

MAUI 4-H LIVESTOCK BREEDING BEEF PROJECT RULES

2019 – 2020

INTRODUCTION

The Maui 4-H Livestock Program is part of a nationwide educational program. It is sponsored by the USDA, the Cooperative Extension Service of the University of Hawaii, and the Maui County 4-H Livestock Committee.

The goal of 4-H is to assist young people in acquiring knowledge, developing skills, and forming attitudes that will enable them to become self-directed, productive, and contributing members of society.

4-H projects emphasize learning-by-doing with emphasis on livestock management, and physiology of their animals. The Maui County 4-H Livestock Show offers an opportunity for 4-H'ers to practice responsible skills, and develop leadership in areas of organization, showmanship, judging, and marketing of their animals.

The dedication and commitment of the 4-H leaders, families and members of the community who make this program possible are gratefully acknowledged.

4-H Youth Eligibility for Show

The 4-H Beef Heifer Project is open to all youth who are 9 years of age as of 1/1/20 and have not turned 19 by 1/1/20. On 1/1/20 if a 4-H'er is between the ages of 9 - 13 they will be classified as a junior; if between the ages of 14-19, they will be classified as a senior. The 4-H'er must be a member in good standing and enrolled in the 4-H heifer project with their County CES office prior to the heifer weigh-in.

Membership dues of \$5.00 per 4-H'er, will be collected on/or-before the weigh-in along with the project registration fees. The 4-H'er should be physically capable of handling his/her animal and should be physically caring for their own animal daily throughout the project. The 4-H'er must have attended at least one Quality Assurance Class within the project year. This class is to be coordinated with the assistance of the Maui 4-H Livestock Board and CTAHR Extension Agents. A registration fee of \$60.00 per project will either be collected at the first weigh-in, on the designated pick-up date, or at the general membership meeting, prior to the Beef Heifer Weigh-in. Fees will be collected by a person designated by the committee and will be submitted to the treasurer. Registration fees are non-refundable in the event the animal dies.

Heifer Eligibility for the Project

Registered or commercial grade beef replacement heifers are eligible projects. Registered heifers from horned breeds may be shown with horns, so long as those horns are trained using horn weights or an effective sloping procedure (contact your Extension Agent for more information). Grade heifers must be naturally polled (without horns), dehorned, or tipped. The sire of the heifer must be of a beef breed. If an exhibitor declares that the heifer is registered, the registration papers must be signed-off and submitted to the CTAHR Livestock Agent before the heifer will be allowed to sell. Heifers will be declared ineligible if the animal is not of an acceptable beef type and conformation. Any animal showing predominant (over 50%) dairy breed characteristics shall be eliminated. The animal may be screened for some major defects by the CTAHR Livestock agent.

All project heifers will be weighed, ear tagged, have DNA collected (using TSUs) and checked for eligibility at this first screening and weigh-in, to be held on November 16, 2019. At the time of the initial weigh-in, the 4H'er must declare which breeding beef divisions their heifer is designated as: 1) Open-heifer or 2) Bred-heifer (more information below); this designation is final and will not be changed during the project year. 4-H'ers that meet the eligibility requirements may enter animals in one, or both divisions within a giving project year. The DNA collected from each heifer will be used for disease screening and genomic analyses. It is recommended that 4-H'ers accompany their animals at the weigh-in. All heifers should be non-pregnant at the time of the initial weigh-in.

Heifers are expected to be gentle and trained to lead with a show halter, therefore it is recommended that 4-H'ers begin training their animals at the start of the project. To be eligible for the beef heifer contest at the State Farm Fair, the heifer must have earned blue ribbon status at the county show.

4-H'ers who decide to raise, show and retain an Open-heifer, may enter that animal in the Bred-heifer division to take place in the following 4-H project year. Heifers cannot be transferred between 4-H'ers.

To be eligible for the Bred heifer division, the heifer must be pregnant (more details below), and not over 24 months old (via dentition; see Table 1) at the time of their county show and sale. Therefore, heifers should be born between 6/12/2018 and 1/8/2019 (see Figure 1) to meet breeding deadline (more information below).

