2023/24 Prairie/Forestry Learning Objectives & Resources

Updated 2/6/24 - New additions in red

North Dakota Envirothon

Overview

North Dakota is a "Prairie" State. The ND Envirothon Prairie discipline will incorporate a practical "hands-on" approach to the understanding of North Dakota's forests and rangelands.

Prairie Learning Objectives

Grass Bundle
- Have an understanding of the CPA-33 Clipping worksheet, the Air-Dry % and Growth Curve and the clipping worksheet instructions on the instruction page tab. • Understand the math used for the calculations
- Know how to clip and use the inventory ring
- Know how to use the clipping shear
- Know how to use the gram scale for grass weight

Plant Identification
- Know the North Dakota State grass and tree
- Have an understanding of and know how to identify grasses and forbs commonly found in ND rangelands
- Know which plants are on the noxious weed list
- Know the difference between native and introduced plants
- What is the difference between a cool and warm season plant

General Rangeland Understanding
- Understand what can cause rangelands and the plant community to change • Understand the pros and cons of rangeland improvements
- What is the difference between rangelands and pastureland?
- Know what are stocking rates and how they affect rangeland
- What are Animal Unit Months (AUM's) and how to calculate them

Land Resources
   • What are Major Land Resource Areas (MLRA's), how do they differ in ND,
      and how many are there in ND
   • What are ecological sites and how do they affect rangelands

General Forestry Understanding
   • Have a basic understanding of Direct Breast Height (DBH) and Basal Area
   (BA) • Have a good understanding of general forestry management
   practices • Know the benefits that native forests provide in ND
   • Understand the benefits of prescribed burning in ND forests

General Tree Knowledge
   • Know the ND State Tree
   • Have a general knowledge of trees suitable to ND and how to identify them

Prairie Resources

Grass Clipping Instructions - step by step instructions - new for 2024 - Use with Prairie Grass Bundle Worksheet

Resources: (free on web)

Range Judging Handbook for North Dakota, NDSU Extension

North Dakota Forestry Best Management Practices, NDFS

Trees & Shrubs of ND, NDSU Extension
Taking Forest Measurements, NDFS Field Guide

Noxious Weeds of North Dakota.

National Range and Pasture Handbook. USDA Natural Resources Conservation Service

USDA Natural Resources Conservation Service website on Range and Pasture

USDA Plants Database

[Rangeland and Pastureland Land Use](#)

NDSU Extension Publications (free on the web)

[Integrated Management of Leafy Spurge – Rod Lym](#).

[Emerald Ash Borer: Biology and Integrated Pest Management in ND](#).

[Grass Varieties for North Dakota](#).

[Ecological Sites of North Dakota](#).

[Challenges of Growing Trees in North Dakota - YouTube](#)