# Procedures for the Pennsylvania Heifer Development Program

## 2022-2023

## Why Should I Consider Professional Heifer Development?

"The replacement heifer is a mixed blessing for most cow-calf operators. On one hand, she represents future profitability and genetic improvement of the cow herd, thus her selection and development are of paramount importance to the continued success of any operation. On the other hand, the replacement heifer is an inconvenience at best. Her smaller size and higher nutritional requirements dictate she be raised and managed separately from the rest of the herd; yet the fact that she is essentially non-productive for the first two years of her life makes her easy prey for mismanagement. Nevertheless, proper growth and development of the replacement female from birth until she produces her first calf is of critical importance for her to become a highly productive part of a beef producer's business." (Heartland Cattle Co., 2009).

"The purpose of the PHDP is to provide small beef producers in Pennsylvania and surrounding states with a method to successfully identify, develop, grow, and breed replacement heifers."

1. Identification and delivery. Heifers born between January 1 and April 15, 2022 will be delivered to the Pennsylvania Livestock Evaluation Center October 11, 2022. They will be individually identified, weighed, measured for frame size, and penned in the facility. Both commercial and purebred heifers will be accepted. Heifers must weigh at least 450 pounds at deliveryand must meet all health requirements of the program. All heifers are required to arrive with an inserted 840 USDA RFID ear tag that is registered to the premise number of their farm of origin. At the time of delivery all heifers will be numbered, by pen, at the beginning of the test and will carry this number throughout the test and sale.

#### 2. Health Requirements

A. All heifers shall be accompanied by a Certificate of Veterinary Inspection **issued within 30 days prior to arrival** by an accredited veterinarian. All heifers originating from states other than Pennsylvania must meet current requirements for importation into Pennsylvania.

The following statement must appear on the Certificate of Veterinary Inspection: "Johne's Disease (Paratuberculosis) has not been diagnosed in this herd within the past 12 months. There have been no clinical signs of BVD infection, mucosal disease or type II BVD in the herd of origin within the past 6 months, or cases of ringworm in the past 30 days".

All heifers must be negative to the following diagnostic tests conducted by an accredited veterinarian and the laboratory procedures performed by the Pennsylvania Animal Diagnostic Laboratory System (PADLS). The results must be present on the Certificate of Veterinary Inspection or be readily verifiable through the PADLS system. The following tests are required:

- a. Negative to an ELISA or AGID test for Leukosis conducted at an approved laboratory within 40 days of delivery.
- b. negative **C-ELISA** test for Anaplasmosis conducted within 40 days of delivery.
- c. negative to microscopic agglutination lysis test for 5 serovars of Leptospirosis (L. pomona, L. Hardjo, L. canicola, L. icterohemorrhagica, L. grippothyphosa) within 40 days of delivery. No heifer with a titer of 1:800 or greater for any one serotype will be accepted. The determination of eligibility for delivery for animals with titers between 1:100 and 1:800 will be determined by the LEC veterinarian in consultation with the veterinarian of the farm of origin, considering vaccination history and herd history.
- d. negative to a micro-plate virus isolation test for persistent infection with Bovine Virus Diarrhea virus within 40 days of entry. Ten cc of clotted blood in a red-topped plain vacutainer must be delivered to Animal Diagnostic Laboratory at Penn State within 48 hrs of collection and no later than Friday of each week. The samples must be kept chilled from the time of collection until arrival at Penn State.

- e. negative to a serum agglutination test for Brucellosis within 40 days of entry. All out of state heifers must meet current importation requirements.
- f. Heifers originating from Pennsylvania herds are exempt from Tuberculin test requirements. Heifers originating from out of state must have a negative intradermal test for Tuberculosis within 30 days of delivery.
- g. All heifers will be vaccinated against Rabies upon delivery to the Livestock Evaluation Center.

#### B. All heifers shall be immunized at the farm of origin as follows:

- a. receive one dose of an inactivated IBR, BVD, PI3, BRSV product more than 21 days and not more than 40 days prior to entry to LEC.
- b. receive at least one dose of an inactivated product against Hemophilus somnus and be immunized against Mannheimemia hemolytica (Pasteurella) using a commercially available product specifically targeted to the leukotoxin of the organism. Questions concerning acceptable products should be referred to the LEC station veterinarian (Dr. Griel, 814-865-1321).
- c. Receive at least one dose of a product containing antigens of 8 clostridial organisms.
- d. immunizations must be documented on the health delivery form supplied by the Livestock Evaluation Center and signed by the attending veterinarian.
- C. Heifers must be free of clinical signs of infectious and contagious diseases upon arrival at LEC. This includes active ringworm, active pinkeye, warts, etc. Heifers meeting any one of the following criteria will not be accepted for penning:
  - a. clinical signs of infectious and contagious disease upon arrival at LEC
  - b. inability to verify diagnostic test results.
  - c. immunizations not performed at least 21 days prior to delivery
- D. All horned heifers must be dehorned in time to allow proper healing before the heifers enter the Center.
- E. No implanted heifers will be accepted for the test or sold through the sale.

