

QUANTIFYING FORESTS AND NATURAL RESOURCES USING CUTTING EDGE SPATIAL SCIENCE TECHNOLOGY

A McIntire-Stennis supported project



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Spatial technologies such as satellite remote sensing, global positioning systems, and unmanned aerial systems are enabling professionals to quantify forests and other natural resources more efficiently and systematically than ever before.

With the rapid advancements in cutting-edge spatial technology, however, it is imperative to assess the feasibility and accuracy of these tools that are increasingly becoming essential components of a forester's tool kit.

Ongoing research at SFA will evaluate the accuracy of technologies such as unmanned aerial systems, Pictometry, consumer-grade global positioning systems, as well as past, current and proposed satellite digital imagery in quantifying and qualifying forests and other natural resources.



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.



COLLABORATION

Partners include the Texas A&M Forest Service, U.S. Forest Service, U.S. Army Corps of Engineers, U.S. National Park Service, Natural Resources Conservation Service, Texas Parks and Wildlife, Texas Commission on Environmental Quality, and Texas Water Development Board.



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Graduate students are supported through this project.

IMPACT

This research will provide key insight into the most effective applications of evolving geospatial technologies, empowering professionals in their mission to best manage and conserve natural resources.



>12 million

Acres of forestland in East Texas alone.



\$18.3 billion

Of direct forest industry output contributed to the Texas economy in 2015.



2.5%

Within actual tree height using Pictometry digital imagery as a measurement tool.