

FOREST LANDOWNER ATTITUDES TOWARD SHORTLEAF PINE RESTORATION: RESULTS OF NINE MISSOURI FOCUS GROUPS

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Abstract—Shortleaf pine (*Pinus echinata* Mill.) once occurred on 6.6 million acres in the State of Missouri, but by the 1970s only 400,000 acres had shortleaf pine. Since 1935 seeds and seedlings have been sold to the public in the State, as well as planted on public lands, for habitat improvement, timber production, and increasing biodiversity. In Missouri, as in many other States, the majority of forest land (approximately 85 percent) is privately owned. In essence, if shortleaf pine restoration efforts are to succeed, they must do so on private land. In 2007 and 2008 a series of nine focus groups was conducted in the historic shortleaf pine range of Missouri. The focus groups ranged from approximately 90 to 120 minutes in length, and had anywhere from 6 to 14 participants. Motivations for growing and managing shortleaf pine were varied, and included ease of production, aesthetics, and wildlife habitat goals, as well as a more general restoration ethic. Economic incentives included sales of timber, increased property values, possible improvements in the growth of more valued species like walnuts, and decreased heating and cooling costs. Many focus group participants alluded to the suitability and hardiness of shortleaf pine as a solution to various problematic land characteristics. It would appear that educational efforts and materials should be better targeted, highlighting planting methods, ease of growth, innate suitability for local habitats, and wildlife benefits. In addition, onsite technical assistance to landowners should be continued or expanded if possible, and increased field days or farm tours should be considered.

INTRODUCTION

Shortleaf pine (*Pinus echinata* Mill.) once occurred on 6.6 million acres in the State of Missouri, but by the 1970s only 400,000 acres had shortleaf pine. Extensive logging from 1880 to 1920, frequent wildfires, and overgrazing have all been suggested as causes of shortleaf population decline. Since 1935 seeds and seedlings have been sold to the public in the State, as well as planted on public lands, for habitat improvement, timber production, and increasing biodiversity.

In Missouri, as in many other States, the majority of forest land (approximately 85 percent), is privately owned. In essence, if shortleaf pine restoration efforts are to succeed, they must do so on private land. To that end, the objectives of this study were to (1) gain an understanding of forest landowners' motivations for managing trees, particularly shortleaf pine; (2) appreciate the challenges and needs of forest landowners in the historic shortleaf pine range; and (3) understand how the Missouri Department of Conservation (MDC) can assist forest landowners.

METHODS

In 2007 and 2008 a series of nine focus groups was conducted in the historic shortleaf pine range of Missouri. The majority of the focus group participants were recruited from the George O. White State Forest Nursery customer database. An attempt was made to prescreen potential participants based on whether they had purchased any shortleaf pine seedlings or seed, and further checks were made while issuing invitations over the telephone. While this resulted in a somewhat imperfect split, to the extent practical, groups were formed based on the presence or absence of shortleaf pine interest. Four focus groups were held with landowners who had done some management for shortleaf pine or who had

shortleaf pine naturally occurring on their land. An additional focus group was held with landowners who had a strong commercial interest in pine. The remaining four focus groups were with landowners who did not manage for shortleaf pine.

The focus groups ranged from approximately 90 to 120 minutes in length and had anywhere from 6 to 14 participants. Participants were mailed a check for \$50 to compensate them for their time and travel expenses to the focus group location. All nine focus groups were audiotaped, fully transcribed, and thematically analyzed for content. While the focus group protocols were similar, the makeup of the groups meant that some questions would vary. However, participants in each group were shown a large photo of a native shortleaf pine forest, and each protocol began with general questions about trees and their management, then asked about motivations, and finally challenges related to tree management.

FINDINGS

Motivations

Motivations for growing and managing shortleaf pine were varied, and included ease of production, aesthetics and wildlife habitat goals, as well as a more general restoration ethic. Other than some regional differences in the prevalence of economic importance, motivations were similar across all groups. Some of the more commonly stated motivations are highlighted here.

Economic incentives included sales of timber, increased property values, possible improvements in the growth of more valued species like walnuts, and decreased heating and cooling costs. Some mention was also made of potential carbon credit sales at some future date.

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Many focus group participants alluded to the suitability and hardness of shortleaf pine as a solution to various problematic land characteristics. Somewhat related to this idea of innate suitability of pine was a tendency to go back to the idea of a preference for shortleaf pine because it was “supposed to be” or it “used to be” in the area or even on the piece of property in question. In all of the focus groups there was discussion of providing shortleaf pine to future generations. Many participants were quick to point out that there was no economic benefit for them, but there might be at some future time for their children or grandchildren. Other participants had more purely ecological or restoration reasons for bequeathing their pine stands, closely related to the idea of “used to be/supposed to be” as previously discussed.

There were many different recreation-related reasons offered for shortleaf pine management. Not surprisingly, a majority revolved around the hunting of species such as deer, turkey, and quail. In addition, people mentioned nonconsumptive benefits of those same species, as well as improved hiking, horse riding, and other benefits. Aesthetic reasons for growing and managing shortleaf pine were stated by a majority of focus group participants, and ranged from the attractiveness of the tree itself, to its evergreen nature, to the smell, and sound, and beyond. For a multitude of reasons, participants found shortleaf pine attractive, and many were emotionally attached to it for the same reasons.

Challenges and Needs

For the most part focus group participants did not have serious problems when it came to managing for shortleaf pine. While certain problems, such as rainfall, were out of MDC control, there were requests for education and labor assistance, as well as some minor issues with the State forest nursery, that can be addressed. Suggestions on labor and educational assistance that would be useful were varied, ranging from simple planting instructions, to field days and help with tax preparation. In some groups a small number of participants had experienced issues with the State forest nursery, including the availability of seeds and timing of receiving seedlings.

Most participants who were currently growing shortleaf pine said that stronger markets would not necessarily affect their

future management plans, which was not surprising given their current high level of interest despite lagging markets. One individual also commented that he did not like the damage caused to his land by logging contractors, making him hesitant about harvesting for profit. As might be expected, the group composed only of people who derived at least some income from shortleaf pine placed more emphasis on markets. A reliable market for saw logs was seen by many members of that group as the biggest obstacle to increasing their involvement in shortleaf pine management.

Those who did not grow shortleaf pine tended to indicate that they were unfamiliar with the requirements of shortleaf pine, as well as what, if any, benefits it provided for wildlife. These participants in particular voiced a need for educational brochures and training about shortleaf pine. They also indicated that technical assistance and equipment loan or rental programs might encourage them to consider becoming involved in shortleaf pine restoration on their land.

There were some suggestions on how MDC could help landowners who were already managing for shortleaf pine, as well as encourage others to grow it. For the most part suggestions centered around the available quantities of seed and seedlings, as well as when those were available to the public. One participant in the economic group did request help from MDC in developing a marketable use for off-fall. Participants also broached the idea of demonstration areas or farm tours. Several participants had benefited from onsite assistance from MDC staff and commented favorably on the assistance given to private landowners.

MANAGEMENT IMPLICATIONS

Many participants have a strong affinity for shortleaf pine and are strongly motivated to grow it for widely diverse reasons. While most do not face insurmountable challenges, an increase in the availability and variety of educational materials may enhance efforts to encourage shortleaf pine restoration on private lands. It would appear that educational efforts and materials should be better targeted, highlighting planting methods, ease of growth, innate suitability for local habitats, and wildlife benefits. In addition, onsite technical assistance to landowners should be continued or expanded if possible, and increased field days or farm tours should be considered.