Forestry Unit Study Guide

Tree Measurement

Biltmore Stick (hypsometer) – purpose / function and how to use it

Diameter Tape – purpose / function and how to use it.

Know how to calculate your “pace.”

Know how to pace off distances.

Explain how to determine the number of board feet in a standing tree.

Length of a chain and a log

Height of DBH

Dimension of a federal cord and a face cord.

Board foot

Basal area

Merchantable Height

What is the minimum top diameter of a saw log 8”

Wedge Prism

Log Rule

Importance of Forests

Forest

Forestry

Urban Forestry

Timberland

Timber

Pulpwood

Important provisions that forests supply. ie. Lumber, food, shade, etc.

Other benefits of trees; reduces erosion by protecting soil from wind and surface runoff. Social impacts of green space, recreation, wildlife, etc.

Value of trees in an urban environment; increase property value, natural cooling effect from shade and evapotranspiration, aesthetic value of scenery.

**Forests and Forests Ecology**

Ecological succession

Pioneer species

Climax species

Understory

Overstory

Canopy

Native forest

Old-growth forest

Regrowth forest

Tree farm

Softwood

Hardwood

Stratification

Hardening-off

Hardiness

Commercial Forest

Know the three basic factors that determine the type of forest. – precipitation, soil type, temperature.

Know the natural forest type in mid-michigan. Mixed hardwood forest (typically Maple-Beech or Oak-Hickory depending on soil moisture)

**Reforestation**

Natural methods of tree reproduction –

Reforestation

Heel-in

Be able to identify and explain how to use a tree planting bar

**General Forestry**

Major parts of a tree – Crown, trunk, roots, bark, cambium.

Pure stand

Mixed stand

Angiosperm

Gymnosperm

Conifer

Evergreen

Deciduous

Silviculture

Know the two different “ways” trees grow

Know the purpose of different silviculture practices

Thinning

Liberation

Salvage

Harvesting

Cleaning