Mission

The mission of the Animal and Range Sciences Farm and Ranch Units is to:

- Provide humane care for the animals housed at the units consistent with all relevant animal care and use guidelines.
- Manage the natural resources associated with the units in a sustainable manner.
- Maintain the physical facilities in attractive and functional condition.
- Provide service and support to the research, extension, and teaching efforts conducted on the farms.
- Minimize the cost of production for the base livestock herds within reasonable constraints imposed by research and teaching efforts.

Goals

By establishing written policies and protocols for the farm and ranch units the Department of Animal and Range Sciences hopes to achieve the following goals:

- Enhance the quality of research projects and extension and teaching activities.
- Enhance the safety and well being of students, employees, and animals.
- Improve communication within the Department.
- Improve the efficiency of labor use.
- Improve job satisfaction for all employees.
- Identify and minimize inherent risks associated with farm and ranch unit operations.

Responsibilities

- The **Department Head** is ultimately responsible for the overall operation and management of the farm and ranch units. This includes:
  - Supervision of the Farm Manager.
  - Establishing and monitoring budgets.
  - Establishing policies.
  - Negotiating conflicts among farm personnel and faculty, staff, and students.

- The **Farm Manager** reports only to the Department Head and is responsible for:
  - Care and monitoring of all livestock.
    - Exclusions are limited to animals involved in projects where the project leader or faculty member has accepted such responsibility as outlined in written, approved protocols.
  - Hiring, training, and supervising all farm personnel.
    - Red Bluff Research Ranch.
    - Fort Ellis Research Farm, including labor performed by individuals living in the houses.
Farm and Ranch Operations Policy

- MSU Livestock Center (Towne Farm).
  - Coordinating use, maintenance, and repair of equipment and facilities.
  - Managing livestock and cropping activities.
    - A Farm Management Plan shall be established annually based on faculty input and consultation with the Department Head.
    - Management activities shall be monitored via a set of checkpoints reported to the Department Head and involved faculty.
  - Managing farm operations budgets as delegated by the Department Head.
  - Coordinate and supervise research and teaching activities as described in written protocols (described below).
  - Communicate effectively with research leaders and instructors.
- The Farm Manager, with approval from the Department Head, shall designate senior a farm employee to serve as Acting Farm Manager in his (her) absence.
  - Procedures for contacting the Farm Manager and the Acting Farm Manager shall be communicated to Department personnel by posting a contact list in:
    - The Department’s main office.
    - The Farm Manager’s office.
- The Farm and Ranch Operations Committee provides advice and support to the Department Head and Farm Manager with regard to operations policy, unit management, and resource allocation.
- The Pavilion Manager is responsible for¹:
  - General operation and maintenance of Miller Pavilion.
  - Management of the Miller Pavilion Budget.
  - Coordination and communication (written and oral) with the Farm Manager regarding:
    - Care and use protocols for horses.
    - Changes in inventory.
    - Maintenance needs.
    - Labor needs.
  - Reimbursement of farm accounts for labor and materials provided in support of the Equine Program.
  - Hiring, training, and supervising the person living in the Pavilion apartment.
- The MSU Rodeo Coach is responsible for²:
  - Communicating with the Farm Manager in advance regarding the arrival and housing of all livestock associated with the Rodeo Team.

¹ Horses owned and managed by the Department are primarily used for teaching purposes. The College of Agriculture provides no operations funds for the horse program. Student equitation fees, and fees charged to groups using the Pavilion fund a major portion of activities associated with horses. The Montana Agricultural Experiment Station subsidizes some horse care. The Farm Manager shall be responsible for the feeding and care of horses housed at the farm units except as specified in written and approved protocols.

² At various times throughout the year the MSU Rodeo Team houses livestock at the Towne Farm. The Farm Manager shall be responsible for the feeding and care of these animals while they are housed at the Towne Farm as specified in written and approved protocols.
Farm and Ranch Operations Policy

- In collaboration with the Farm Manager and Department Head, developing a written memorandum of understanding between the MSU Rodeo Team and the Department of Animal and Range Sciences.
- Reimbursing the farm accounts in for farm unit expenses associated with feed, labor, health care, and any other pre-arranged services.

- The **MSU Horseshoeing School Instructor** shall be responsible for the management and care of all horses delivered to the school for services³.
  - Services provided to the Horseshoeing School by the farm units shall be described in a written memorandum of understanding.

