Breeding Beef Heifer Essentials

Overview. The 4-H breeding beef heifer project involves a time commitment of one to three hours per day and will generally last one to two years. Proper selection, care, feeding, and management of the heifer project are all production skills learned in addition to invaluable life skills. An advantage of the breeding beef heifer project over market animal projects is the opportunity for the heifer to be retained or sold as a breeding animal in a cowcalf operation. The basic information and resources needed to support the project are as follows.

Questions to Ask. To adequately address the needs of the 4-H family interested in breeding beef heifers, the following questions will need to be asked:

- What are the goals of the 4-H member and family?
- Do you understand that the project is a one to two year project?
- What facilities are available?
- Which shows will you be exhibiting the project?
- Will you need assistance in locating and selecting your project?

Selection.

<u>Breeds</u>. Currently, there are more than 75 different breeds of beef cattle that can be registered in the United States. This does not include composite cattle (Star-5, Chi-Angus, Balancer, etc.) as well as just crossbred cattle. Personal preference is one of the most common reasons 4-H members choose a particular breed. However, it is important to realize that the breeds that are eligible for show at major and local shows vary considerably and the rules should be carefully reviewed before deciding on a particular breed. Many local shows and some major shows have an "All Other Breeds" category that heifers which do not have a designated breed at the show can still be exhibited. Another consideration is decide if you would like a "hair breed" (Shorthorn, Limousin, Angus, etc.) or a "slick breed" (Santa Gertrudis, Brahman, Beefmaster, etc.). Breeds with long hair require considerable more work because of the extra grooming required.

Age. Heifers born on any day of the year are eligible and divided into classes at the show based on date of birth. Heifers can typically be shown until they are approximately 30 months of age as long as they are pregnant or have a calf at side. This will vary with each show, so be sure to consult the Exhibitors' Handbook prior to making the purchase.

<u>Quality Considerations.</u> Other selection criteria include structural correctness, frame size, muscle, depth of body and capacity, feminity, and overall balance and eye appeal. When selecting heifers, be aware of hair and fatness which can cause the perception that the animal is of much higher quality than she really is in reality. Learn to look past the fat and hair and look for the true muscle, structural correctness, and overall quality of the animal.

<u>Where to Purchase Heifers.</u> Heifers can be purchased through private treaty or through auction sales. Information on breeders or other sources of heifers can be found from other heifer exhibitors, on the internet, or show-oriented magazines such as "The Showbox" or "Purple Circle."

Ownership Requirements. For most shows, heifers are required to be registered in a breed association and have an original set of papers during check-in at the show. Many shows have an ownership deadline for the heifers to be registered in the name of the 4-H member and Exhibitors' Handbooks for individual shows should be consulted for these dates. In addition to registration papers, heifers must have a breed approved form of permanent individual identification (brand or tattoo) at the time of show check-in.

Facilities and Equipment. Facilities need not be elaborate; just basic, functional facilities will be adequate for a successful project. A minimum of 75 sq. ft. of well ventilated and drained covered space per heifer is recommended. An additional .25 acres (100 ft. x 100 ft.) is also recommended to allow the heifer to exercise. Make sure that heifers have adequate shade during the summer and consider installing fans for additional cooling. Access to clean, fresh water and clean feed troughs are very important in maintaining the health of the heifer as well as good growth and performance. Facilities should cleared of manure and feed refusal daily to help maintain a good environment for the heifer project. Other equipment needs may include water buckets,

feed pans, brushes, combs, water hose, trimming chute, electric clippers, hot air blower, rope halters, show box, extension cord, and electric fan.

Nutrition. There are no magic feeds or supplements that make champions. Successful breeding beef heifer projects are based on meeting the basic nutritional requirements of the growing animal. The basic nutrients required by beef heifers are water, protein, energy, minerals and vitamins. A balanced commercially mixed feed that is 12 to 13 percent crude protein and contains 45 to 60 percent corn depending on the desired animal gain is the basis of the beef heifer's diet. Heifers should consume 1.5 to 2.5 percent of their body weight per day divided into two feedings (morning and evening). A feed that is consistent from bag to bag and fresh is very important in order to maintain feed consumption and heifer performance. Also, make sure that a set daily feeding schedule is maintained and make any changes to the diet gradually over several days to avoid digestive problems. Be sure to monitor heifer body condition (external fat cover) and adjust the diet as necessary for optimal condition.

Health. Every day that a beef heifer is sick is one day that the animal has not gained weight or potentially has lost weight. Thus, minimizing the number of days that a heifer is sick during the feeding period is important for the success of the project. Prevention is the key to any animal health program. Assume that the heifer has received no vaccinations and implement a vaccination program according to your local large animal veterinarian's recommendations. Also, be sure to administer booster vaccinations as recommended on the label or as directed by your veterinarian. Deworm heifers upon arrival and at least twice a year thereafter. Monitor the daily habits of your heifer as well as her physical appearance. Depressed eyes, droopy ears, nasal discharge, labored breathing, a change in routine, and feed refusal are all signs of potential illness. The faster a diagnosis is made, the sooner she can be on her way to recovery. When administering drugs, always follow label instructions, administer injections in the neck region (or front elbow pocket for subcutaneous injections) according to Beef Quality Assurance procedures, and adhere to the withdrawal time before slaughter. The use of any drug in a manner other than stated on its label is regulated by the Food and Drug Administration and may be done only under the control of a licensed veterinarian. Texas livestock shows have strict policies against the illegal use of drugs and will disqualify animals if such drugs have been used. Even though the breeding heifer project is not a terminal project, livestock shows have the right to test for substances that may illegally alter animal performance.

Management. The amount of work that is put into a beef heifer is a direct reflection of the success of the project. Daily care of the beef heifer is just as important as nutrition, selection and health. Paying attention to the details is important. Daily washing or rinsing, hair grooming, walking and showmanship practice are key aspect of successful beef heifer projects. Hair (within the hair breeds) is a competitive advantage for exhibitors that work hard at growing and grooming it. In breeds that are shown slick, hair and skin care is just as important but requires less work. Success is not free, it takes work to achieve it, and show heifers are no exception.

Rules. References to the Exhibitors' Handbook (rules) have been made numerous times within this publication. Each show is different and the rules change from year to year. Each year, take the time to review the rules of each show and keep a copy of the rules on hand while at the show. Ignorance of the rules is not a valid excuse for breaking them. One key section in all Exhibitors' Handbooks is the "Animal Health Regulations.. Most major livestock shows (and some county shows) require a current set of health papers on an animal before entry into the show grounds. Review the health requirements outlined in the Exhibitors' Handbook at least a month before the show because some tests required by the Texas Animal Health Commission take a week or more to perform.

Additional References.

Managing Beef Cattle For Show. AS 1-2.