#### HEALTH AND VETERINARY CARE:

- 1. Health of the heifers will be under the supervision of the Veterinary Clinic Service at The Pennsylvania State University.
- 2. Any heifer deemed clinically unsound during the test will be removed from the test. This decision will be made by the Center Director and the Center veterinarian, or his designee.
- All heifers will be treated for control of internal and external parasites and be vaccinated for clostridial diseases (<u>blackleg</u>, <u>malignant edema</u>, <u>enterotoxemia</u>).
- 4. Consignors will pay for all incurred veterinary treatment costs.

### 3. Development and Breeding

All heifers consigned to the PHDP and delivered to the LEC in October must remain in the facility until pregnancy diagnosis is received, unless they are removed for reasons of health or disposition. A producer may consign a heifer to the program in the Fall 2022 and have two options for use of the heifer. The first would be the heifer would be returned to the consignor after all financial settlements are made and at least 45 days after a successful pregnancy test. (Research shows heifers should not be transported within 45 days after breeding due to a higher incidence of early embryonic mortality.) The minimum expected period of residence in the LEC is 224 days.

Heifers will be bred AI after synchronization with sires designated by the consignor. Heifers will be examined pre-breeding for reproductive soundness. All heifers will be simultaneously synchronized using a procedure determined each year based on efficiency, cost, and logistical soundness. Heifers may also be bred from visual observation for standing heat within the breeding period.

#### 4. Rations and Feeding Program

Heifers will be group-fed using rations designed by station personnel. Expected rations may include corn silage, corn, roasted soybeans, distillers byproducts, and alfalfa and grass hay and baleage. Baleage will be the preferred diet when availability and quality is sufficient. Body condition will be monitored continuously and rations adjusted to maintain effective body condition. Rations will be designed to reach the critical breeding weight for the heifers based on delivery weight and frame size. It is expected rations will be designed for 1.8 to 2.2 lbs. per day average daily gain.

### 5. Program Costs

Heifers will be charged for feed and bedding at cost plus \$0.30/hd/day plus any veterinary treatment, semen, and breeding costs incurred. Individual feed cost will be calculated as a function of weight and weight gain by the following equation:(Average weight of the heifer/average total weight of all heifers) X total feed intake.

A fee of \$200 per heifer is due at delivery and will be applied to the total cost for the heifer. All fees must be paid in full before a heifer may be released from the facility. Heifer Delivery Date: October 11, 2022.

## PENNSYLVANIA LIVESTOCK EVALUATION CENTER

Heifer Development Program Nomination Form

		Phone	E-mail
Farm Name		Phone	E-mail_
Address:			
FAX			
Farm Manager		Phone	
County			
raised.			
Your most recent test year here at the	e Center		
Number of heifers you want to t	est		
2. Breed			
3. Registration #			
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Upon acceptance of any of my anima accept full and complete responsibili official test, post-test, sale, etc. I have program now in existence or hereafted	Is for test at the Pennsylvania ty and liability for my anima we read and agree to abide by er adopted by the LEC Exect	Livestock Eva lls during all ph y the rules, regu tive Committed	duation Center, I, as owner, do hereby ases of the program, such as pre-test, dations, terms, and conditions of the e for this test.
Upon acceptance of any of my anima accept full and complete responsibili official test, post-test, sale, etc. I have program now in existence or hereafted authorize employees of The Penns other person or organization connect the program. I further agree and stip	ls for test at the Pennsylvania ty and liability for my anima we read and agree to abide by a adopted by the LEC Executylvania Department of Agricuted with the management of bulate that the above mention	Livestock Eva ils during all ph y the rules, regu ative Committed culture, The Pe the program to ed employees o	duation Center, I, as owner, do hereby ases of the program, such as pre-test, dations, terms, and conditions of the e for this test.

Send nomination form to: PA Dept. of Agriculture, Livestock Evaluation Center, 1494 West Pine Grove Road, Pennsylvania Furnace, PA 16865

Contact: Greg Hubbard, Station Manager-LEC, 814-238-2527/ ghubbard@pa.gov