- **Researchers** are responsible for:
  - Submitting written requests for animals and facilities in advance as outlined below.
  - Submitting written protocols that describe their activities and the responsibilities for all project and farm unit personnel.
  - Submitting appropriate forms to the MSU Institutional Animal Care and Use Committee (IACUC).
  - Communicating with the Farm Manager in a timely and effective manner.
  - Ensuring that project personnel are trained in proper animal handling techniques and the safe use of all relevant equipment.

- **Instructors** are responsible for:
  - Submitting written requests for animals and facilities in advance as outlined below.
  - Submitting written protocols that describe their activities and the responsibilities for all project and farm unit personnel.
  - Submitting appropriate forms to the MSU Agricultural Animal Care and Use Committee (AACUC).⁴
  - Communicating with the Farm Manager in a timely and effective manner.
  - Instructing students on the safety risks associated with the activity, and training students in proper animal handling techniques and the safe operation of any relevant equipment.

**Budget Management**

Only the Farm Manager and Department Head may make management decisions that impact the budgets entrusted to the Farm Manager. Requests or proposals regarding activities that impact farm unit budgets must be made directly to the Farm Manager. The Farm Manager shall supervise all personnel paid from farm unit budgets.

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³ The MSU Horseshoeing School, located at the Towne Farm, is attached to the Department of Animal and Range Sciences.
⁴ As of May 2003, precise responsibilities of this committee and procedures for approval have not been finalized.
Inherent Risks
Management of agricultural enterprises includes use of machinery and equipment, strenuous activity, heavy lifting, and handling of livestock. These activities are associated with risks of human injury and disease, and risks of animal injury and disease. The policies and procedures established for the operation of the units are intended to reduce these risks; however, it is emphasized that such risks cannot be eliminated.

Human Safety
Through experience employees and students become more aware of risks and dangers and learn how to avoid them. However, training programs and operational policies have been established to minimize risks of injury and disease. All employees and students involved in the daily operation of the farm and ranch units shall:

- Maintain current vaccination against Tetanus.
- Be certified in animal care and handling via the Animal Caretakers Training Course.
- Be certified in the operation of all items of equipment they are required to operate.

Specifics of the Agricultural Animal Care Training Program and certification procedures are outlined in a separate document. To summarize, 1) certification is required before beginning employment, and 2) annual update training and certification is required.

Training on safe operation of equipment shall be provided on an individual basis as needed by senior farm personnel. A safety checklist shall be developed by the Farm Manager for each major type of equipment, filed in a notebook in the Farm Manager’s Office, and attached to the equipment. No one shall operate a piece of equipment without this training. A checklist shall be maintained for all employees and students. For each individual this file shall indicate the items of equipment that the individual is permitted to use, the date of training, and the initials of the “student” and “instructor.” Machinery Safety Policy and Procedures for Montana Agricultural Experiment Station are covered in a separate document.

Animal Safety and Well-Being
Prevention of animal injury shall be addressed by training all employees and students in proper animal care and handling. The Animal Caretakers Training Course shall be the vehicle for this training. Prevention of disease shall be addressed by implementing a sound and practical Health Management Plan. The Farm Manager in consultation with a licensed veterinarian, the Department Head, and the Farm and Ranch Operations Committee shall develop this plan.

General Livestock Husbandry Policies and Procedures are specified in a separate document. In summary, these procedures specify responsibilities, control points, monitoring frequencies, and reporting standards for the general husbandry of livestock managed by the Department.

Requests for Service or Resources
All requests for service from the farm and ranch units shall be made directly to the Farm Manager in writing. Procedures are described below.
Animal Use in Research

Animals are managed by the Department to support teaching, research, and extension. Use of livestock in research projects affects general farm management, the use of feed resources including grazable forage, the scheduling of labor, and the use of facilities. The Department Head in consultation with the Farm Manager and the Farm and Ranch Operations Committee shall make decisions regarding the allocation of resources to specific projects.

