



**Center for Advanced Forestry Systems
2021 Annual Meeting Project Progress Report**



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PROJECT ID: CAFS.19.75

PROJECT TITLE: Assessing & Mapping Regional Variation in Site Productivity

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PROJECT DESCRIPTION:

This project aims at defining areas with common expected stand productivity with emphasis on making predictions at a regional scale.

HYPOTHESES or OBJECTIVES:

Site productivity is defined by changes in climatic patterns as well as variation in soil characteristics. When all relevant predictors are accounted for, using contemporary statistical techniques, a map of common stand productivity can be defined.

METHODS:

A set of predictors is going to be derived and compiled for the areas involved. Plots will be used to estimate productivity at the site level. These metrics of productivity will be crossed with environmental variables (soil, climate, terrain, and geology) to infer changes in productivity.

MAJOR FINDINGS:

Productivity is affected by Water Deficit and Depth to Water Table. Soil variables have an impact at the regional scale to determine differences.

DELIVERABLES:

Productivity maps indicating the major limitations.

MEMBER COMPANY BENEFITS:

Identifying the variables that determine changes in productivity allow the utilization of localized functions to further improve volume estimation.