Open Heifers		Bred Heifers	
Approximate Birth Date	Age at time of county show	Approximate Birth Date	Age at time of county show
7/7/19	11 months	12/9/18	18 months
6/7/19	12 months	11/9/18	19 months
5/8/19	13 months	10/10/18	20 months
4/8/19	14 months	9/10/18	21 months
3/9/19	15 months	8/11/18	22 months
2/7/19	16 months	7/12/18	23 months
1/8/19	17 months	6/12/18	24 months

Figure 1. Target ages at show, with respective birth dates for heifers exhibited in the breeding beef project.

To be eligible for the Open-heifer division, the heifer must be non-pregnant and between 11 months and 17 months of age, at time of the county show. To accomplish this, heifers should be born on, or after, January 1, 2019, but not later than July 7, 2019.

More information on aging cattle by teeth is found in Table 1.

Table 1. Typical cattle ages when permanent teeth erupt, develop, and wear.

Teeth	Cattle age at occurrence		
	Eruption	Full development	Wear
Incisors			
Pinchers	18 to 24 months	24 months	Leveled at 5 to 6 years, noticeable wear at 7 to 8 years
1 st intermediate pair	24 to 30 months	36 months	Leveled at 6 to 7 years, noticeable wear at 8 to 9 years
2 nd intermediate pair	36 months	48 months	Leveled at 7 to 8 years, noticeable wear at 9 to 10 years
Corners	42 to 48 months	60 months	Leveled at 9 years, noticeable wear at 10 years
Premolars			
1 st cheek tooth pair	24 to 30 months		
2 nd cheek tooth pair	18 to 30 months		
3 rd cheek tooth pair	30 to 36 months		
Molars			
4 th cheek tooth pair	5 to 6 months		
5 th cheek tooth pair	12 to 18 months		
6 th cheek tooth pair	24 to 30 months		

Breeding Guidelines for Bred-Heifer class.

Although tremendous variation does exist in calving seasons amongst cattle breeders in Hawai‘i, many operators calve in the fall, winter and/or early spring. In order to fit our 4-H livestock venues and in consideration of the local industry, Beef-heifer projects must be bred in order to calve between October 15th and February 7th (following the state livestock show and sale in which they do have the option to be exhibited in, only after earning blue ribbon status at the county show). To accomplish that goal, these heifers must be bred **no sooner than December 31, and no later than April 30th, of the current 4-H year.** The preferred breeding season to fit the calving season for the majority of ranchers in Hawaii will be between **January 1 - April 30;** albeit we acknowledge that some ranchers

prefer to calve in May. Heifers bred and managed according to these guidelines also provides an additional benefit to May-calving herds, as they have extra time to recover and regain body condition after having their first calf, and as a result will have a greater chance of rebreeding in a timely manner with the cowherd they will be joining.

Heifers may be bred by natural service or through artificial insemination (AI). Advantages to AI include improved biosecurity, and the ability to use a highly proven, calving ease bull with genetic merit for multiple traits. At least one round of AI is suggested for the project; contact your local county agent for more details. Regardless of AI or natural service mating, project heifers should be bred to bulls with low birth weights in order to reduce calving difficulty.

Heifers will be pregnancy tested at the mandatory pre-show in May by the county agent or a veterinarian. Heifers that are close to the April 30th breeding deadline may be re-checked again at the official weigh in prior to the county show. Heifers that are not pregnant will be disqualified from show competition and ineligible for sale in the auction. Pregnant heifers meeting these guidelines are eligible for entry in the Bred-heifer division contest.

Only Open-heifers that were designated as such at start of the project, and are not pregnant, are eligible for entry in the Open-heifer division contest.

Nutrition and Project Management

The member must have adequate facilities and feed for the project. Heifers should be fed a ration and/or managed on good pasture to achieve continuous growth throughout the project (gaining around 1.2 to 1.5 pounds of body weight per day). It is important that these heifers reach proper weights and body condition scores for successful breeding, maintenance of pregnancy, showing and sale. At the same time, the heifer should be managed so they do not become overly fat or obese; extremes should be avoided.

Accurate records must be kept on the heifers! It is important that members have dates written down as to when the heifer was AI bred and or exposed to the bull, along with any other data (supplemental sheet for the record book will be provided) that could be beneficial to the potential buyer. Prior to picking up the heifer, 4-H members should ask the breeder basic information about their heifer including the approximate birth date, breed composition, sire information (individual or multiple sire, age, breed, etc.) and dam (ID, age, breed, production record, etc.) and vaccination/deworming schedule. A supplemental sheet will be given to 4-H'ers enrolled in the Breeding Beef project to fill out and add to their project books.