Researchers who desire to use livestock in research projects must:

- Provide the Department Head and the Farm Manager a written request for animals and facilities at least six (6) months in advance.
  - Requests received with less lead-time than 6 months risk receiving lower priority in the allocation of animals, facilities, and feed resources.
  - Requests requiring changes in mating assignments or changes in the breeding protocol must be received at least three (3) months before the breeding season.
- Provide the Department Head and the Farm Manager a written protocol at least 1 month prior initiation of project work. Points of clarification or negotiation shall be resolved before initiation of the project. No project may start without an approved protocol as indicated by:
  - A signed Animal Use Agreement – Animal and Range Sciences Department.
  - A copy of the protocols submitted to the MSU-IACUC.
- **Farm Unit Research Protocols** should include the following:
  - Starting and ending dates of the project.
  - Rationale
  - Objectives
  - Experimental Design
  - Personnel involved.
  - Animals required – specified by type, age, condition, sex and source.
  - Animal management and facility requirements and specifications.
  - Labor requirements, including specification of times, dates, and the people responsible.
  - Feed requirements, including specification of responsibilities for purchase and preparation.
  - Details of data collection and personnel responsible.
  - A budget that estimates added costs incurred by the Department, and how those costs will be reimbursed to the Department.
- Project costs payable directly to the Department shall be negotiated on a case-by-case basis until a different policy is established.
- Hold a face-to-face meeting with the Farm Manager and other involved personnel prior to initiation of the project to discuss and clarify protocols and responsibilities.
- Communicate any modifications to protocols to the Farm Manager as soon as possible both orally and in writing.
- Communicate frequently with the Farm Manager regarding the progress of the project.
Farm and Ranch Operations Policy

Animal Use in Teaching and Extension

Animals are managed by the Department to support teaching, research, and extension. Use of livestock in courses and other educational activities affects general farm management, the use of feed resources including grazable forage, the scheduling of labor, and the use of facilities. The Farm Manager in consultation with the Department Head and the Farm and Ranch Operations Committee shall make decisions regarding the allocation of resources to specific instructional activities.

Instructors who desire to use livestock in educational activities must:

- Provide the Department Head and the Farm Manager a written request for animals and facilities at least six (6) months in advance.
  - Requests received with less lead-time than 6 months risk receiving lower priority in the allocation of animals, facilities, and feed resources.
  - Requests requiring changes in mating assignments or changes in the breeding protocol must be received at least three (3) months before the breeding season.
  - Continuing needs – e.g., for undergraduate courses should be indicated in the first request, but do not need to be repeated unless protocols change.

- Provide the Farm Manager a written protocol at least 1 month prior initiation of the activity. Points of clarification or negotiation shall be resolved before initiation of the activity. No activity may start without an approved protocol as indicated by:
  - A signed Animal Use Agreement – Animal and Range Sciences Department.
  - A copy of the protocols submitted to the MSU-AACUC.

Farm Unit Instructional Protocols should include the following:

- Starting and ending dates of the activities.
- Times and frequency of activities.
- Objectives.
- Description of activities.
- Personnel involved.
- Animals required – specified by type, age, condition, sex and source.
- Animal management and facility requirements and specifications.
- Labor requirements, including specification of times, dates, and the people responsible.
- Feed requirements, including specification of responsibilities for purchase and preparation.
- A budget that estimates added costs incurred by the Department, and how those costs will be reimbursed to the Department.

- Activity costs payable directly to the Department shall be negotiated on a case-by-case basis until a different policy is established.

- Hold a face-to-face meeting with the Farm Manager and other involved personnel prior to initiation of the activity to discuss and clarify protocols and responsibilities.
  - Continuing activities (e.g., undergraduate courses) should do this annually.

- Communicate any modifications to protocols to the Farm Manager as soon as possible both orally and in writing.

- Communicate frequently with the Farm Manager regarding the progress of the activity.
Document Copies and Storage
For all animal use projects, copies of the following documents will be stored in the Department Head’s office and in the Farm Manager’s Office. The project leader is expected to also keep copies.
- Initial dated written request for animals.
- Dated and signed Animal Use Agreement
- Dated and signed MSU-IACUC (or MSU-AACUC) approval protocols.
- Dated and signed Farm Unit Research (or Instructional) protocols.

Resource Materials
Resource texts located in the Farm Manager’s office:
- GUIDE for the Care and Use of Agricultural Animals in Agricultural Research and Teaching – FASS.
- Handbook of Livestock Management - Battaglia.

The following resource materials must by stored in:
- The Farm Manager’s Office – MSU Livestock Center (Towne Farm).
- The “Surgery Room” – Fort Ellis Research Farm.
- The Red Bluff Research Ranch Office.

Resources included in a single notebook:
- Emergency contacts and phone numbers.
- General Livestock Husbandry Policies and Procedures.
- Animal and Range Sciences Farm and Ranch Operations Policies (this document).
- Agricultural Animal Care Training Program
- Agricultural Animal Worker Health and Safety Plan

Resources included in a second notebook:
- Current Farm Unit Research Protocols for projects conducted at the unit.
- Current Farm Unit Instructional Protocols for activities conducted at the unit.

