

PROMOTING FOREST SUSTAINABILITY/DIVERSITY

A McIntire-Stennis supported project

Michigan State University (MSU) researchers are seeking to improve diversity and sustainability in the state's forests by comparing multiple silvicultural systems with the goal to find the best systems for producing well-stocked, diverse tree regeneration.

For decades, Michigan's northern hardwood forests were primarily managed using single tree selection silviculture. However, this method has not proven successful in promoting long-term forest sustainability and diversity in many areas. Species diversity is important because it makes forest ecosystems more resilient to threats from pathogens, insects, climate change, changing economics and other factors.

MSU's study, led by forest ecologist Michael Walters, is comparing the single-tree selection system with three alternative silviculture systems to determine which combinations are most successful, with success in part hinging on finding systems that limit the impact of deer on regenerating trees.

The six-year project received a \$1 million grant from the Michigan Department of Natural Resources (MDNR).

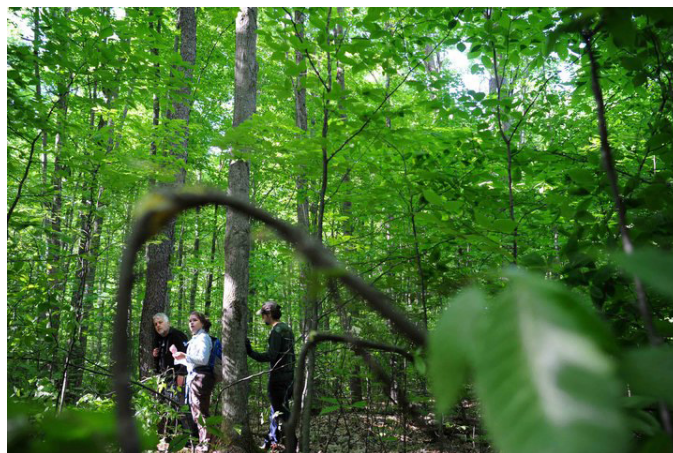
COLLABORATION

MSU AgBioResearch is partnering with MDNR, state forest managers and private industry. MSU Department of Fisheries and Wildlife ecologist Gary Roloff is leading the deer study.



4,260 acres

The project encompasses 142 30-acre stands ranging from Michigan's Upper Peninsula to the mid-Lower Peninsula.



About McIntire-Stennis

The McIntire-Stennis program, a unique federal-state partnership, cultivates and delivers forestry and natural resource innovations for a better future. By advancing research and education that increases the understanding of emerging challenges and fosters the development of relevant solutions, the McIntire-Stennis program has ensured healthy resilient forests and communities and an exceptional natural resources workforce since 1962.



IMPACT

Michigan's forests feature 20 million acres of woodland and are important to the state's economy and culture. The density and diversity of these forests are at risk due to management issues and high deer population.



\$20 billion

The annual economic impact of Michigan's forest products industry is \$20 billion.



800 companies

More than 800 logging and trucking companies are in the state.



1,000 manufacturers

More than 1,000 Michigan manufacturers are dependant on lumber.