

**George Washington
National Forest
Plan Revision**

Vegetation Management

- Timber Harvest
- Fire Management
 - Prescribed Fire
 - Wildland Fire
- Wildlife Habitat Improvement
- Special Biological Areas
- Old Growth
- Non-Native Invasive Species

Vegetation Management

Terms

Stand: A community of trees of similar type and age

Age class distribution: A grouping of all the stands in an area based on 10-year age classes

Forest interior habitat: Areas of mature, unbroken forest away from edges of openings in the vegetation

Habitat Fragmentation: The disruption of habitat due to some disturbance that affects the extent and conditions of habitat for a species.

Vegetation Management

Terms

Succession: Often described as the development of a forest community following a major disturbance.

- early 0-10 years;
- seedling/sapling 11-40 years;
- mid 41-80 years; and
- late over 80 years old.

Early successional habitat: Little to no canopy cover and an abundance of ground cover. May include forest 0 - 10 years of age, maintained openings, grasslands, balds, shrublands or open woodlands.

Vegetation Management

Terms

Not Suitable for Timber Production. Forest land for which timber production is not a management objective.

- a. Lands withdrawn from timber production;
- b. Timber production would not be compatible with the desired conditions of the plan;
- c. Timber is generally not suitable for harvest.

Lands Generally Suited for Timber Harvest.

- a. Lands suitable for timber production, and
- b. Other lands where salvage sales or other harvest necessary for multiple-use objectives may take place.

Vegetation Management

Terms

Timber Harvest. The removal of trees for wood fiber use and other multiple-use purposes.

Timber Production. The purposeful growing, tending, harvesting, and regeneration of trees to provide commercial timber products.

Vegetation Management

Terms

Prescribed fire: Management ignited fire to meet specific objectives under prescribed conditions.

Fire suppression: Actions to control and contain a fire using an appropriate management response

Fire regime: Pattern of fire occurrence in a particular ecosystem or geographic area. Described in terms of size, severity, frequency, seasonality, type, and duration.

Vegetation Management

Terms

Fire condition class: Measure of departure from fire regime

- Class One: Fire regimes are usually within historical ranges. Vegetation composition and structure are intact.
- Class Two: Fire regimes on these lands have been moderately altered from their historical range by increased or decreased fire frequency.
- Class Three: Fire regimes on these lands have been significantly altered from their historical return interval. Vegetation composition, structure and diversity have been significantly altered.

Why Manage Vegetation?

Why Manage Vegetation?

Purpose of the National Forest

National Forests established and purchased:

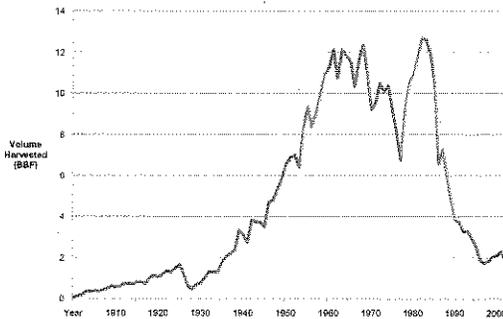
- For securing favorable conditions of water flows
- To furnish a continuous supply of timber

... Organic Act of 1897

... Weeks Law of 1911

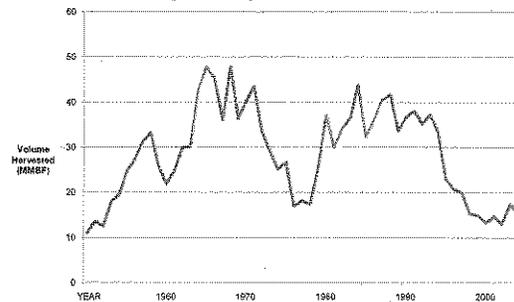
Why Manage Vegetation?

Historic National Forest Timber Sales



Why Manage Vegetation?

George Washington NF Timber Sales



Why Manage Vegetation?

Purpose of the National Forest

National forests are established and shall be administered for outdoor recreation, range, timber, watershed, and wildlife and fish purposes.

...Multiple Use – Sustained Yield Act of 1960

Why Manage Vegetation?

Purpose of the National Forest

Provide for diversity of plant and animal communities based on the suitability and capability of the specific land area

...National Forest Management Act 1976

Why Manage Vegetation?

To reestablish vegetation communities

Historically, fire regime on most of forest was frequent (2-8 years on drier sites), but low intensity with mixed severity. This maintained more open woodland habitat.

