

NATIONAL ADVANCED SILVICULTURE PROGRAM (NASP)

Bob Cooke
USDA Forest Service
Durham, NH



Outline

- What is NASP
- Why NASP is important
- How NASP came about
- Eastern Region Steps to Certification



NASP is.....

- National Advanced Silviculture Program
- Attendees – FS, BLM, BIA, and States

- Graduate-level training
- Four National Modules
- Local Modules
- Project stand



Why NASP is important



Why NASP is important

NASP is a must for Certification

- All vegetation activities
- Prescription
- Certified Silviculturist



Forest Service Certification

- A Certified Silviculturist with the US Forest Service is:
 - Certified by the Regional Forester
 - Experienced
 - Trained
 - Tested
 - Recertified



NASP is key for....

- Silvicultural prescriptions
 - ▣ complex
 - ▣ environmentally-sound
- Educate and train
 - ▣ state-of-the-art



How NASP came about



Clearcutting Controversy

- 1960s – Bitterroot NF clearcutting and terracing
- Bolle report criticized the Forest Service
- “mining” timber

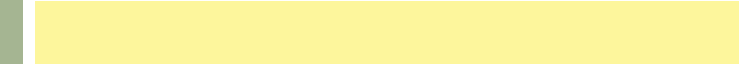


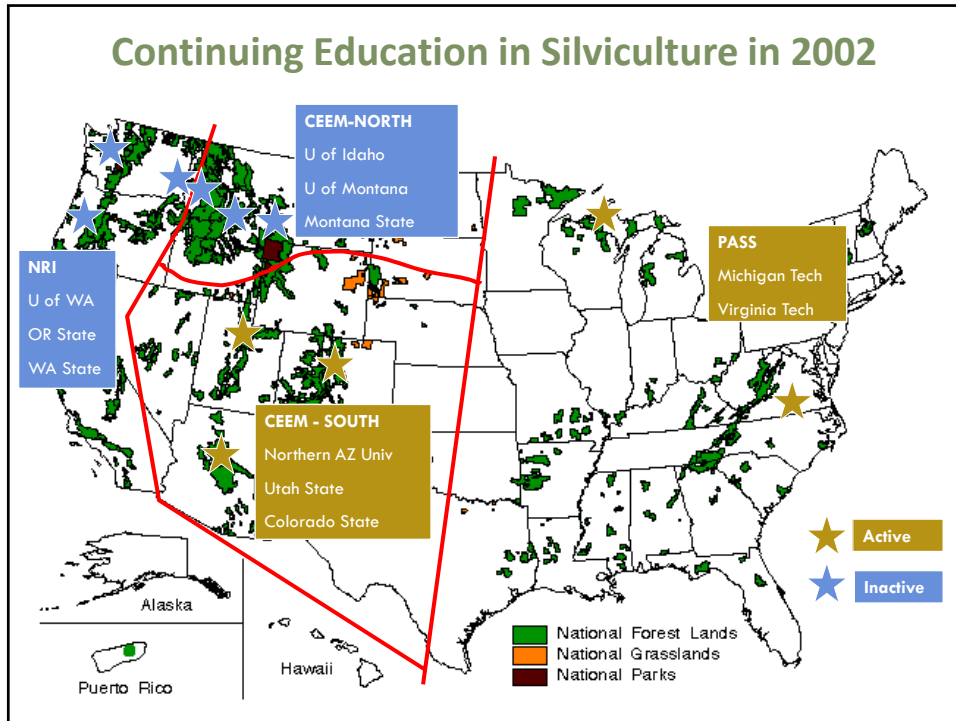
<http://www.foresthistory.org>



Effects of Controversy

- 1971 Team recommended
 - **improving knowledge,**
 - **skills, and**
 - **abilities for silviculturists**
- 1973 FS Chief directed Regional Foresters
 - silviculture certification programs





NASP is born

- The review team recommended
 - national core curriculum
 - university-sponsored program
- Class 1 of NASP was conducted May 2007
- NASP 12 will start July 2018



Module 1 - Ecological Systems

- University of Minnesota
- Drs. Windmuller-Campione & Sagor
- Two weeks

Topics	Contact Hours
Forest ecology	16
Geology, landforms, soils	16
Hydrology and watershed	8
Tree physiology	12
Silvics of forest trees	4
Genetics	8
Fire ecology, fire behavior	8
Course evaluations, tests etc.	4
All topics	76



Module 2 - Inventory and Decision Support

- University of Oregon
- Dr. Bailey
- Two weeks

Topics	Contact Hours
Growth and yield	8
Site quality and productivity	4
Statistics/Sampling/Inventory	32
Economic principles	8
Forest regulation	4
Forest planning	4
Legal requirements	4
Monitoring	8
Course evaluation, tests, etc.	4
All topics	76



Module 3 - Landscape Ecology

- University of Mass & Northern Arizona Univ.
- Dr. McGarigal
- Two weeks

Topics	Contact Hours
Introduction to Landscape Ecology	2
Concepts of Scale	2
Characterizing the landscape	6
Processes that structure landscape	6
Disturbance ecology	10
Fire ecology	8
Ecological implications	10
Landscape dynamics	4
Landscape modeling	12
Management applications	12
Course evaluation, tests, etc.	4
All topics	76



Module 4 - Advanced Silviculture Topics

- University of Tennessee
- Dr. Clatterbuck
- Three weeks

Topics	Contact Hours
Silvicultural systems	14
Regeneration	20
Stand and forest dynamics	24
Integrated pest management	4
Fish, wildlife, TES	6
Rangeland management	2
Scenery management	2
Timber, markets, utilization	2
Harvest systems	4
Prescribed fire	4
Diagnosis process	4
Rx preparation practice	26
Course evaluation, test, etc.	4
All topics	116



Eastern Region Local Modules

- Lake States
- Southern Region - Mountain
- Southern Region - Pine



Eastern Region Local Modules

- Lake States
- Southern Region - Mountain
- Southern Region - Pine
- Northeast Silviculture Institute for Foresters



Eastern Region Steps to Certification



Step One

- Get experience before applying
 - Stand examination and inventory,
 - Sale preparation and administration,
 - Reforestation and stand improvement,
 - Land Management/Timber Management Planning, and
 - Writing silvicultural prescriptions.