Resources included in a third notebook:
- Operation and Safety Checklists – one for each type of equipment used at the unit.
- Training manual on use of Equipment (when available).

Items to be filed in the Farm Manager’s Office:
- Animal Care certifications for all current employees.
- Equipment Operation and Safety certifications for all current employees.
Montana State University
Animal and Range Sciences Department
Animal Use Agreement

Project Title: _____________________________ Date: __________

Project Leader: _________________________ Campus Phone ______________

MSU-IACUC Approval Number and Date (if applicable) ______________________

MSU-AACUC Approval Number and Date (if applicable) ______________________

Other project personnel: _____________________________________________

____________________________________________________________________

Animals Involved: ________________________________________________

Dates and duration of use: _________________________________________

Services and resources provided by Animal and Range Sciences Farm Personnel:

Labor (dates, times, description):

Feed (types, amounts, processing required):

Facilities:

Equipment:

Other:
Budget (for services and resources provided by the Department):

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</tbody>
</table>

Account Number for billing: ____________________________

Signatures:

____________________________________  ________________________
Project Leader               Date

____________________________________  ________________________
Department Head              Date

____________________________________  ________________________
Farm Manager                 Date

1 Yardage, if applicable, covers expenses associated with equipment and facilities (i.e., capital assets that require repair, maintenance, and experience depreciation).
Horses
- All horses brought to the MSU Equine Unit for housing, or any activity must have current evidence of the following vaccinations and tests prior to arrival:
  - Equine Encephalomyelitis – Western and Eastern strains
  - Tetanus
  - West Nile Virus
  - Strangles
  - Equine Influenza
  - Equine Viral Rhinopharyngitis
  - Negative Coggins' test
- Health papers, with a list of vaccinations and Coggins test results, are to be sent or delivered to the Animal and Range Sciences Department PRIOR to arrival of the animals.
  - Horses that arrive without acceptable documentation cannot be unloaded.
  - The Pavilion Manager shall be responsible for monitoring and approving health papers, except for rodeo.
  - The MSU Rodeo Coach shall be responsible for monitoring and approving health papers for all horses involved in rodeo.
- Horses brought to the MSU Horseshoeing School must be kept in Horseshoeing School facilities, and must remain in that area.

Cattle
- All cattle brought to the MSU Farm Units for housing, or any activity must have current evidence of the following vaccinations prior to arrival:
  - Bovine Viral Diarrhea (BVD)
  - Bovine Respiratory Syncytial Virus (BRSV)
  - Infectious Bovine Rhinotracheitis (IBR)
  - Parainfluenza-3 Virus (PI-3)
  - Clostridial (7- or 8-way)
- Cattle that arrive without acceptable written documentation of these vaccinations, cannot be unloaded.
- The Farm Manager shall be responsible for monitoring and approving health papers, except for rodeo.
  - The MSU Rodeo Coach shall be responsible for monitoring and approving health papers for all cattle involved in rodeo.
Animal and Range Sciences Department
General Livestock Husbandry Policies and Procedures
Approved by AACUC May 2003

Purpose
As a public institution, Montana State University is committed to guaranteeing the welfare and well-being of all animals in its care. The Department of Animal and Range Sciences seeks to be an example of professional and compassionate management for all current and potential livestock owners and managers.

Proper management is essential for the well-being of the animals (FASS, 1999). The purpose of this document is to outline and define minimum husbandry procedures and policies for livestock managed by the Department of Animal and Range Sciences at farm and ranch units owned by the Montana Agricultural Experiment Station.

This document attempts to codify general policies and procedures. However, the Department recognizes the importance of human judgment in managing livestock. As such, the levels of care outlined below may need to be exceeded under specific circumstances. Additional protocols and procedures applying to animals used in research projects or teaching exercises are contained in separate documents submitted to the Montana State University Institutional Care and Use Committee.

