
Timber Harvests and Wildlife Management

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Things to Consider...

- **Species of Interest**
- **Carrying Capacity—how many can this land support?**
- **Limiting Factor—what is suppressing the population now?**
- **Diversity—the more diverse, the greater the attraction**
- **Interspersion—interweaving of habitats**
- **Edge—key element for many species**



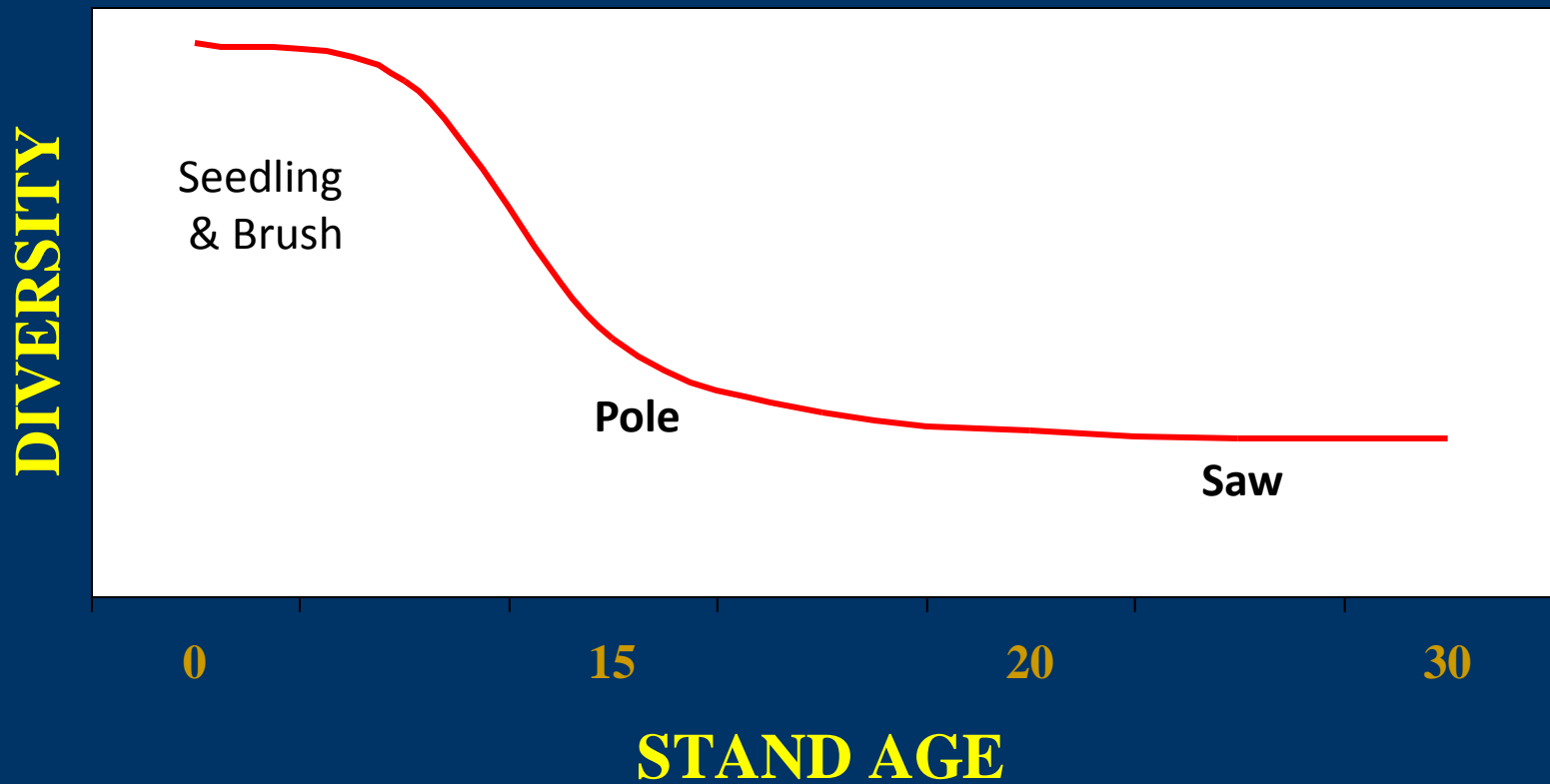
Basic Needs of Wildlife

- Water
- Food
- Cover
- Space

Early Successional Wildlife Species and Habitat Loss

- In the last 50 years Virginia's fallow land declined by 64%
 - Decline in many wildlife species
 - Songbirds (yellow-breasted chat, brown thrasher, Bachman's Sparrow)
 - Bobwhite Quail
 - Rabbits
 - Loss of Habitat Diversity
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- A close-up photograph of a small, brown and white speckled bird, likely a sparrow or similar species, perched on a person's hand. The bird is facing left, and its feathers are detailed with fine patterns of brown and white. The background is a soft, out-of-focus brown, suggesting an indoor setting with warm lighting.

