FOREST MANAGEMENT SYSTEMS

LET THE SUNSHINE IN!

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WHAT IS A FOREST
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Webster- A dense growth of trees and underbrush covering a large tract.

- Trees and plants
- Soil and Duff layer
- Critters
  - Bugs
  - Fungi
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Many different inputs decide how a forest responds and grows.

Forests are constantly changing.
WHAT IS A FOREST?
SUCCESSION

- The natural transition of a plant community from pioneer species to climax species
The ability of a tree species to grow in shade
VERY TOLERANT:

- Hard Maple
- Bitternut hickory
- Ironwood
TOLERANT:

- White ash
- Basswood
- White and Red elm
- Hackberry
- Boxelder
INTERMEDIATE:

- Green ash
- Silver maple
- White pine
- Red cedar
- Shagbark hickory
INTOLERANT:

- Black cherry
- Oaks
- Walnut
- Butternut
- Honey locust
- Scotch pine
- Red pine
VERY INTOLERANT:

- Cottonwood
- Aspen
- Poplar
- Black Locust
- Jack pine
FOREST MANAGEMENT SYSTEMS

Even Age Management & Uneven Age Management
MANAGEMENT PLAN
ROAD MAP TO A SUCCESSFUL PLANTING PROJECT

- Addresses landowner objectives
- Describes site (soils, drainage, aspect etc.)
- Provides information on who, what, when and how
- Provides maintenance information
Even Age Management

- All of the trees in a timber stand are the same age.
- This system favors shade intolerant species like oak and walnut.
Clearcutting is a form of even age management.

This system involves removing the entire overstory to get sunlight to the forest floor.
DEER BEDDING AREAS
ADVANTAGES AND DISADVANTAGES

- You have full sunlight to the forest floor.
- High density regeneration.
- Only one timber sale.
- All of your seed trees are gone.
- Very Drastic appearance.
- Invasive weed species.
Also a form of even age management.

The first step is to remove half of the overstory to get some sunlight to the forest floor.

Once you have good regeneration you remover the remaining overstory.
ADVANTAGES AND DISADVANTAGES

- Your best seed trees are left.
- Appearance is much more pleasing.
- Spread out income.
- May take much longer to get good trees.
- May need more TSI work.
- Have to conduct a second harvest.
UNEVEN AGE MANAGEMENT

- This system of management allows you to have trees of many different ages.
- This system favors shade tolerant species like maple and basswood.
Uneven age management allows you to selectively harvest the poorest and declining trees throughout your forest every 10 to 20 years.

This harvest tends to be very light and does not usually change the overall appearance of the forest.
ADVANTAGES AND DISADVANTAGES

- You always have big trees.
- Appearance is much more pleasing.
- Spread out income.

- Lack of diversity.
- Loss of oak!
- Erosion
TIMBER STAND IMPROVEMENT

Crop Tree Release
Even Age Management
CROP TREE SELECTION

- Base your crop tree selection on your personal goals.
  - Wildlife
  - Timber production
  - Esthetics
  - All of the above

- You should pick trees based on:
  - Desirable species
  - Good form
  - Good canopy growth
  - Proper spacing
Crop Tree Release

- Select a crop tree every 30 feet.
- Mark it with flagging or paint.
- Kill any tree that is competing with the canopy of your crop tree.
DOUBLE GIRDLE
TIMBER STAND IMPROVEMENT

Weed Tree Removal
Uneven Age Management
WEED TREE REMOVAL

- Since we always have big seed producing trees in the overstory, we need to remove the trees we do not want to produce seed.

- Weed trees are determined by your timber management goals.

- Herbicide use is highly recommended.
KILLING WEED TREES