

Rangeland Study Guide



Key Topics

- Basic rangeland knowledge, to include: identification of state grass, plant I. D. and definitions, importance of rangelands in Montana.
- Range Ecology Processes – definition of ecological sites (soil – plant relationships), ecological processes (energy flow, nutrient cycle, water cycle and plant succession).
- Rangeland Management – stocking rates/carrying capacity, general types of grazing systems, improvement practices (fencing and water developments), wetland, riparian and upland communities.
- Basic knowledge of livestock and wildlife interactions, forage preferences, forage overlap, and habitat requirements.

Learning Objectives

1. Define rangeland, % of state encompassed by rangeland, importance of rangelands.
2. Identify state grasses of Montana, differentiate between plant types (grass, forb, shrub, and trees), identify parts of a grass and/or grass-like species.
3. Define rangeland ecological sites, understand ecological process, understanding of all definitions inclusion to all key topic areas.
4. Understanding of basic rangeland management concepts, i.e. grazing systems, stocking rates, and rangeland improvements.

5. Understanding of Best Management Practices (BMPs) on rangeland and how different communities (wetland, riparian, and upland areas) interact.
6. Recognize different classes of livestock and understand their interaction with wildlife species.

Publications

1. RANGELAND MANAGEMENT PRINCIPALS AND PRACTICES, Jerry I. Holechek, Rex D. Pieper, Carlton H. Herbel; copyright 1989, Prentice-Hall INC.
2. Best Management Practices for Grazing, publication DNRC, 1999, 1625 11th Avenue, Helena, MT 59620
3. How to Identify Plants, H. D. Harrington, L. W. Durrell; copyright 1957 may be current update.
4. Rangelands, Society for Range Management (SRM), 445 Union Blvd., Suite 230, Lakeland, CO 80228, non-technical publication.
5. Grazing Management, John P. Vallentine, copyright 1990 Academic Press.
6. Determining Forage Production and Stocking Rates: A Clipping Procedure for Rangelands (1997), MT9704AG Free
7. Tips on Grass Identification Using Vegetative Characteristics (1995), 2C1089 \$1.50
8. Range Plants of Montana (1994), EB 122 \$15.00
9. Montana Guide to Range Sites, Condition and Initial Stocking Rates (1987), MT8515AG Free
10. Monitoring Montana Rangeland (1996), 2B0369 \$2.00
11. How to Collect, Press and Mount Plants (1987), MT8359AG Free
12. 250 Plants for Range Contests in Montana (1984), MT8402AG Free
13. USDA/NRCS Field Offices
National Range and Pasture Handbook
Key Objectives to look for:
Range Definition/Term Definitions