Relationship of Biodiversity to Forest Age



Timber Management Options

- Clearcut
- Thinning
- Shelterwood Harvests
- Logging Decks/Skid Trails
- SMZs

- Prescribed Burning



Clearcut-

- Even-aged stand management
- Stimulates grasses, forbs, legumes
- Increases insect abundance
- Provides good nesting and brood habitat







Hardwood Clearcuts-Wildlife

- Size (10-20 acres)
 - Interspersed with other habitat types
- Create soft edge/field border within harvest area
- Leave snags/den trees
- Don't have to be "clean"
 - Leave tops, slash laying or create long hedgerows

Thinning (Hardwoods and Pines)

- Marked Thinning (Basal Area Reduction)
- Timber Stand Improvement
- Crop Tree Release
- Know the difference between thinning and high grading a hardwood stand

Benefits of Thinning

- Increased sunlight to forest floor!!
- Sunlight = More herbaceous plants
- Increases forage, seed and fruit production
- Increases biodiversity and habitat structure
- Good for the trees too!

Commercial Thinning (Hardwood)

- Not widely practiced
- NOT High Grading
 - Need experienced consultant and logger
- Encourages early successional growth
- Prescribed burning will improve early successional habitat





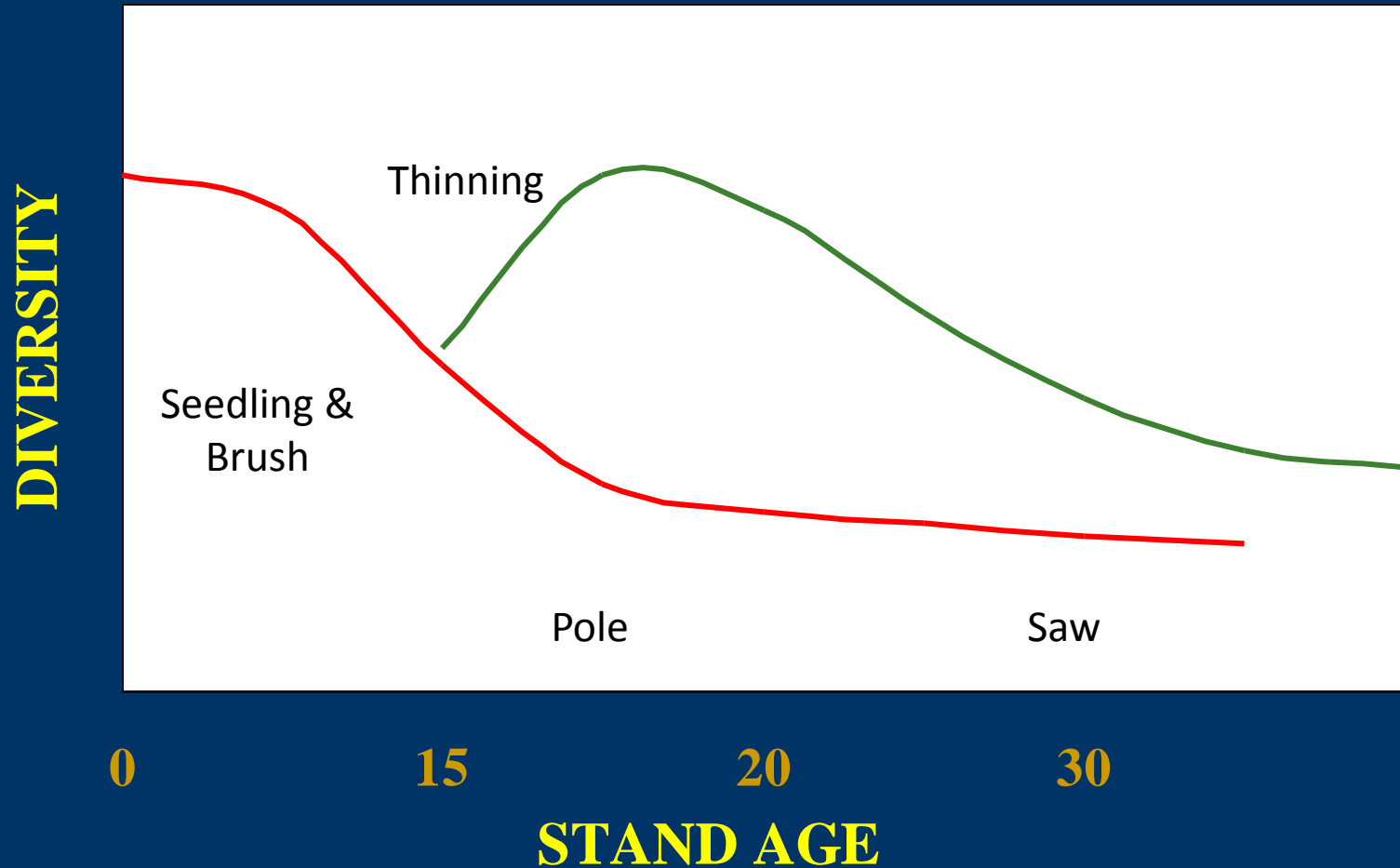
•Benefits for both timber and wildlife



Thinning Improves Brooding Habitat

- Promotes growth of herbaceous vegetation
- Increases the abundance of insects

Thinning's Effect on Biodiversity



Crop Tree Release/TSI

- Remove understory saplings
 - Herbicide or Manual
- “Releasing” the remaining trees from competition
 - Light, Space, Nutrients, Water
- Labor Intensive/Time Consuming
- Benefits for early successional species won’t be seen without continued management
 - Herbicide/Prescribed Burning