Fire exclusion has resulted in:

- encroachment of shade tolerant and fire intolerant species normally limited by fire;
- Increased vulnerability of trees to insects/disease;
- inadequate reproduction of fire tolerant species
- Shift in type and increase in accumulation of fuel

Why Manage Vegetation?

To improve wildlife habitat

To improve diversity of habitat conditions and associated species

To provide a diversity of structure and composition to plant communities

Why Manage Vegetation?
 To improve wildlife habitat

Cooperative Relationship with

- Virginia Department of Game and Inland Fisheries
- West Virginia Division of Natural Resources

Why Manage Vegetation?
 To improve wildlife habitat

Management of Game Species

Re-set the successional stage, increasing sunlight to the forest floor, encouraging soft mast, browse and bugging areas

Deer	Bear
Turkey	Woodcock
Ruffed Grouse	Squirrel
Bobwhite	Rabbit

Why Manage Vegetation?
 To improve wildlife habitat

Management of non-game species

American Bird Conservancy:
 Top 20 Most Threatened Bird Habitats in the U.S. -
 Early Successional Habitat in Eastern Deciduous Forests

Partners in Flight: Watch List Species

Why Manage Vegetation?
 To improve wildlife habitat

Management of non-game species

- Insects
- Reptiles
- Mammals

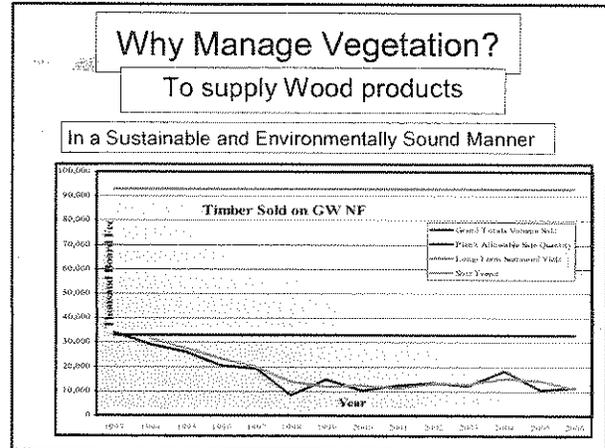
Age	Acres	%
0-10	12,094	1
11-20	25,483	2
21-30	26,472	3
31-40	40,647	4
41-50	6,432	1
51-60	4,063	0
61-70	13,186	1
71-80	55,668	5
81-90	159,462	15
91-100	230,465	22
101-110	184,691	18
111-120	80,273	8
121-130	74,343	7
131-140	48,793	5
141-150+	80,927	8
TOTAL	1,042,999	100

To provide for a healthy
Early successional 0-10
s of
tain

Grouse: 5-20

Hard mast production: 40+

Bear snags



Why Manage Vegetation?

To supply Wood products

To support local economies

In Virginia, every job created in forestry related industry results in another 1.5 jobs in the Virginia economy.

Every dollar generated in value-added results in another \$1.47 value-added in the Virginia economy.

Why Manage Vegetation?

To supply Wood products

To improve the practice of forestry

Forest research and experimental forests have been instrumental in developing:

- Silvicultural practices,
- Wildlife habitat improvements
- Protection of water quality – development of BMPs

Current Management

1993 Forest Plan resulted in

Percent of Forest	Vegetation Mgt
33%	Little to no active vegetation management
10%	Recreation emphasis with a small amount of vegetation management
57% * Half is unsuitable	Vegetation management using timber harvest for wildlife and timber

Current Management

Timber Suitability

Description	Acres
Lands withdrawn from timber production and lands physically unsuitable for timber production	145,000
Objectives inconsistent timber production	244,000
Lands impractical to manage given lack of access, low productivity, or excessively steep slopes	206,000
Lands unsuitable due to economic efficiency	116,000
Land suitable for timber production.	350,000

Current Management

Interior and Early Successional Habitat

The Forest Plan sought to:

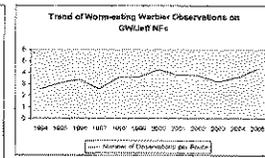
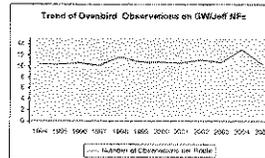
Provide large, unfragmented blocks of forested land, mostly in later successional stages.
-located in a manner that provided opportunities for the movement of plants and animals.

Provide habitat for species benefiting from early successional vegetation.
-located in timber harvest units (0-10 age class), wildlife clearings, utility rights-of-way, and prescribed burn areas.

