



October 5, 2017

Dear 4-H, FFA, Independent & Jr. Grange Exhibitors, Leaders, and Advisors:

Enclosed please find copies of the 2017-2018 Beef Replacement Heifer Manual and the Project Agreement and associated forms. If you should you require additional copies, forms will also be posted on the Amador County Fair website, at www.amadorcountyfair.com. The forms are located under the Competitions tab, or are available at the Amador County Fair main office. Contact the Fair office or check their website for days and hours of operation.

IMPORTANT FACTS TO KNOW:

- ✓ Replacement heifers must be owned by the exhibitor on or before November 1, prior to the year the animal will be shown.
- ✓ Project Agreement forms must be completed by each exhibitor intending to show a replacement heifer at the 2018 Amador County Fair; forms and copy of bill of sale and/or yellow transportation form (Form 74-036) are due no later than Friday, January 26, 2018.
- ✓ One (1) Photo of the replacement heifer project must be provided by the exhibitor. They must be 4"x6" in size and developed and printed on photo processing paper; regular copy paper will not be accepted. Photos should be attached to the Beef Replacement Heifer Sales Catalog Information form that is due Wednesday of fair at the weigh-in. Photos may also be emailed to circleranch@volcano.net.
- ✓ Exhibitors must fill out all paperwork completely and legibly, and all signatures must be on the project agreement forms or the agreement will be rejected.
- ✓ A \$20 entry fee will be assessed when entry forms are due. This entry fee includes the cost of the March pregnancy check and the July (fair) pregnancy check and associated veterinarian fees that are not required for market animals.
- ✓ A required pregnancy check will be held in March of 2018, date, time and location to be determined. Project exhibitors will be notified by the fair of all details in February 2018.

If you should have any questions, please feel free to contact me via e-mail at entries@amadorcountyfair.com

Sincerely,

Kathy Simmons
Entry Department
Amador County Fair

Enclosures



2017 - 2018 BEEF REPLACEMENT HEIFER PROJECT MANUAL

Amador County Fair
26th District Agricultural Association
P.O. Box 9
18621 Sherwood St.
Plymouth, CA 95669
209-245-6921
rev. 10-05-2017



TABLE OF CONTENTS

| | |
|--|---|
| Introduction..... | 1 |
| Objectives of Beef Replacement Heifer Project..... | 1 |
| Selection of Heifer..... | 1 |
| Economics and Financing..... | 2 |
| Facilities and Tack (Equipment)..... | 3 |
| Feeding/Nutrition..... | 3 |
| Feeding Guidelines..... | 4 |
| Breeding..... | 4 |
| Health..... | 5 |
| General Rules for Beef Replacement Heifer Project..... | 6 |
| Exhibitor Eligibility..... | 6 |
| Heifer Eligibility..... | 6 |
| Temperament of Heifer..... | 7 |
| Owner Requirements and Project Agreement..... | 7 |
| Photograph Requirements..... | 7 |
| Animal Substitutions..... | 8 |
| Insurance..... | 8 |
| Judging..... | 8 |
| Beef Replacement Heifer Sale..... | 9 |
| After Sale..... | 9 |
| Following Fair..... | 9 |

Attachments

Beef Replacement Heifer Project Agreement

Beef Replacement Heifer Sale Catalog Information Form

Beef Replacement Heifer Project Deadlines and Schedule



Introduction

Raising a beef replacement heifer gives 4-H, Future Farmers of America (FFA), Jr. Grange and independent youth an opportunity to expand their knowledge in a breeding project related to commercial cattle production. Because of the difference between raising breeding heifers and market beef, this manual, as well as several publications mentioned later, are recommended reading for anyone planning to raise or supervise a replacement heifer project.

Objectives of the Beef Replacement Heifer Project

The objectives of the Beef Replacement Project are the following:

1. Learn basic management practices of the beef cattle breeding business
2. Learn the economics of raising a beef replacement heifer
3. To select and raise quality heifers that meet the requirements of local commercial cattle producers in order to expand and/or upgrade existing herds

Selection of Heifer

In deciding which breed or cross breed heifer to buy, take the following factors into account:

Differences between breeds in:

- ✓ Rate of gain per day
- ✓ Size of breed
- ✓ Disposition of breed
- ✓ Fertility
- ✓ Optimum breeding age
- ✓ Milk production

Larger breeds eat more, usually reach sexual maturity at a later age, and are heavier in weight than smaller breeds. They may also be more difficult to handle, especially for smaller and/or younger exhibitors.

