

Intermediate Use Areas: Considerations and Tools



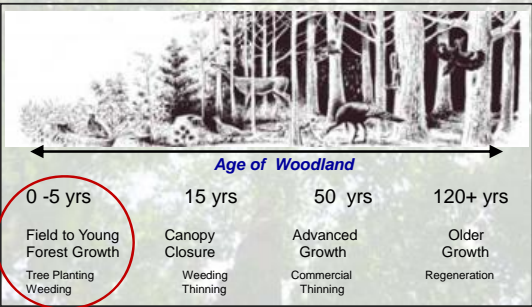
The Woods In Your Backyard Program

UNIVERSITY OF MARYLAND
EXTENSION
Solutions in your community

What You Will Learn:

- Options for converting lawns and intermediate use areas to natural areas.
- Tools and equipment considerations

Time line for Forestry Activities



Age of Woodland			
0-5 yrs	15 yrs	50 yrs	120+ yrs
Field to Young Forest Growth	Canopy Closure	Advanced Growth	Older Growth
Tree Planting Weeding	Weeding Thinning	Commercial Thinning	Regeneration


Your Property in the Landscape: Looking for Opportunities

- Consider habitat of surrounding properties
- Adding on to existing forest areas – red vs orange area?



Plant Drainage Areas Potential Riparian Areas

Use Soil Survey or your Eyes



Areas with high potential for water quality and habitat value

Create fewer & larger natural areas

What Are The Options? Depends on Your Objectives!



Maintain a view? Retire a sloped area?
Wildlife habitat closer?
Enhance a storm retention pond? Create a wildlife corridor?

Connection to Wooded Properties!



Consider working with neighboring property to create corridor or larger area

Options for Converting Lawn and Other Intermediate Areas

Natural Areas Without Tree Cover:

- Occasional mowing
- Warm season grasses & wildflower fields

Convert to Woodland:

- Managing natural succession
- Maintain old field areas
- Tree planting



Range of Options to Establish Natural Areas

- Maintain early succession cover



Mow every 2-4 years



Mow once a year

Mow every 3 years in strips Habitat for turkeys, quail, etc



Warm Season Grasses & Native Wildflower Fields

- Create unique habitat for wildlife
- Requires complete removal of present vegetation, purchase of seed (\$\$), intensive management, special equipment for planting.
- 2-3 years to become established
- Seed for wildflowers, warm season grasses expensive.
- Cost share programs are available



3-acres WSG



Maintain Existing Old Field Succession



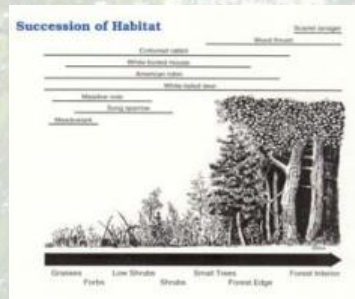
Many existing old fields can be maintained by killing hardwoods that establish themselves. Provides unique habitat

Manage Old Field Succession & Young Forests

- Control invasive species
- Clear around tree species you want to succeed.
- Low cost but requires regular maintenance



Succession & Wildlife Habitat



What succession stage or habitat type is most limiting for the wildlife of interest?



Garrett Co
Early Successional Species



Eastern Shore
Early Successional Species Vary by Region

Establish Trees



By planting



Natural regeneration

Reasons for Tree Planting

- Reforestation
- Water Quality
- Develop Wildlife Habitat
- Windbreak
- Noise Buffer
- Aesthetics



Hedgerows - Privacy

- Long narrow forest areas between fields
- Should be at least 50' wide
- Use a combination of trees and shrubs
- Mix evergreens and deciduous



Windbreaks

- Use evergreens
- Plant at least 4 rows deep if possible
- Stagger rows so that it fills in quicker



Planting for water quality



- Buffers should be at least 35 feet wide for water quality.
- Need 100 wide buffer for maximum wildlife benefit.
- Whatever you can provide is a benefit and worth the effort.

Tree Planting Using Seedlings



Bare root seedlings available from MD State Forest Nursery in spring. Minimum of 100 trees per order. A Great Deal!



John S. Ayton MD State Nursery
<http://dnr.maryland.gov/forests/nursery/isatreenursery.html>

Reforestation

- Most reforestation projects use seedlings at 400 per acre. Fewer if desired.
- Select the proper tree for the site
- Keep the seedlings fresh
- Seedlings should be planted in March or early April



Mechanical tree planting

Site Preparation



Fall prior to Planting:

Cut the grass to a low height if needed.

Kill competing vegetation within 3 feet of trees using herbicide or mechanical methods

Check for presence of voles and treat if needed



Tree Planting Methods



Volunteers - Urbana High students



commercial hand planter



Mechanical tree planting

Protecting Young Seedlings




Installing tree shelters
Deer fencing

Planting tree seedlings without deer protection is a recipe for failure in most areas of Maryland!

Tree Shelters Maintenance Source of Supply





Older shelters may harm trees. Nets prevent bird entry.
Tree shelters from older plantings can be used

Maintaining Plantation

- Three mowings per season is ideal with herbiciding of the tree rows.
- The cover crop is important. Dense enough to exclude weeds ...but open enough to not harbor mice and voles.
- *Planting seedlings in turf without killing the vegetation within 3 ft is a recipe for disaster!*



The Headless Mower

Voles are very destructive: Be proactive






Vole damage on a sapling



Herbicides and Weeding

- Herbicide & mowing during the first few growing season to control competing vegetation.






Herbicide strips or circles around each tree

Roundup is safe, available and commonly used. Other herbicides will kill vegetation for a long period of time.

Weedings

- Mowing
- Vine removal
- Invasive Species Control



Managing this young stand might involve mowing the grasses



Control Invasive Species Before They Become Established!



As trees grow and crowns close let it go “wild”



Be aware of county ordinances for ROW and weeds

Sources of Assistance & Materials

(See information sheet)

- University of MD Extension Woodland Stewardship Education website www.extension.umd.edu/woodland
- MD DNR Forest Service state forester www.dnr.state.md.us
- Backyard Buffers – MD DNR
- Seedlings from John S. Ayton State Forest Nursery operated by MD DNR Forest Service
- Tree shelters – look online
- Forest herbicides – see info sheet

