 1:00 a.m., Sunday, July 28th or premiums will be forfeited.

- *Susan Truehart Garey  
Extension Agent, Animal Science  
University of Delaware*