High-milking breeds raise fast gaining calves, but they also require more feed to maintain regular reproduction, a possible disadvantage on dry range conditions.



Try to avoid heifers that are extreme in size. Most California cattlemen prefer cows of medium size and milk producing ability. Pay attention when choosing your heifer to be aware of the preference(s) of the commercial cattlemen that make up your market.

Select feminine-appearing heifers that will weigh at least 650 pounds and are 12 – 16 months old at breeding time (December through January). Replacement Heifers must weigh a minimum of 900 pounds at Fair weigh-in to be eligible for show and sale.

You may consider crossbred heifers since they typically wean heavier calves, (due to hybrid vigor), than purebred cattle. The project rules state that the sire of your heifers must be a beef breed and low birth weight, calving ease bulls.

Remember that you must halter break your heifer, be able to lead and have control of your project, and the heifer needs to be calm around crowds. Try to avoid selecting a high-headed or "wild" heifer.

Economics and Financing

Before purchasing a heifer, find out the prevailing market price for beef heifers. Since most of the heifers from this project will go into commercial herds, it is wise to buy heifers at reasonable prices.

The income from commercial cattle is not expected to be high enough for commercial cattlemen to justify paying inflated prices as is sometimes done for registered breeding animals and market animals. When selecting project calves from the top of the herd, however, it may be necessary to pay more than market price.

Exhibitors should formulate a budget of expected expenses before starting the project. Project rules require that accurate recordkeeping be done and kept updated and current.



Facilities and Tack (Equipment)

If you keep your heifer in a pen, allow about 900 square feet for adequate exercise area. Be certain it is sturdy enough to keep the heifer enclosed.

If a shelter is used to protect your heifer from winter storms and summer sun, a shed, lean-to, or box stall measuring 10' x 10' should be large enough for one heifer, with additional pen space for pasture. Make sure it is well ventilated.

Cattle require equipment or tack. There are many different types of show tack and grooming supplies that you can purchase. Check with your leader/advisor/parent regarding what grooming supplies you will need or may be allowed to use at the fair. Some required tack/equipment includes:

- ✓ Strong rope halter
- ✓ Water and feed troughs
- ✓ Brush and combs
- ✓ Show halter
- ✓ Show stick

Feeding/Nutrition

There are many ways to feed your heifer. Some are more efficient than others, but may not be available to you where your heifer is being kept.

If you graze your heifer on irrigated pasture, about half acre of good pasture will support her during the best growing season, March through October. Additional feed will be needed the remainder of the year. Remember, it is easy for the heifer to become too fat on irrigated pasture, be careful not to supplement the heifer too much.

Rangeland is also a good feed source, but it will take two (2) to ten (10) acres of rangeland, depending on soil and rainfall, to carry the heifer during the green season (about January to May). Although animals on the range are more independent than those in enclosed pens, exhibitors should work with all project animals regularly to train and fit them for the fair, and also monitor their health and nutritional condition.

Heifers not on rangeland or pasture will need about two (2) to two (2) ½ pounds of alfalfa hay or a mix of grass or grain hay and alfalfa per 100 pounds of body weight. Oat, barley or grass hay, when substituted for part of the alfalfa hay, can help reduce scours. Additionally, prevent your heifer from becoming too fat as this can impair calving and milk production. Unlimited access to irrigated pasture can lead to an overly fat condition.



Cereal hay or grass hay can be fed free-choice combined with $\frac{1}{2}$ pound of cottonseed meal and one (1) to one (1) $\frac{1}{2}$ pounds of barley, rolled or ground. If alfalfa hay makes 50 percent or more of the hay ration, the cottonseed meal can be eliminated. If the heifer gains too rapidly and starts to get too fat, reduce or eliminate the barley.

If good range or irrigated pasture is available, no other feed is necessary. When range becomes dry, a protein supplement, such as, one (1) to one (1) $\frac{1}{2}$ pounds of cottonseed meal fortified with vitamin A, is needed. Vitamin A can also be injected.

Heifers should be managed to maintain a continuous rate of growth not exceeding about one (1) to one (1) $\frac{1}{2}$ pounds per day, depending on breed and skeletal size. They must weigh a minimum of 900 pounds at weigh-in at the Fair in order to qualify for the beef replacement heifer class.

Feeding Guidelines

- ✓ Feed at regular times (once or twice daily)
- ✓ Feed at the same time each feeding
- ✓ Keep feed and water troughs clean at all times
- ✓ Do not change types/brands of feed suddenly
- ✓ Have plenty of fresh clean water available at all times

Breeding

The rules for this project specify that heifers ***must be bred*** to calve between September 1 and October 31 following the fair. Assuming a nine (9) month gestation, the heifer should be bred no later than January 31 the year of the fair (December through January). By calving in September/October, the heifers should have enough time to cycle for their second breeding season.

