ECONOMIC VALUATION AND POLICY DEVELOPMENT OF FOREST ECOSYSTEM SERVICES

A McIntire-Stennis supported project

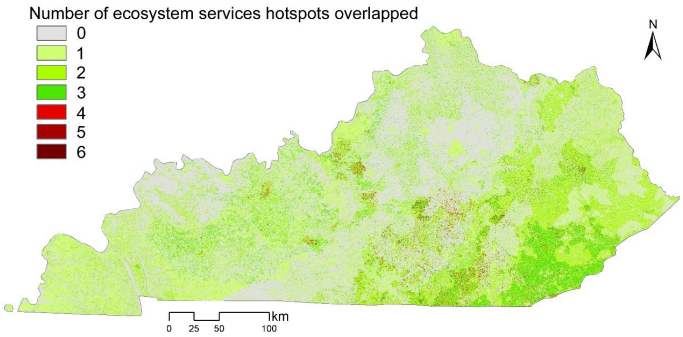
Emerging Project

University of Kentucky

Forestry and Natural Resources
College of Agriculture, Food and Environment

Forests, as natural systems if properly managed, yield a stream of benefits which are vital to society, such as timber, water purification, recreation, and wildlife conservation. While the economic contribution of timber resources is understood, the full extent of the economic values derived from ecosystem services generated by forests is not. Accounting for all of these values is critical to ensure effective policy decisions. This project is designed to quantify the full economic value of forests, providing the information necessary for making wise forest management decisions to provide maximum benefits to society.

This emerging McIntire-Stennis supported project develops an integrated environmental-economic framework, incorporating the value of forest ecosystem services into the economic valuation of the forest sector. This is accomplished through “tradeoffs simulation scenarios analyses” and provides robust and economically realistic data needed for forest management and policy decision-making.



Concurrence of the seven ecosystem services hotspots in Kentucky

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

This is a high-skill, data-intensive and long-term project that brings together expertise in both geospatial analyses and economic modeling. Researchers at the University of Kentucky are working in partnership with USDA Forest Service Southern Experiment Station, Kentucky Division of Forestry, and Kentucky Geological Survey.

IMPACT

As this emerging project develops it will provide the true value of our forests and show us where our forests provide the most valuable, helping to ensure their proper management and protection. It will show how land use change affects our economy, where water can best be protected, the relationship between economic growth and ecosystem services and help answer a host of critical economic and environmentally related issues.

12 Million

The number of forest acres in Kentucky that are providing ecosystem services that will be economically accounted for.

Highly Skilled

the students will be developed that can help answer the tough economic questions facing society.