



United States
Department of
Agriculture

Forest
Service

Monongahela N.F.
Marlinton District
P.O. Box 210
Marlinton, WV 24954
(304) 799-4334

Monongahela N.F.
White Sulphur District
410 East Main Street
White Sulphur Springs, WV
(304) 536-2144

File Code: 1950

Date: July 1, 2004

Non-commercial Release Project
Reply Requested by July 15, 2004

Friends of the Forest:

I am proposing to conduct non-commercial thinning, or release, treatments on 300 acres of the Marlinton/White Sulphur Ranger District of the Monongahela National Forest, located in Greenbrier and Pocahontas Counties, as described below. This letter is to inform you of the proposal and to invite you to participate by providing any comments or information that you have concerning the proposal. We encourage your participation. However, due to the considerable cost of scoping, and mailing material to the large number of persons on the mailing lists, the Forest can no longer afford to send everyone on the mailing list all analysis and decision documents. Therefore, if you desire a copy of the decision, please notify our office. I ask for your comments in writing by July 15, 2004.

Project: Thinning to improve forest health and future mast production

Location: Selected areas on the Marlinton/White Sulphur Ranger District, in Greenbrier and Pocahontas counties. See Location Map.

Background

The Marlinton/White Sulphur Ranger District has been infested with gypsy moths since before 2000, the year when many areas were first heavily defoliated. Not every acre has had heavy defoliation. Suppression treatments with aerial spraying were done in 2001 and 2003 in several locations. The purpose of treatments was to reduce defoliation and gypsy moth populations. Gypsy moth populations are currently low on most of the district, and defoliation has been reduced from previous years as a result of weather and natural enemies. The gypsy moth is considered an "outbreak" pest, whose population can quickly rise to damaging levels, and equally quickly crash to low levels. Damages from high levels of gypsy moth defoliation range from a few dead branches or trees in a stand to complete stand regeneration and multiple years with little or no mast production. Damage can be much more severe when other stress factors, such as drought, are present.

Stands with many oaks are more likely than other stands to be heavily defoliated when populations rise, and such stands are common throughout the area. Within heavily defoliated stands, oak trees that are dominant are more likely to survive defoliation than those that are codominant, intermediate or suppressed. Dominant trees have their leaf surface, or crown, above the level of the surrounding trees. Young stands, regenerated less than 15 years ago, are likely to have lower defoliation levels than older stands. Once trees within a stand reach 15 years of age, defoliation levels are likely to be similar to surrounding older stands, but survival of more resilient young trees is likely to be higher.



What is the project?

The Forest Service is proposing thinning, or release, on approximately 300 acres, within the White Sulphur portion of the Marlinton Ranger District. Stands proposed for treatment are shown on the attached map, and listed in the following table.

Compartment	Stand	GIS Acres	Year of Origin
16	37	10	1985
16	36	7	1987
17	49	10	1984
17	52	10	1984
17	41	9	1983
17	54	16	1984
17	51	11	1984
55	37	10	1988
55	38	6	1988
55	40	10	1988
63	49	25	1983
63	54	21	1983
94	36	22	1988
94	14	14	1988
95	23	19	1985
95	24	18	1985
97	19	12	1988
97	12	10	1988
97	7	21	1987
97	59	16	1988
Total		300	

The stands chosen for release are 15 to 25 years old. The project would be accomplished by choosing about 40, healthy codominant or better trees per acre and making sure they are free to grow, unimpeded for the next ten years. Trees would be chosen for release based on current good crown size, and would be species that can contribute to the diversity of the stand, whether by choosing a variety of oak trees, or other less common hardwood trees. Pine trees would not be chosen for release. Trees touching the crown of the tree designated for release would be cut. Healthy dogwood, butternut, and American chestnut trees would not be cut. Understory shrubs would not be cut, unless necessary for safety. Vines may be cut, but grapevines would be retained in numbers that comply with Forest Plan standards and guidelines. The maximum tree diameter at 4.5 feet (DBH) is expected to be about 10 inches. No logging equipment would be used and commercial utilization of cut stems will not be possible because of the small size and value.

What would be accomplished by the project?

The release or thinning is proposed to accomplish the following objectives:

- Increase the vigor and strength of canopy trees, primarily oaks
- Increase the ability of these forested areas to withstand future outbreaks of gypsy moth
- Maintain the species diversity of the stands
- Provide stronger potential for future oak mast production in an area which could be heavily impacted by future gypsy moth defoliation

How would thinning accomplish these objectives?

Research indicates that oak trees that are dominant in a 20-year-old stand have a much higher likelihood of surviving to age 80 than do trees with higher levels of competition. Dominant trees have a lower mortality rate following defoliation. On a stand level, this means that crowded stands, with few dominant, and many codominant stems, are more likely to experience serious effects of defoliation, such as mast failures and mortality. Thus, the long-term goal of the thinning would be to reduce stand susceptibility to gypsy moth defoliation.

Similar release projects have been done in areas that experienced heavy defoliation. Monitoring of a stand where heavy defoliation occurred for at least one year indicated that survival of crop trees was good, and crown position was maintained.

Why were these areas selected?

The areas were selected because these young stands are over crowded, mostly oak stands, with few trees that are resistant to gypsy moth. These young stands are located in a matrix of older stands which are very susceptible to gypsy moth because of the high percentages of susceptible species.

The Management Prescriptions for each stand are 6.1, 3.0 and 6.2, as shown on Map 2. Tree felling is permitted within these management prescriptions to enhance mast production and forest health. In 6.1 areas part of the Desired Future Condition (DFC) is that “Management emphasis will focus on manipulation of the naturally occurring tree species composition to optimize hard mast production. . .” (Forest Plan, page 165). The DFC within the 3.0 areas is that, “The Forest will be a mosaic of stands of predominantly hardwood trees and associated understories that provide habitat for a variety of

wildlife species.” (Forest Plan, p. 127) The DFC for the 6.2 areas includes “Natural succession will be the primary vegetative objective, with vegetation management used only to protect the resource or complement the recreational value.” (Forest Plan, page 184)

What could happen if this project is not accomplished?

In these young stands, as time progresses, crowding would become more severe. Crown size and vigor would be reduced overall, and the effects of any future outbreaks of gypsy moth could result in more mortality and less mast production. In these stands, there are few resistant species present, and serious multi-year defoliation could be expected to enhance the pine component, where present. In stands or parts of stands where mostly oak and little or no pine is present, killing of many of the oaks might result in delayed regeneration of less preferred species such as pine or birch whose seeds might blow into the area.

What would the Forest Service like to hear from the public at this time?

After you review the information presented here, the Forest Service would like to hear any comments and/or questions you may have concerning this project. If you need additional details, please contact the Forest Service at the address listed below.

What is the proposed timeline for this project?

Project description sent to public: July 1, 2004
Comments returned to the Forest Service: July 15, 2004
Expected decision (tentative): July 20, 2004
Implementation: 2004-2006.

Who may I contact if I have questions or concerns relating to this project?

To comment or ask questions on the proposal, you may contact Jane Bard, the team leader for the analysis. She can be reached at:

Phone: (304) 846-2695
Mail: Gauley Ranger District
932 North Fork Cherry Road
Richwood, WV 26261

Sincerely,

/s/ *Jim Henry*

for RONDI L. FISCHER
District Ranger

Enclosure (Map)