Heifers may be bred naturally or by artificial insemination. The heifers should be bred to small frame bulls to low birth weight, ease of calving bulls, one of the English breeds in order to reduce calving difficulty.

It is recommended that the bulls be semen tested for fertility. Leaving a heifer with bull(s) for 45 days or more should cover at least two (2) estrous cycles.

The heat period, the time when your heifer will breed, will usually last from 12 – 24 hours. The heifer will usually repeat the heat period about every 21 days until in calf. As a general rule, a heifer should be inseminated within 12 – 24 hours after first being observed in heat.



The gestation period, the time after breeding until the calf is born, is about nine (9) months, or 283 days, depending on the breed.

Heifers that calve prior to or during the Amador County Fair Beef Replacement Heifer show will be disqualified and ineligible to show or sell through the Beef Replacement Heifer show and sale.

Accurate records must be kept on the heifers. It is important that exhibitors have dates written down when the heifer was exposed to the bull and any other information that could be beneficial to the potential buyer.

Owning and managing a replacement heifer is not without risk. A number of factors can delay or prevent conception and calving. Some of the causes include: diseases, nutrition, sexual immaturity, genetic defects, and physical injury. Should you have any questions regarding your replacement heifer and her ability/inability to breed, contact your leader/advisor, your breeder, and your local veterinarian.

Health

There are many common cattle diseases that exhibitors should be aware of. At the start of the project, exhibitors should consult with your veterinarian for vaccination and health management recommendations to avoid common diseases. Certain vaccinations can only be administered by licensed veterinarians. California State law requires that beef heifers over 12 months of age show evidence of calf hood brucellosis vaccination if they are sold within the state for breeding purposes.

It is mandatory that the Brucellosis ear tattoo number (not orange metal clip number) be entered on the Project Agreement form. This information should be obtained by the exhibitor from the breeder. This information is required on the Project Agreement form and the agreement will not be accepted without it. Additionally, all heifers will be checked by the veterinarian upon arrival on the fairgrounds, and those heifers having no tattoo, shall be disqualified from show competition.

Treatment for stomach and intestinal worms may be beneficial, especially for heifers on irrigated pasture. A fecal count for worms is suggested, if feasible.

Be aware of possible infestations of parasites such as grubs, lice, ticks, face flies, and hornflies. If treatment is necessary, carefully follow the directions on the label of the product being used.

Ensure your Replacement Heifer project hooves are healthy and trimmed prior to coming to the fair.



General Rules for Beef Replacement Heifer Project

Exhibitor Eligibility

To be eligible for the Amador County Fair Beef Replacement Heifer project, the exhibitor must:

- ✓ Be a member, in good standing of an 4-H or Jr. Grange Club or FFA Chapter in Amador County, or
- ✓ Be a qualified independent junior exhibitor from Amador County (Refer to State and Local rules for eligibility and qualifications)

Heifer Eligibility

Registered or grade beef replacement heifers are eligible projects. Grade heifers must be without horns. The sire of the heifer must be of a beef breed and low birth weight, ease of calving bull. If an exhibitor declares that the heifer is registered, the registration papers must be signed off and submitted to the Jr. Livestock Office before the heifer will be allowed to sell in the Replacement Heifer auction.

The age limit for a heifer is a minimum of 20 months and a maximum of 30 months on the Tuesday of the fair. Heifers must weigh a minimum of 900 pounds at weigh-in during the fair, and be bred to calve between September 1 and October 31 of the year shown.

All beef replacement heifer projects are to be physically located in Amador County and project maintenance to be completed by the owner (junior exhibitor) of the project.

These requirements will be verified at the scale by the certified weighmaster, the attending veterinarian, and fair management. Heifers will be pregnancy tested at the Wednesday weigh-in at the fair by blood sample taken by a veterinarian designated by fair management. Pregnancy results will be available Wednesday afternoon and heifers with any questionable results will have the opportunity to retest with a physical pregnancy test administered by a veterinarian designated by fair management. Any exhibitor wishing to re-check by having a physical pregnancy test must contact the Beef Replacement Heifer Project Chair(s).

It is mandatory that the Brucellosis ear tattoo number (not orange metal clip number) be entered on the Project Agreement form. All agreements without this information will be rejected. Heifers will also be checked by the veterinarian upon arrival on the fairgrounds, and those heifers having no tattoo, shall be disqualified from show competition. A brand inspector will conduct brand inspections at the Wednesday pre-weigh at fair.

