

## Appendix A

### **WORK PROCESS SCHEDULE Bison Herd Manager**

**O\*NET-SOC CODE: 45-1011.08 RAPIDS CODE: 1136**

This schedule is attached to and a part of these Standards for the above identified occupation.

**1. TERM OF APPRENTICESHIP**

The term of the occupation shall be two (2) years with an OJL attainment of 4000 hours supplemented by the required hours of related instruction

**2. RATIO OF APPRENTICES TO JOURNEYWORKERS**

One (1) apprentice may be employed in each shop department, and/or jobsite employing a qualified journeyworker.

**3. APPRENTICE WAGE SCHEDULE**

Apprentices shall be paid a progressively increasing schedule of wages based on a percentage of the current journeyworker wage rate.

**2 Year Term Example:**

1 <sup>st</sup>	6 months + hours = ____	2 <sup>nd</sup>	6 months + hours = ____
3 <sup>rd</sup>	6 months + hours = ____	4 <sup>th</sup>	6 months + hours = ____

**4. SCHEDULE OF WORK EXPERIENCE (See attached Work Process Schedule)**

The Sponsor may modify the work processes to meet local needs prior to submitting these Standards to the appropriate Registration Agency for approval.

**5. SCHEDULE OF RELATED INSTRUCTION (See attached Related Instruction Outline)**

## Appendix A

### WORK PROCESS SCHEDULE

Bison Herd Manager

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#### APPROXIMATE HOURS

- 1. Develops and implements bison health management plans and procedures to ensure consistent health of the herd and prepares treatment records.** **800**
  - a. Observes the herd via horseback, all-terrain vehicles, and motor vehicle to monitor for signs of illness, injury, or unusual behavior; check for external parasites and injuries; notify veterinarian as warranted.
  - b. Treat animal illnesses or injuries, following experience or instructions from veterinarians.
  - c. Helps prepare a vaccination schedule for the herd and determines the amount of vaccines and medications required by working with local vets and labs.
  - d. Assists vets with administering medicated mineral combinations for specific health problems
  - e. Observes the herd during calving assists with problems and if present, collects deceased calves for post-mortem examination.
  
- 2. Monitor animal care, maintenance, or breeding; studies feed, weight, health, genetic, or milk production to manage the allocation of feed and procures supplements to meet the health and nutritional needs of the herd.** **800**

Assign tasks for the feeding and treatment of animals such as;

  - a. Administers vitamin and mineral combinations to enhance conception rates and ensure a healthy gestation.
  - b. Purchase required feed supplements that meet the requirements for herd management.
  - c. Formulates feed ratios for weaned calves and monitor condition during confinement.
  - d. Collects soil samples to determine fertilizer needs and maintains the hay ground for maximum hay production at maximum protein content.
  - e. Plans and conducts hay harvest; determines schedules, hires workers or contractors, directs daily activities and maintains equipment in proper working condition.
  - f. Negotiates haying contracts with private, state and federal landowners when hay production do not meet pre-determined demand.
  - g. Prepares budget for feed and supplement.

- 3. Confers with managers and develops a database to maintain records of genetic and performance data to enable selection of breeding stock that meets pre-determined goals for herd-bull and cow criteria and to provide supporting data for sale stock. 800**
- a. Maintains blood type information on breeding bulls and cows.
  - b. Maintains initial weight of calves at weaning and weight gain at pre-determined intervals.
  - c. Maintains fertility test results and scrotal data collected by vets and labs.
  - d. Prepares reports showing genetic and performance data for sale bulls.
  - e. Prepares reports for strategic planning.
  - f. Maintains point of origin and herd family records.
  - g. Maintains genetically pure bison tracking records for bison herd.
- 4. Prepare reports concerning facility activities to manage the herd, to control size and movement, and marketing of the surplus herd. Monitors packing and transfer activities to ensure work is done correctly. 800**
- a. Selects replacement herd-bulls and breeding bulls for sale.
  - b. Provide information and assistance to sell excess stock.
  - c. Supervise handling of sale animals during confinement.
  - d. Gather the herd in the holding pasture in preparation for a sales or transport.
  - e. Select working riders for the roundup and provide a safety briefing.
  - f. Coordinate the trophy bull hunt and act as a hunting guide.
  - g. Conduct and coordinate roundups as needed.
  - h. Coordinate the removal of animals from the herd using culturally appropriate methods and preparation of animals for transport to processing facility (if necessary).
- 5. Assigns tasks related to cleaning and maintenance of animal quarters. 600**  
Performs maintenance and upkeep of the corral complex and division fences to ensure a safe working environment for employees and animals. Determines and reports on condition of equipment and details of supplies.
- 6. Performs other work as needed. 200**  
Prepares work schedules and maintains employees' time records.
- 7. Knowledge Skills and Abilities:**  
Knowledge of:
- a. Administration and management.
  - b. Biology, animal science, and bison husbandry.
  - c. Education and training.
  - d. Food production (forage crops, harvesting times and nutritional value).
  - e. Farm equipment operation and maintenance.
  - f. Big game hunting.
  - g. Basic operation of computers.