Current Management

Interior and Early Successional Habitat

The Management Areas designated to provide large blocks of relatively unfragmented forested areas have not changed.



Current Management

Interior and Early Successional Habitat

Timber harvesting, however, has declined and acreage treated has decreased from about 3,000 acres per year in 1993 to about 800 acres per year.

Current Management

Interior and Early Successional Habitat

Since the 1993 revised GW forest plan, scientific understanding of fragmentation in general and the effects of fragmentation on various wildlife species has changed.

"Fragmentation" is better defined as a permanent loss of forests rather than temporary change within a forest as they are managed silviculturally.

Management Recommendations

Open Woodland Habitat

Contains large patches of mature trees, yet provides an understory of native grasses and shrubs

Restoration can provide habitat required at some point in yearly life cycle needs:

deer, ruffed grouse, black bear, turkeys, Indiana bats, golden-winged warblers, and many 'forest interior' bird species during critical post-breeding, migratory, and wintering life cycles.

Management Recommendations

CER recommended the same level of land suitable for timber production (~350,000 acres of land).

Need to increase acres of open woodland habitat and reestablish vegetation communities through the use of fire across much of the Forest

90% of the GW is highly departed from natural fire conditions.

Increase the prescribed fire objective to program of 15,000 + acres

Ecological Sustainability Analysis

Identifies the ecological systems on the forest

Identifies rare and at-risk species along with the threats to these species

Determines need for additional plan components to address species and systems needs

Special Biological Areas

Lands that support key components and concentrations of the Forest's biological diversity.

These areas typically include high quality natural communities such as high elevation mountain tops, shale barrens, caves and karst features, wetlands, and habitat for threatened, endangered, and sensitive (TES) species.

Special Biological Areas

69,000 acres of land identified as special biological areas.
- additional 6,100 acres of the Laurel Fork

CER identified an additional 49,000 acres of land to be added.

Old Growth

Category	Total Acres	
	Suitable Timberland	Unsuitable Timberland
Existing in 1993	33,134	121,475
Current Potential Old Growth	41,000	201,000
Future Potential Old Growth	N/A	654,000

Non-Native Invasive Species

Spread of non-native invasive species is a concern across the forest.

The measures to use to control these plants and management practices to prevent their spread are considerations in the revision.

What We've Heard

- Some prescribed burning is needed
- No prescribed burns at all, let natural fires burn
- Incorporate goals and objectives of state, regional and national wildlife plans
- More balanced age classes: 3-5% herbaceous, 10-15% early successional, 15-20% young, 50-60% in mast producing 40-120 yrs, 10-15% in late
- All acreage in the wildlife habitat designations available for active wildlife management.
- Retain MA 14 areas – important for black bear and other species

What We've Heard

- Strictly protect wood turtle populations
- Establish objectives for old growth in areas other than wilderness.
- Keep suitability for timber harvest on perimeter of areas but not in the interior
- Continue timber harvesting in areas already managed and stay out of unmanaged areas
- Invasive species – need to be aggressive
- Concern over gypsy moth population explosions

Tonight's Meeting

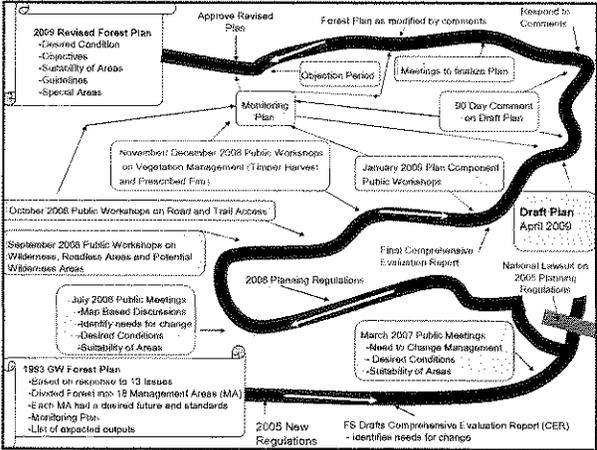
Question

- **What is important to you about managing vegetation on the Forest?**

Tonight's Meeting

Groups

- **By Topic:**
 - Wildlife Management
 - Fire Management
 - Timber Management



Next Meetings

- **Vegetation Management Meetings**
 - November 13 - Verona
 - December 3 - Lexington
- **Forest Plan Components**
 - January or February - Verona
 - January 29 - Lexington

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Visit Our Website

www.fs.fed.us/r3/gwj