Those heifers that do not meet the criteria will be disqualified from show competition.



Temperament of Heifer

Heifers must be gentle, halter-broke, and be able to be led by the exhibitor. The Fair management reserves the right to disqualify, as ineligible for show competition, and, order the removal of any beef replacement heifer project entry from the fairgrounds, that is not gentle and properly halter broke to lead, if it is determined that the beef entry may endanger other exhibitors and the fair-going public.

Ownership Requirements and Project Agreement

The project members must have ownership of their heifer by November 1 of the year prior to the fair. You are required to complete a Project Agreement and return it to the Amador County Fair office by the due date of Friday, January 26, 2018.

Project Agreement forms will be available to all exhibitors, project leaders and advisors, and independent exhibitors at the fair office and online at www.AmadorCountyFair.com. A copy of the Bill of Sale and/or yellow transportation form (Form 74-036) must be submitted with the Project Agreement as proof of ownership for all heifers. ***The original Bill of Sale and transportation form must be retained by the exhibitor and presented to the State Brand Inspector at the fair during the Wednesday weigh in/pregnancy check.***

If you do not submit your Project Agreement with all the required attachments and signatures by the January due date, your Project Agreement will be rejected and you will be unable to show a Replacement Heifer project at the Amador County Fair.

Photograph Requirements

All exhibitors must submit one (1) color photograph of their animal with the Beef Replacement Heifer Sale Catalog Information form. This form and attachments are due the Wednesday of the fair at the weigh-in/pregnancy check. The photograph submitted needs to have the exhibitor visible and show the full profile of the heifer. Please write the name of exhibitor on the back of each photo. Only photos on photo processing paper will be accepted. Photos may be emailed to circleranch@volcano.net.



Animal Substitutions

If a breeding or health problem should occur, as evidenced by a veterinarian, a substitute replacement heifer may be allowed if owned by the member on or before 30 days following the initial pregnancy test in March. No substitution will be allowed unless:

- ✓ The exhibitor submitted a Project Agreement on the original heifer by the original deadline
- ✓ Receives approval from the Replacement Heifer Chair(s) and fair management on the substitution
- ✓ Submits a written justification for the substitute and evidence from the attending veterinarian

Insurance

Consider buying insurance for your heifer while at the fair. Insurance is available through the fair office.

Fitting and Showing

4-H, FFA, and Grange project manuals have detailed information on the fitting and showing of beef cattle. The internet also has many references available for viewing or downloading.

Heifers that are not registered should be without horns. Dehorning may be necessary. The same hair clipping procedure used for market steers is acceptable for replacement heifers.

Judging

The Danish system of judging will be used at the Amador County Fair. The Beef Replacement Heifer judge will have the final decision on how the classes will be broken. The judge's decision will be final.

A Grand Champion and a Reserve Grand Champion Beef Replacement Heifer will be selected by the judge. Heifer projects awarded blue, red or white ribbons in show competition qualify for the Beef Replacement Heifer sale held during the Fair.

Non-champion heifers that qualify for the sale are not required to sell, but must inform the Jr. Livestock Office immediately following the heifer show in order to be removed from the sale order. Champion and Reserve Champion heifers cannot be removed from the sale. Per Amador County Fair rules, all champions sell.



Replacement Heifer Sale

Heifers that qualify may be shown in the beef Replacement Heifer division at the Amador County Fair in July. The rules on the last two (2) pages in this manual and the 2018 Amador County Fair Premium Book state the requirements for the Replacement Heifer division. Heifers are not required to sell; however, the exhibitor must inform the Jr. Livestock Office immediately following the show in order to remove the heifer from the sale. This option does not exist for Champion and Reserve Champion heifers. All champion animals must sell.

An exhibitor may not show or sell more than one (1) beef Replacement Heifer project at the Amador County Fair per year. *If a replacement heifer project calves prior to or during the Fair, the project will be disqualified and will be ineligible to show or sell in the Beef Replacement Heifer show and sale.* If a Heifer does calve, the exhibitor can choose to show the cow/calf pair in the Jr. Livestock Breeding classes. Should the exhibitor choose this option, the Jr. Livestock Office and Beef Replacement Heifer Chair(s) must be notified immediately in order to add the entry to the appropriate breeding class.

After Sale

Exhibitors need to ensure proper feed and water management until the replacement heifer project leaves the fairgrounds. Coordinate with your buyer(s) to determine responsibility and feeding/watering schedule if your heifer project is not leaving the fairgrounds immediately after the sale.