Responsibility
- As the Administrator of the unit, the Head of the Department of Animal and Range Sciences is ultimately responsible for the care and welfare of the animals managed by the Department.
- The Farm Manager is directly responsible for the care of livestock managed at the Department of Animal and Range Sciences three farm units: MSU Livestock Center (Towne Farm), Fort Ellis Research Ranch, and Red Bluff Research Ranch.
  - The Farm Manager is expected to ensure that all General Livestock Husbandry Policies and Procedures are followed.
  - The Farm Manager may delegate responsibilities to employees.
  - The Farm Manager reports directly to the Department Head.
- Due to the distance between the Towne Farm and the Red Bluff Research Ranch, the Red Bluff Ranch Foreman is immediately responsible for the care and welfare of animals located at this unit.
- For animals used in certain research or teaching projects, responsibility for care may be transferred to the Principal Investigator or Instructor. In such cases, dates, times, and circumstances should be clearly stated in written protocols for the project or class.

Indicators and Control Points
Animal well-being has both physical and psychological components. No single objective measurement exists that can be used to evaluate the health and well-being of animals.
Monitoring multiple integrated indicators provides the best means of assessing animal well-being (FASS, 1999). Providing for the general care and well-being of agricultural livestock includes monitoring critical control points and responding to changes in these indicators. A high level of stockmanship is required to adequately detect and assess indicators of health and well-being (FASS, 1999). Control points fall into four broad categories: animals, feed, water, and facilities.

- **Animals** will be monitored for general signs of health and well-being as indicated by:
  - Body condition
  - Hair coat
  - Posture
  - Appetite
  - Behavior
  - Physical signs of injury, illness or disease

- **Feed and water** sources will be monitored for:
  - Availability
  - Amount
  - Quality

- **Facilities** will be monitored for:
  - Fences
    - Appropriate for species and degree of confinement
    - Function
    - Safety
  - Shelter (natural and artificial)
    - Appropriate for species and season
  - Surfaces (i.e., footing) appropriate for degree of confinement
  - Ventilation

**Monitoring Frequency**

- For animals housed in stalls, **all** control points will be monitored twice daily.
- For animals housed in corrals, paddocks and pens, **all** control points will be monitored daily.
- For animals being hand-fed in pastures, **all** control points will be monitored daily.
- For animals grazing in pastures, **all** control points will be monitored at least three times a week. No more than two days shall separate monitoring events.
  - E.g., monitoring on Mondays, Wednesdays and Fridays would be acceptable.
  - Monitoring only on Mondays, Tuesdays and Wednesdays would not be acceptable.
  - In large pastures containing broken terrain and (or) timber it is not practical or possible to locate all animals individually. In such cases, livestock personnel shall make a reasonable attempt to monitor a representative sample of the animals.

- Due to increased risk to animal health and well-being, certain circumstances warrant monitoring control points more frequently. Examples include but are not limited to:
  - Parturition
  - Weaning
  - Climatic extremes (e.g., storms, risk of freezing water, drought, etc.)
  - Use of mechanical devices to provide water
Emergencies

The Farm Manager will determine and communicate responsibilities and procedures for managing specific events. When monitoring reveals evidence or risk or emergency, the Farm Manager (or Ranch Foreman at Red Bluff) shall be notified as soon as possible. Livestock personnel shall call a veterinarian directly if necessary.

Records and Accountability

At each farm unit, a log shall be maintained that allows animal management personnel to certify that monitoring was completed. The Farm Manager and Department Head shall determine the specific format of the log. The log shall:

- Clearly define management groups.
  - A management group is a group of animals that are housed and fed and managed together.
- Track management groups separately
- Record:
  - Date.
  - The nature of any problems or deficiencies detected.
  - Action(s) taken.
  - Initials of personnel responsible.

In addition, at each farm unit records of the following shall be maintained:
- Identification of animals treated for sickness or injury
- Dates when observed and treated
- Treatments and pharmaceuticals administered
- Personnel involved

Failure to Monitor

It is the responsibility of the Farm Manager to assure that monitoring of all livestock is completed according to the procedures outlined above. Responsibilities delegated to other employees must be clearly communicated. Monitoring failures shall be addressed as outlined below.

- First failure to monitor as assigned:
  - The supervisor shall meet with the negligent employee and discuss the situation.
  - A letter of reprimand will be placed in the employee’s file.
- Second failure:
  - The employee shall be suspended.
  - “Termination for Cause” proceedings shall be initiated according to the MSU Personnel Policy and Procedures Manual.

Prevention of Disease

For each livestock species, in consultation with a veterinarian and the Department Head, the farm manager shall establish and implement sanitation measures and vaccination programs to reduce risks associated with disease.

- Specific written protocols will be reviewed annually and updated as necessary.
- Dates of administration and products used will be recorded.
Reference: