SPATIAL HARVEST SCHEDULING AND FOREST PLANNING

A McIntire-Stennis project initiated to address complex, spatial forest landscape planning problems of the southern United States

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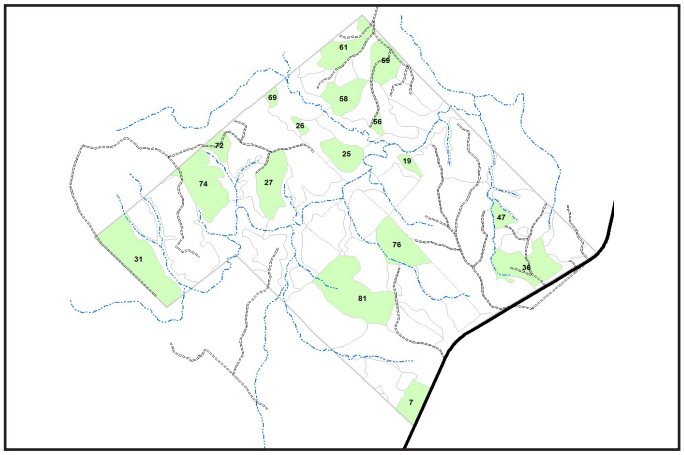
Forest planning and harvest scheduling are an integral part of the management of southern United States forests. Private landowners and consultants utilize spatial forest planning models to assess the impact of alternative policies on financial returns and long-term sustainability of forest resources; public agencies utilize spatial forest planning models in a similar manner, with greater emphasis on achievement of complex habitat goals. However, complex spatial forest planning problems can be difficult to solve and may require extensive computational effort.

This project is assessing the effectiveness and efficiency of forest planning models on the ability to address complex spatial forest planning problems. The project is developing new harvest scheduling models, applying models to realistic forest planning problems of the United States, and integrating spatial scheduling methodology into large-scale, long-range forest landscape planning efforts. This project has already produced significant research in the field of forest planning.



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.

USDA

COLLABORATION

We are collaborating with scientists at other universities, forestry companies, and forestry consultants to advance our understanding of the efficiency of methods for solving large, complex, spatial forest planning problems.

4 States, 3 Countries

Cooperators in Georgia, California, Florida, Wisconsin, Turkey, China, and the Czech Republic have contributed to the project.

IMPACT

Significant efficiencies in management processes can be achieved through advances in spatial harvest scheduling methods.

Regulations and voluntary contributions to conservation can affect the overall value of a forest from tens to hundreds of dollars per acre.

The economic effects are illustrated through changes in overall financial returns and periodic harvest volume levels.

Forest landowners, consultants, companies and agencies will understand that new solution techniques can produce efficient forest plans.

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