Animal Health

At the start of the project, 4-H'ers should seek advice from the county extension agent or a local veterinarian about preventing diseases such as BVD, IBR, Leptospirosis, Vibriosis, and brucellosis through vaccination with the use of either modified live or killed vaccines. To maximize protection against reproductive loss, vaccinations against Leptospirosis (5-way) and Vibriosis should be given between 60 and 30 days prior to breeding. A booster vaccination against IBR and BVD is typically required between 60 and 30 days prior to breeding. Modified live viral vaccines for IBR and BVD are recommended. If killed viral vaccine products are used, two boosters are strongly recommended. Follow label directions for all products used. DNA collected from each heifer via TSU method at the start of the project will be sent to Kyle Caires, Maui County Livestock Agent, for disease screening.

Animal Substitutions

If a breeding or health problem (death, severe injury or illness) should occur, as evidenced by a veterinarian or the county agent, a substitute heifer maybe allowed if certified and approved in writing with the county agent no later than the third week of January. For substitution to occur, the 4-H'er is responsible for notifying their leader, the beef heifer chairperson and their county extension agent as soon as possible and the replacement animal will be weighed, tagged and have DNA collected accordingly to the aforementioned Breeding Beef (open-heifer and bred-heifer) project guidelines.

Screening Committee and Pre-shows.

The screening committee has the right to disqualify animals as ineligible for show competition, if they are not gentle and properly trained to lead, in order to prevent endangerment of other exhibitors and members of the public attending the show and sale. The beef committee will have one (1) tour and three (3) pre-shows at the same time as the Market Beef project. It is recommended that the 4-H'er attend as many pre-shows as possible to obtain performance data and to train their heifer to lead in public, while becoming accustomed to new people and surroundings. Participation in the final pre-show is mandatory, and at this time, heifers will be evaluated for age and pregnancy status by a local veterinarian or the county extension agent.

The Beef project tours are usually scheduled for a Saturday in January or February, 2020. TBA at a general membership meeting.

Pre-shows are scheduled for the following month. Date and times to be announced at general membership meetings:

Saturday, March ____, 2020,
Saturday, April ____, 2020,
Saturday, May ____, 2020.

Record Books

4-H'ers are expected to keep complete and current record and project books that reflect the goals, efforts, and expenditures of the 4-H member's project. Independence of family assistance will be evaluated. All books must be completed by 4-H'ers themselves. A supplemental sheet will be given to 4-H'ers enrolled in the Breeding Beef project to fill out and add to their project books. A completed project book is mandatory to enter the county show and auction.

The record books must be turned in by the leader to the Extension Office no later than 4:00 PM on the date to be determined by CTAHR agent. If not turned in by the specified date and time the 4-H'er will be disqualified. Record books must be signed by the club leader and taken by the club leader (no parents or 4-H'ers to turn in record books) to Maui Cooperative Extension Service, 310 Kaahumanu Avenue, Building 214, Kahului, HI. 96732. *Record books are invalid if 4-H participant drops out prior to mandatory pre-show.

County Show and Sale

To be eligible for the beef heifer show, all animals must be accompanied by the 4-H'er and be at the showgrounds, for weigh-in at a time and date specified by the 4-H Livestock Committee. Announcement of the dates will be made one month prior to the show. Record books must be completed by the aforementioned deadlines. Stall cards must be fully completed and in place by 8 a.m. Saturday (day of the contest).

The intent of 4-H Livestock projects is to allow all 4-H'ers an equal opportunity to purchase, raise, show, and market their animals. Club leaders will provide each project participant with a set of rules and a record book at initial project meeting. Any activity or intent to violate these rules will be grounds for declaring the animal and 4-H'er ineligible for the show and sale. Any inhumane treatment of animals will result in disqualification. The Livestock Committee will be informed of any violations of these rules. The screening committee, in conjunction with the judge, will have the authority to declare animals ineligible if they pose a danger to other participants in the show ring. Any grievances or criticisms of the Beef Heifer Project (including but not limited to, pre-shows, tours, contest and sale) should be submitted to the Maui 4-H Livestock Executive Board in writing and should include possible solutions to subject grievances or criticisms.

