

Healthy Forest Restoration Act Projects Title IV-Silvicultural Assessment

Project Title: Applied Silvicultural Assessment of Upland Oak-Hickory Forests and the Red Oak Borer in the Ozark and Ouachita Mountains of Arkansas
Monticello, AR (SRS-4106)

Significance: The goal of this applied silvicultural assessment (ASA) is to develop and test different silvicultural practices to reduce problems associated with the current outbreak of the red oak borer (ROB), and to translate that information to practicing professionals and the public.

Approach: Silvicultural treatments including thinning and brood tree removal will be evaluated on roughly 400-600 acres using a newly-developed rapid estimation procedure by scientists on national forest lands to evaluate silvicultural mitigation of red oak borer outbreak and rehabilitation of stands that have been or are in current infestation. Associated with this field test will be a focused set of studies within the ASA stands and elsewhere on red oak borer biology, landscape assessment of red oak borer incidence, and transfer of new technology for mitigation and rehabilitation to forest landowners in the region.



Outcome(s): The products produced in this ASA will include recommended silvicultural mitigation and rehabilitation treatments for oak-hickory stands in the region, scientific findings about red oak borer biology, and web-based stand and landscape visualization products for private landowners and the professional foresters and entomologists who advise them.

Benefits: Development of state-of-the-art silvicultural strategies and tactics for mitigation and rehabilitation of affected stands, broadening the biological understanding of the insect, and getting quantitative visualization tools into the hands of landowners and resource managers, better decisions can be made to restore healthy oak-hickory forests in the region and to improve the health of forests affected by this red oak borer epidemic.

Contact(s): Dr. James Guldin- Project Leader, Upland Forest Ecology and Management
USDA Forest Service-Southern Research Station
100 Reserve St. Hot Springs, AR 71901
(501)- 623-1180; jguldin@fs.fed.us