Sheltonwood Harvest

- Regenerating oak forests
- Continued harvests (2-3x) over 7-10 years
- Open canopy-advanced regeneration critical
- Final harvest conducted when sufficient regeneration is present
- Deer browse can be problematic







• Logging decks as “food plots”

•Brood strip development



Streamside Management Zones

- Can provide thicket cover
- “Sanctuary”/bedding areas
- Soft mast production



Controlled Burning



Benefits of Burning

Removes ground litter

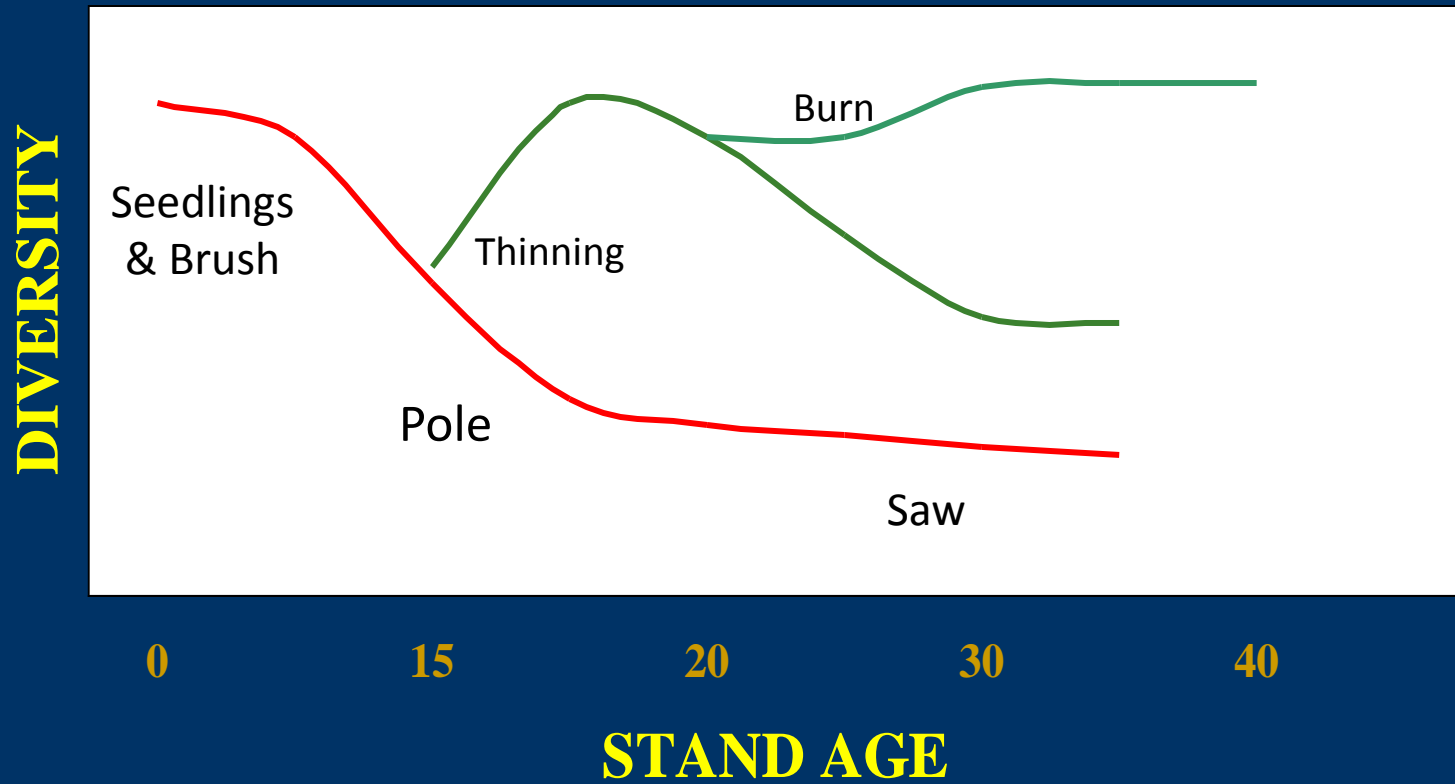
Stimulates herbaceous growth

Maintains optimum vegetation heights

Increase nutritional value of vegetation

Increases palatability/digestibility of foods

Effect of Fire on Biodiversity





Any Questions?