Step Two

- Respond to call for applications
 - Summary of work experience
 - Copy of Performance rating
 - Letter of recommendation from Forest Supervisor
 - Copy of College transcript(s)
 - Letter of personal commitment
 - Letter of reference from supervisor or Forest Silviculturist

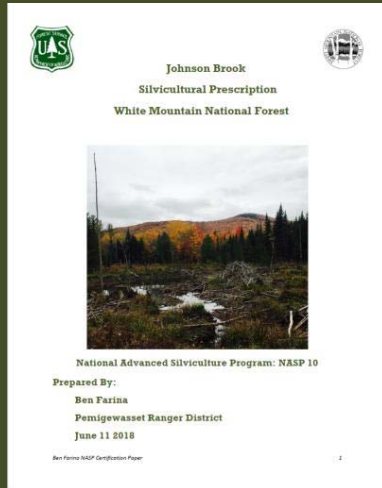


Step Three

- Attend all 4 national modules and an appropriate local module, complete required assignments and receive a passing grade.



Step Four



- Write a project paper on a selected stand
 - ▣ Existing Condition
 - ▣ Objectives
 - ▣ Desired Future Condition
 - ▣ Alternatives
 - ▣ Prescription for preferred alternative



Step Five

- Certification Panel
 - ▣ Regional Forester
 - ▣ Representative University or Research Representative
 - ▣ Neighboring Forest Silviculturist
 - ▣ Forest Line Officer
- Presentation
- Field Visit



Step Six

- Receive Official Certification



Step Seven

- Maintain certification
 - Every Four years
 - Experience in the Practice of Silviculture
 - Continuing Education
 - Sample Prescriptions



Prescription Template

Default Silvicultural Prescription

SILVICULTURE PRESCRIPTION									
Project	State	County	Section	Township	Range	Zone	Block	Sub-Block	Acres

STAND CHARACTERISTICS

Species	Age Class	Volume	Basal Area	Number of Trees	DBH	Height	Canopy Closure	Undergrowth	Notes

STAND OBJECTIVES

- Maintain a mature hardwood-hickory stand with high structural diversity.
- Regulate the stand to support hardwood species, including the short-leaf pine, in the future.
- Provide habitat for native species, including the short-leaf pine, in the future.
- Maintain a high level of structural diversity in the stand and in the future.
- The trees in the stand are growing in an open site and are subject to insect and disease attacks.
- The stand contains an average of 2.5 inches per acre of DBH and 3.0 trees per acre over 12" DBH.

MANAGEMENT OBJECTIVES

- Provide a high level of structural diversity in the stand and in the future.
- Provide habitat for native species, including the short-leaf pine, in the future.
- Maintain a high level of structural diversity in the stand and in the future.
- The trees in the stand are growing in an open site and are subject to insect and disease attacks.
- The stand contains an average of 2.5 inches per acre of DBH and 3.0 trees per acre over 12" DBH.

LOW-YIELD OBJECTIVES

Forest Structure

- Allow the stand to develop a balanced age class distribution over the next 2-3 decades.
- Use natural regeneration to increase numbers, diversity, and composition of the stand.
- Control regeneration of oak, pine, and other species in the stand.
- Control basal area and stand height.
- Remove coarse woody debris from the stand.
- Provide habitat for native species, including the short-leaf pine, in the future.
- The trees in the stand are growing in an open site and are subject to insect and disease attacks.
- The stand contains an average of 2.5 inches per acre of DBH and 3.0 trees per acre over 12" DBH.

Management

- Provide a high level of structural diversity in the stand and in the future.
- Provide habitat for native species, including the short-leaf pine, in the future.
- Maintain a high level of structural diversity in the stand and in the future.
- The trees in the stand are growing in an open site and are subject to insect and disease attacks.
- The stand contains an average of 2.5 inches per acre of DBH and 3.0 trees per acre over 12" DBH.

DETAILED PRESCRIPTION

Management Objectives

- Provide a high level of structural diversity in the stand and in the future.
- Provide habitat for native species, including the short-leaf pine, in the future.
- Maintain a high level of structural diversity in the stand and in the future.
- The trees in the stand are growing in an open site and are subject to insect and disease attacks.
- The stand contains an average of 2.5 inches per acre of DBH and 3.0 trees per acre over 12" DBH.

Management Objectives

- Provide a high level of structural diversity in the stand and in the future.
- Provide habitat for native species, including the short-leaf pine, in the future.
- Maintain a high level of structural diversity in the stand and in the future.
- The trees in the stand are growing in an open site and are subject to insect and disease attacks.
- The stand contains an average of 2.5 inches per acre of DBH and 3.0 trees per acre over 12" DBH.



For More Information

Bob Cooke
 rcooke@fs.fed.us
 603.868.7705



Thank You for Your attention!