Following Fair

Since the successful end of the heifer replacement project is a healthy calf at weaning time, it is important that the exhibitor acquire follow-up information on calving and weaning from their buyer, if possible.



BEEF REPLACEMENT HEIFER PROJECT AGREEMENT

This project agreement must be completed and returned with all required attachments and signatures to the Amador County Fair office by Friday January 26, 2018 to be eligible to show a Beef Replacement Heifer project at the 2018 Amador County Fair. The project rules should be read thoroughly before signing this agreement.

Note: All heifers must be owned by November 1, 2017 and the bill of sale/yellow transportation slip (Form 74-036) must be reflective of this date. For Amador County Fair office days and hours, please contact the fair or check their website. **All Fields on Project Agreement Form are Mandatory.**

Please print clearly or type. Forms that are not legible or are incomplete shall not be accepted.

Name of Exhibitor: _____

Club/Chapter: _____

Mailing Address: _____

Street Address: _____

Telephone Number: _____

Email: _____

Name/Nickname of Heifer: _____

Breed(s) of Heifer: _____

Color and Markings of Heifer: _____

Date Heifer came under Ownership: _____

(Attach copy of Bill of Sale/yellow transportation slip)

Brucellosis Ear Tattoo (Required): _____

(This information obtained by breeder. This will be a capital letter, shield sign and year)

Heifer Location: _____

(physical address)

SIGNED STATEMENT

We have read the manual and attached information to this Beef Replacement Heifer Project Agreement and will abide by the project rules and State and local fair rules. Project and exhibitor disqualification will result if the rules are not followed.

Exhibitor Name: _____

Exhibitor Signature: _____

Dated: _____

Parent/Guardian Name: _____

Parent/Guardian Signature: _____

Dated: _____

Leader/Advisor Name: _____

Leader/Advisor Signature: _____

Dated: _____



BEEF REPLACEMENT HEIFER PROJECT SALE CATALOG INFORMATION

NAME OF EXHIBITOR: _____

CLUB/CHAPTER: _____

Heifer Information

Breed: _____

Color & Markings: _____

Birth Date: _____
(Month and Year)

Is the Heifer Registered? _____

Name of breeder and
address of where heifer
was purchased: _____

Breed of Heifer's Sire: _____

Breed of Heifer's Dam: _____

Breed of Bull Heifer was
bred to: _____

Heifer was bred by: Artificial Insemination (AI) ☐ Natural ☐

If AI, name of bull: _____

If Natural, dates heifer
was exposed to bull(s): _____

Personal Biography: Attach a one paragraph personal biography with form.

***This information is very important for the Beef Replacement Heifer Sale Catalog.
Please complete the entire form and with the required photographs and
biography to the Beef Replacement Heifer Chair(s) on
Wednesday of fair at weigh-in/pregnancy check.***



BEEF REPLACEMENT HEIFER PROJECT DEADLINES & SCHEDULE

- ✓ Must have ownership of Beef Replacement Heifer project by November 1, 2017. Bill of Sale and/or yellow transportation slip (Form 74-036) required.
- ✓ **Project Agreement Form must be completed and returned to/received by the Amador County Fair office no later than close of business Friday, January 26, 2018.**
- ✓ An introductory meeting will be held after the Beef Replacement Heifer Project Agreement deadline. The Beef Replacement Heifer Project Chair(s) will contact the exhibitors and leaders/advisors of the date, time and location of meeting.
- ✓ If you have met the first ownership deadline of November 1, 2017, met the requirements listed in the manual and received approval from Fair Management and the Beef Replacement Heifer Chair(s), a substitute heifer may be allowed only if a health or breeding problem occurs on or before the initial pregnancy test date in March 2018 (date, time and location to be determined). Exhibitors will have 30 days to replace the original Beef Replacement Heifer project.
- ✓ Heifers must be bred to calve between September 1st, and October 31st. This requires that breeding **must** occur December through January.
- ✓ Information regarding the initial pregnancy test in March will be sent to the exhibitor, leaders and advisors in February 2018.
- ✓ The Sales Catalog Information form and attachments are due the Wednesday of the fair at the weigh-in/pregnancy check.
- ✓ Ensure that you are aware of the Amador County Fair office hours and days of operation in order to meet required deadlines.

CONTACT INFORMATION:

Amador County Fair

(209) 245-6921

entries@amadorcountyfair.com

Beef Replacement Heifer Project Chair(s)

Tim and Jill Curran

(209) 765-0450 (Jill)

(209) 765-1815 (Tim)

CircleRanch@volcano.net