Shortleaf Pine Initiative

Eastern Native Grass Symposium
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www.shortleafpine.net
Historic Range of Shortleaf Pine and Area of Overlap with Longleaf Pine Range
History of Shortleaf in the U.S.

- Important for trade and building during European colonization and expansion.
- Exact historical range is unknown, but estimated to be 70-80 million acres in 1896.
- Decline in harvests started as early as the mid-1800's.
Historical Context – Shortleaf Pine

- Shortleaf responded well to Native American landscape management—especially fire
- Common in historical records—frequent fire return intervals favored Shortleaf
- Historic fire regimes (with variable frequency and intensity) were good to Shortleaf pine
Shortleaf Pine
-factors contributing to decline

- Historic vs. Current fire regime
- Fence Laws
- Loblolly and Longleaf interests
- Harvesting of Shortleaf without regeneration/replanting
- Urbanization
- Succession
Shortleaf Pine, today...

Current range of Shortleaf Pine:
6 million acres in 22 states

- Acreage has declined by 53% since 1980 and 91% since 1896.

- Less than 10% of its historic range.
• Current (2012) area

Range-wide

Total = 6,102,937 acres
Shortleaf pine = 3,227,998
SP – Oak = 2,874,939
- Change in timberland area (1980-2012)

12.6 million acres (1980s) - 6.1 million acres (2012)

Loss of 52 percent
Loss of 190,625 acres per year
Loss of 522 acres per day
Loss of approx 22 acres per hour !!

12.6 million acres (1980s) – 6.1 million acres (2012)
Loss of 52 percent*

Top two FIA Shortleaf Forest Types
Why Shortleaf?

- Declining species and ecosystem
- Wide range
- High quality sawtimber
- Better fit for increasing demand for sawtimber with decreasing demand for pulpwood on public and private lands.

- Pure or mixed stands of Shortleaf managed as savanna or woodland create excellent habitat for many floral and faunal species (RTE and Game)

- Fits Ecosystem management on public lands in historic Shortleaf range

- Fits changing ownership objectives for NIPF landowners
Why Shortleaf?

- Good option on poor to fair sites with thinning, prescribed fire and long rotation.
- Short and narrow crowns along with short needles allows higher sunlight levels to understory. Same sunlight with a higher BA.
- More resilience to wind or ice damage.
- “Fireproof” stands in high arson areas.
Timeline – Shortleaf Pine Initiative

September, 2010 – Shortleaf Workshop – Raleigh, NC
September, 2011 – 1st Biennial Shortleaf Conference – Huntsville, AL
March, 2013 – Shortleaf Pine Initiative Created
June, 2013 - Stakeholder Planning Workshop – Knoxville, TN
October, 2013 – Stakeholder Planning Workshop – Roanoke, VA
December, 2013 – Stakeholder Planning Workshop – Ft. Smith, AR
June, 2014 – Stakeholder Planning Workshop – Waretown, NJ
September, 2014 – First Draft – Shortleaf Pine Restoration Plan
November, 2014 – Shortleaf Pine Initiative Director Hired
March, 2015 – 1st Shortleaf Pine Advisory Committee Meeting
July, 2015 – Shortleaf Pine Initiative Website Online
September, 2015 – 3rd Biennial Shortleaf Pine Conference – Knoxville, TN
March, 2016 – Shortleaf Pine Restoration Plan – FINAL
March, 2016 – 2nd Shortleaf Pine Advisory Committee Meeting
June, 2016 – Online Shortleaf Pine Restoration Plan
June, 2016 - Webinar via SREF
Shortleaf Pine Restoration Plan: Restoring an American Forest Legacy
Shortleaf Pine Restoration Plan

- Partnerships
- Public Lands
- Private Lands
- Economic Sustainability
- Ecological Sustainability
- Public Relations, Communications and Outreach
- Evaluation of Plan Actions
- Implementation of the Plan
Threats to Shortleaf Pine

