# **Progress Report**

# Assessing and mapping regional variation in potential site carrying capacity

## CAFS 19.76

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## **Project Overview**



Synthesize a nationwide forest inventory database from publicly available data and from CAFS Members



Standardize maximum carrying capacity modeling, and



Create efficiencies for multi-regional forest management organizations by providing consistent, species-site-silviculturally sensitive, wall-to-wall spatial models of SDImax for commercial species of the United States.





## **Current Progress**

Northwest regional SDImax models are being shared satisfactorily (Web apps and raster's).

Data is prepared for SDImax modeling. Currently, we are analyzing and reviewing existing regional models to standardize Maximum Carrying Capacity modeling.

#### Southern

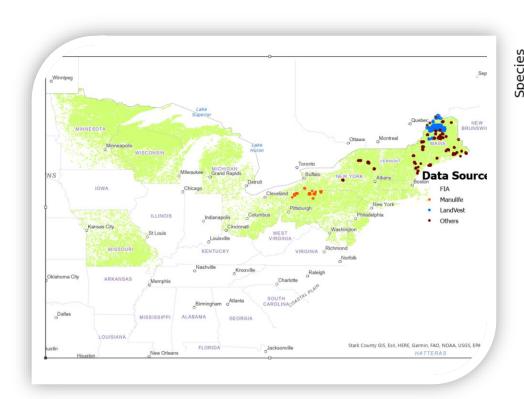
The SDImax model build for loblolly pine in the southern United States, is sensitive to site, stand, and silvicultural treatments, and it is validated by local experts.



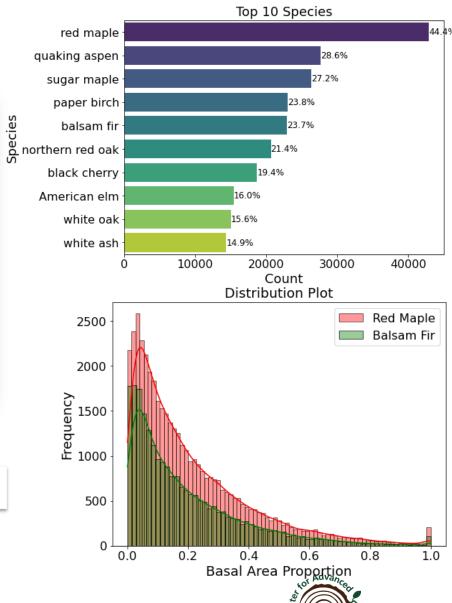


# **Current Progress**

## **Northern Region SDImax Data**



FIA - 34,759 Industry and Research Data - ~5000





#### **Future Plans**

### **Northen Region**

- Meeting with SDImax model researchers in the region to learn about crucial covariates for modeling (specific gravity, shade tolerance, forest type, and hardwoodsoftwood proportion etc.)
- SDImax modeling for commercial species.

## **Southern Region**

- Generating a GeoTiff for the loblolly pine SDImax model, once we get the final modified soils layer from the Forest Productivity Coop at NCSU, we'll send it for review by our Members.
- Exploring SDImax modeling for other species based on data availability and member interest.

#### **Pacific Northwest**

 Enhance and standardize SDImax models by incorporating additional data received/expecting from members.



