



**Regeneration of Forestland in
Northwestern New Jersey: One
Forester's Observations and Experience**

**New Jersey Division SAF
Winter Training
January 30, 2020**

Disclaimer

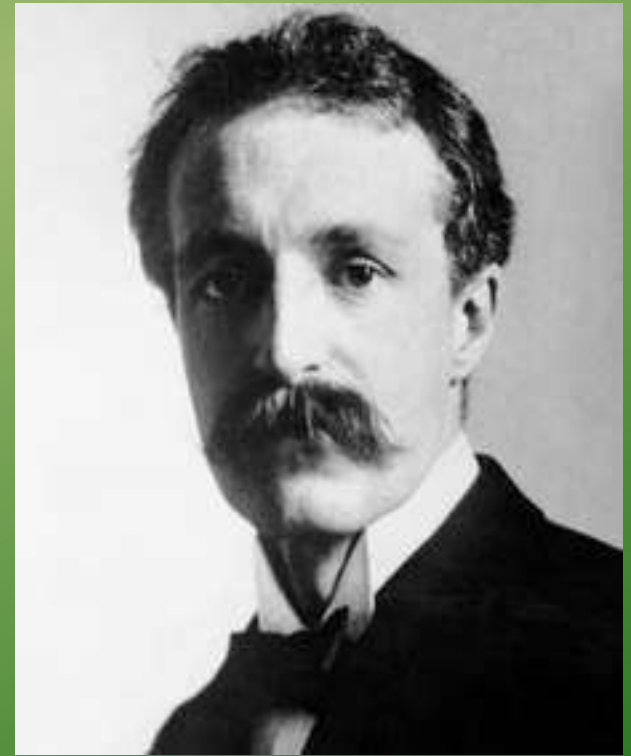
The following is a review of anecdotal evidence that has been observed by one forester over a period of years. No measurements have been made. Observations are presented in the hope that they will encourage discussion and information exchange between foresters.

Presentation Content

- What is the rationale for doing what we do?
- How have we done it?
- What results are we seeing?
- How can regeneration success be improved upon?

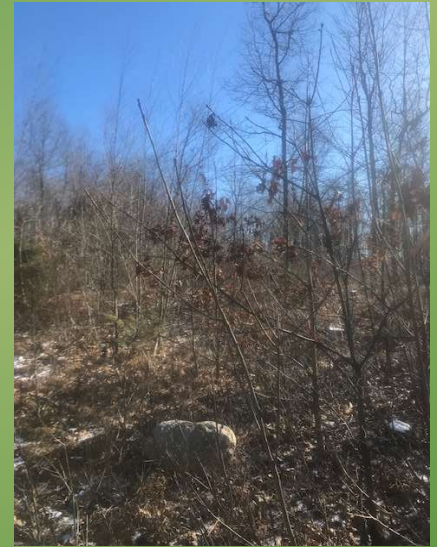
Pinchot's Mission. Our Mission?

*'The greatest good for
the greatest number in
the long run'.*



Meeting Society's Needs with Sustainability

The most important outcome of the silvicultural manipulation of our forests must be the establishment of desirable regeneration that is 'free to grow'.



Practice Prerequisites

- Use History
- Site
- Silvics
- Experience



Working toward regeneration



Intermediate treatments:

- Improved stand composition
- Enhanced genetics
- Control disease

From what types of forests are these observations derived?

- Central hardwoods
- Northern hardwoods
- Mixed hardwoods
- Mixed wood (hardwood/white pine)

Silvicultural Systems and Natural Regeneration

Even-aged

- Shelterwood
- Seed Tree

Uneven-aged

- Single-tree Selection
- Group Selection

'Oak seedlings develop in a closed-canopy forest'.
- Anonymous NJ 'Greenie' and
misinformed, ignorant, and/or politically-
motivated ecologist

Even-aged Systems

Shelterwood

Seed tree

Clear-cut

Modified Seed Tree







Uneven-aged Systems

Single-tree Selection

Group Selection









Regeneration Results

- Oak/Hickory
- Sugar Maple
(with substantially lesser quantities of other shade-tolerants such as Hophornbeam)
- Black Birch/Red Maple/Beech/Hickory
(or any combination thereof)
- Non-native shrubs and *Ailanthus*























Problems associated with regenerating forested sites

- Site/past use/pre-harvest stand composition
- Timing of harvest
- Seed production
- Non native/Invasive plants (dirty logging equipment)
- Deer
- Parcelization and fragmentation
- Social/political issues ('edgy silviculture')
- Absence of fire (NJFA meeting 3/21/2020)
- **Loss of 'institutional' knowledge**

Loss of 'institutional' knowledge.

Caused by lack of communication between professionals and lack of mentorship!



That's all, folks. See you in the forest?



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