Official Dress

4-H members are expected to wear official 4-H dress while participating in all show classes and showmanship classes. This shall consist of a white shirt with the 4-H emblem on pocket, black or blue denim jeans and covered shoes. A 4-H cap or cowboy hat is optional.

Breeding Beef Heifer Contest

Heifers have to be palpated for pregnancy status and mouthed to determine that age requirements are met by a veterinarian or county agent prior to the weigh-in at the show. All heifers must be shown by the 4-H'er who officially enrolled the heifer at weigh-in of the project.

There will be two divisions for Heifers: Bred (pregnant) and Open (non-pregnant). Weight classes (if needed) will be determined by the show judge, and the livestock screening committee. Heifers will be judged on conformation, performance and overall quality and condition.

In the event that a 4-H'er has multiple beef projects (e.g., steer and heifer), their live placing scores will be averaged across the species to promote fairness and prevent inflation due to multiple projects for tabulations where supreme/overall contests and awards are given.

Auction and Sale

The sale order for heifers will be according to their placement in the show (the highest placed animal, sells first). The show judge will determine the final sale order. Following the heifer shows, 4-H exhibitors must declare if their Breeding Beef project heifer will be sold at auction or retained. This decision is final. Breeding Beef projects eligible for the sale, will not be auctioned by pound, but rather by the lot.

Prior to the auction, announcements will be made to (1) inform buyers which heifers are pregnant and non-pregnant; and (2) that all heifers sold through the sale are sold as breeding animals, as-is, with no slaughtering process provided. Following the sale, the 4-H exhibitor shall pay to the Maui 4-H Livestock Association: (1) 5% of sale price of animal, and (2) any unpaid fund raiser money, if applicable, in addition to the Membership Dues and Registration Fees collected at the start of the project. As previously mentioned those fees will be collected by a person designated by the committee and will be turned in to the treasurer. Again, in the event of mortality, those fees are not refundable. (Note: Cash or Checks payable to the Maui 4-H Livestock Association will be accepted. In the event a check is returned for insufficient funds a return fee of \$35 will be charged.)

Beef Showmanship Contest

Each 4-H participant must show the heifer or steer that they officially enrolled at the weigh-in of the project to be eligible for the beef showmanship contest. There will be a junior and senior showmanship contest that will be judged on an individual basis, in both the senior and junior classes. Junior members are aged 13 and below; seniors must be 14 years old as of January 1" of the current project year. The animals will be judged for cleanliness, grooming, and training. The 4-H contestant shall be judged for appearance and proficiency in stockmanship that goes with the proper fitting, showing of the animal, and the ability to answer questions the judge may have. No 4-H participant will be exempt from the Showmanship contest unless the beef chairperson was previously notified and a written excuse was approved by the county agent. Should a 4-H'er participant not comply, they will be excluded from the Herdsmanship competition.

The top two (2) showpersons from the Beef Showmanship contest are eligible to participate in the Master Showmanship competition. In the event that one (1) or both of these top two (2) winners choose not to represent the Beef species in the competition, then the third-place senior runner up will be eligible to compete in the Master Showmanship competition. Animals for the contest will be selected by the judge, county extension agent and a committee of the species chairpersons.

Beef Herdsmanship Contest

The beef Herdsmanship contest will be judged on an individual basis, in both senior and junior classes and be handled in the same manner for exhibitors of breeding heifers or market steers.

Record Book Contest

The Breeding Beef Record Book contest will be judged on an individual basis, in both senior and junior classes and be handled in the same manner for exhibitors of market steers. In the event that a 4-H'er has multiple beef projects, their record book scores will be averaged across the species to promote fairness and prevent inflation due to multiple projects whenever overall point totals are tabulated.

Genomic Values / Genetic Evaluation Contest

All heifers enrolled in the Breeding Beef project will participate in the Genomic Evaluation contest. The heifers will be ranked based on their genomic values for multiple economically relevant traits following genomic analysis of the DNA collected at the start of the project. Kyle Caires, Maui County Livestock agent, will tabulate the results similar to those in carcass contests, and results will be provided to the 4-H'ers at the awards contest following the county show.