- Altered fire regime/lack of prescribed fire/fire suppression
- Conversion to intensive (mostly loblolly) plantation silviculture
- Genetic swamping (loblolly)
- Conversion to urban-suburban or other non-forest uses
- Lack of familiarity (public and professional) with shortleaf pine
- Poor timber markets (lack of resources for public and private landowners to manage forests)
- Southern pine beetle outbreaks
- Littleleaf disease
Barriers to Shortleaf Restoration

- No plan for shortleaf pine restoration (until now)
- Lack of funding and personnel for prescribed fire/smoke management
- Economic hurdles, especially with private landowners
- Fear of additional southern pine beetle outbreaks
- Lack of resources and trained personnel familiar with shortleaf pine restoration
- Limited seedling supply
- Lack of fundamental research about shortleaf pine restoration in different forest systems
Shortleaf Pine Initiative Advisory Committee

- USFS
- USFWS
- NRCS
- TNC
- NFWF
- NACD
- SREF
- NWTF
- AFF
- SGSF
- UTIA
- SEAFWA
- QF
Attributes of Shortleaf Pine
For Wildlife Habitat -

- Short needles
- Narrow and short crown
- Basal Crook and Sprouting
- **FIRE !!!**
Wildlife Utilizing Shortleaf Pine Woodland and Savanna – Game Species

- White-tailed Deer
- Northern Bobwhite
- American Woodcock
- Wild Turkey (Eastern)
Wildlife Utilizing Shortleaf Pine Woodland and Savanna – Threatened/Endangered

- Red-cockaded Woodpecker
- Gopher Frog
- Eastern Indigo Snake
- Gopher Tortoise
- American Burying Beetle
Wildlife Utilizing Shortleaf Pine Woodland and Savanna – Special Conservation Interest (USFWS)

- Baird’s Pocket Gopher
- Black and Louisiana Pine Snake
- Southern Hog-nosed Snake
- Striped Newt
Wildlife Utilizing Shortleaf Pine Woodland and Savanna – Birds of High Concern (USFWS)

- American Kestrel (Southeast)
- American Woodcock
- Bachman’s Sparrow
- Brown-headed Nuthatch
- Eastern Whip-poor-will
- Prairie Warbler
Wildlife Utilizing Shortleaf Pine Woodland and Savanna – Birds of High Concern (USFWS)

- Red-headed Woodpecker
- Northern Bobwhite
- Henslow’s Sparrow
- Loggerhead Shrike
- Chuck-will’s-widow
- Many others...
Appendix F:

Scientific and Common Names of Grass and Herbaceous Species Typically Found in Shortleaf Pine Woodland Understory – Pages 40-47

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Three Condition Classes -

- Maintain
- Improve
- Restore
FIRE – prescribed fire can be utilized at early age due to seedlings ability to re-sprout after top kill by fire.

Slower Crown Closure - narrow, short crowns and slower initial growth means early succession is maintained longer.
FIRE – seedlings can be regenerated and “Banked” for later release due to sprouting ability

FIRE – frequent prescribed burning with adequate sunlight can be used to develop understory for wildlife habitat – game and non-game.
Maintain

- **Ice storms** – narrow, short crowns and short needles capture less ice accumulation
- **Wind events** – same
- **Higher Basal Area** – greater sunlight transmission
- **FIRE** – seedlings can be regenerated and “Banked” for later release due to sprouting ability.
Next Steps

- Partnerships and Collaboration
- Site-based Conservation
- Priority to Existing Stands
- Concurrent Focus on Both Private and Public Lands
- Strategic and Adaptive Approach
- Communication Plan Under Development
Final Thoughts

- Manage shortleaf for the objectives of the landowner and the land.
- Manage shortleaf on the proper sites.
- Be realistic and honest in your expectations.
- Measure twice and cut once.
- Priority to existing stands.
- The SPI is a marathon, not a sprint.