Ability to:

- a. Remain calm in dangerous situation.
- b. Administer vaccinations and oral medications to large animals.
- c. Confine and handle large animals.
- d. Ride a horse, drive an all-terrain vehicle and motor vehicle.
- e. Operate and maintain farm equipment.
- f. Use a computer.
- g. Listen and communicate information clearly and concisely.

**TOTAL HOURS**

**4000**

**RELATED INSTRUCTION OUTLINE**  
**Bison Herd Manager**  
**O\*NET-SOC CODE: 45-1011-08 RAPIDS CODE: 1136**

**APPROXIMATE  
HOURS**

**YEAR 1**

**Animal Science**

This course will provide the bison herd manager with an introduction to all phases of animal science. The topics will include beef, sheep, horses, and specialty animals such as deer, bison, and elk. The students will become familiar with all the basic information including species characteristics, evaluation procedures, management systems, production standards, nutritional requirements, health concerns, and business concerns. **48**

**Bison Husbandry**

A study of bison history, origin, ecology, restoration, anatomy, bison meat and by-products, physiology, reproduction, breeding, genetics, health, disease, parasites, behavior, herd dynamics, handling, nutrition, supplemental feeding and range management techniques. Other topics to be covered include record keeping, agricultural business management decision-making, record systems, balance sheets, profit/loss statements, budgets and agricultural/wildlife policy/law. **48**

**Forage Crops, Harvesting Times and Nutritional Value**

This course is a study of plant science including the study of plant characteristics, history, planting rates/dates, planting methods, harvesting methods, growing methods, cost of production, average yields, uses, and economic returns, the study of common cereal grains, common hay crops, trees, and other major crops grown in the area. Other topics to be covered include range plants, range sites and grazing management concepts on ranches, game ranches, and wildlife preserves. Bison herd managers will learn to identify the different range plants and sites, determine range use and condition, and determine carrying capacity, conservation methods of soil and water, evaluate soil type and land classes for uses, take soil samples, do fertility tests and outline the technical and financial assistance available through the Farm Services Agency and Natural Resources Conservation Services. **48**

**TOTAL HOURS**

**144**

## YEAR 2

### **Farm Equipment Operation and Maintenance** **48**

This course will cover operation and maintenance of farm equipment and building structures for use with livestock and equipment. The class will introduce Bison Herd Managers to the process of types of machinery, purchasing, maintenance, their operation including safety guidelines, accepting bids on buildings, assessing bids on buildings, basic building principles, electrical wiring, and plumbing. Other abilities needed to properly build and maintain structures will be discussed. This course will also cover a study of common agricultural pests and using integrated pest management to control them. Information on safety in regards to the applicator, crops, livestock and the environment as outlined by common sense and governmental regulations. This course will also include an introduction in using equipment, its characteristics, and calibration of equipment. Introduction to chemical selection hardware and how to use it in a practical manner is also covered.

### **Big Game Hunting** **48**

The first part of the course will cover hunter responsibility and ethics, wildlife conservation and management, firearms and firearm safety, game and fish statutes and regulations, game care and wildlife identification, necropsy and first aid. Then the Bison Herd Manager will look at methods of field kill, methods/handling field dressing carcasses, federal/state meat inspection regulations for consumption and transportation.

### **Basic Operation of Computers** **48**

This course is based on the assumption that the Bison Herd Manager has little to no computer experience. Topics covered in this course will include computer hardware, windows, file management, word processing and touch-typing skills on the keyboard. The Bison Herd Manager will then be introduced to Microsoft Word, Excel, Power Point and Access.

### **TOTAL HOURS** **144**