Improved Mapping and Assessment of Minnesota's Forest and Natural Resources.

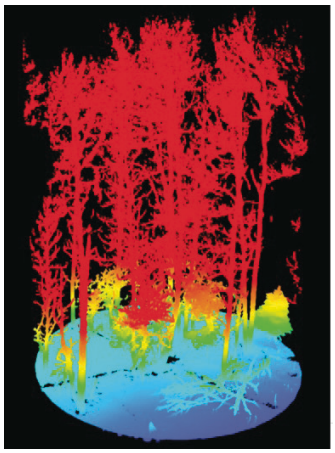
A McIntire-Stennis supported project

UNIVERSITY OF MINNESOTA

Driven to Discover®

Our natural ecosystems are changing due to natural and human-caused phenomena. This research focuses on developing geospatial science data such as satellite images, LIDAR (light detection and ranging), and drones to understand and quantify the resulting impacts on our forests and wetlands. This project focuses on improving forest and natural resource mapping and assessment methods, the study of wetland dynamics, and mapping invasive phragmites (common reed) in Minnesota's wetlands.

This research on the dynamics of natural and human-caused effects on Earth's ecosystems will allow us to address current challenges like climate change, deforestation, and loss of wetlands; and to develop and implement sustainable land use practices for the future.



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

Minnesota DNR, Minnesota Pollution Control Agency, U.S. Fish and Wildlife Service, Minnesota Geospatial Information Office, U.S. Environmental Protection Agency, and University of Minnesota researchers.

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Collaborating agencies, organizations, and individuals.

IMPACT

Improved understanding of the dynamics of natural and human-caused effects on Earth's ecosystems will help us confront challenges such as climate change, deforestation, and loss of wetlands.

11,000,000+
Acres of changing Minnesota wetlands will be measured measured for change over 40 years by our developed mapping tool.

17,000,000+
Acres of Minnesota forests will be improved by our advanced forest inventory and health monitoring methods.

Hundreds
of stands of stands of invasive common reed in Minnesota will be identified and monitored by our satellite imagery.