



Summer Field Work Experiences

Sensor suite sites have been installed around the region, most recently on AMC land in Maine. The low cost, energy efficient wireless sensors can measure air temperature, relative humidity, photosynthetically active radiation, soil temperature and snow depth. Check out our 2 minute [sensor suite install video](#) on YouTube!



Secondary school teachers from VT-ME-NH returned to Maine to bolster their forest ecosystem data collection knowledge & quantitative reasoning in context skills. Stations at the Old Town site included soda lime & measuring CO², working with Mayfly data, & data collection using GLOBE protocols. Workshop included working groups on the ForEST App and spatial data.



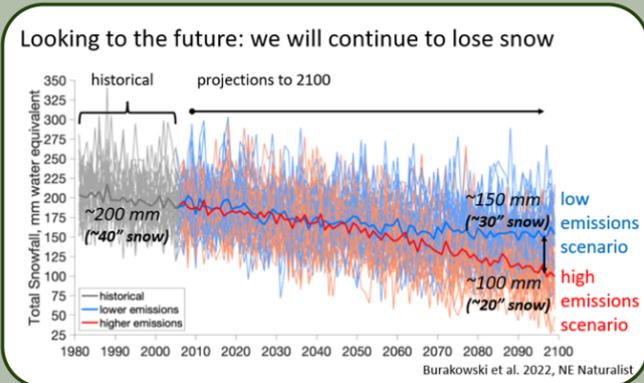
Further afield, AAMU's Dr. Shaik Hossain lead a research team on the growth-drought relationship of two southern pine species in north Alabama. Three undergraduate students collected 70 cores from three sites in north Alabama and processed them in the lab. The students are expected to prepare a poster to be presented during the "Stem Day" at Alabama A&M University in Summer 2023.



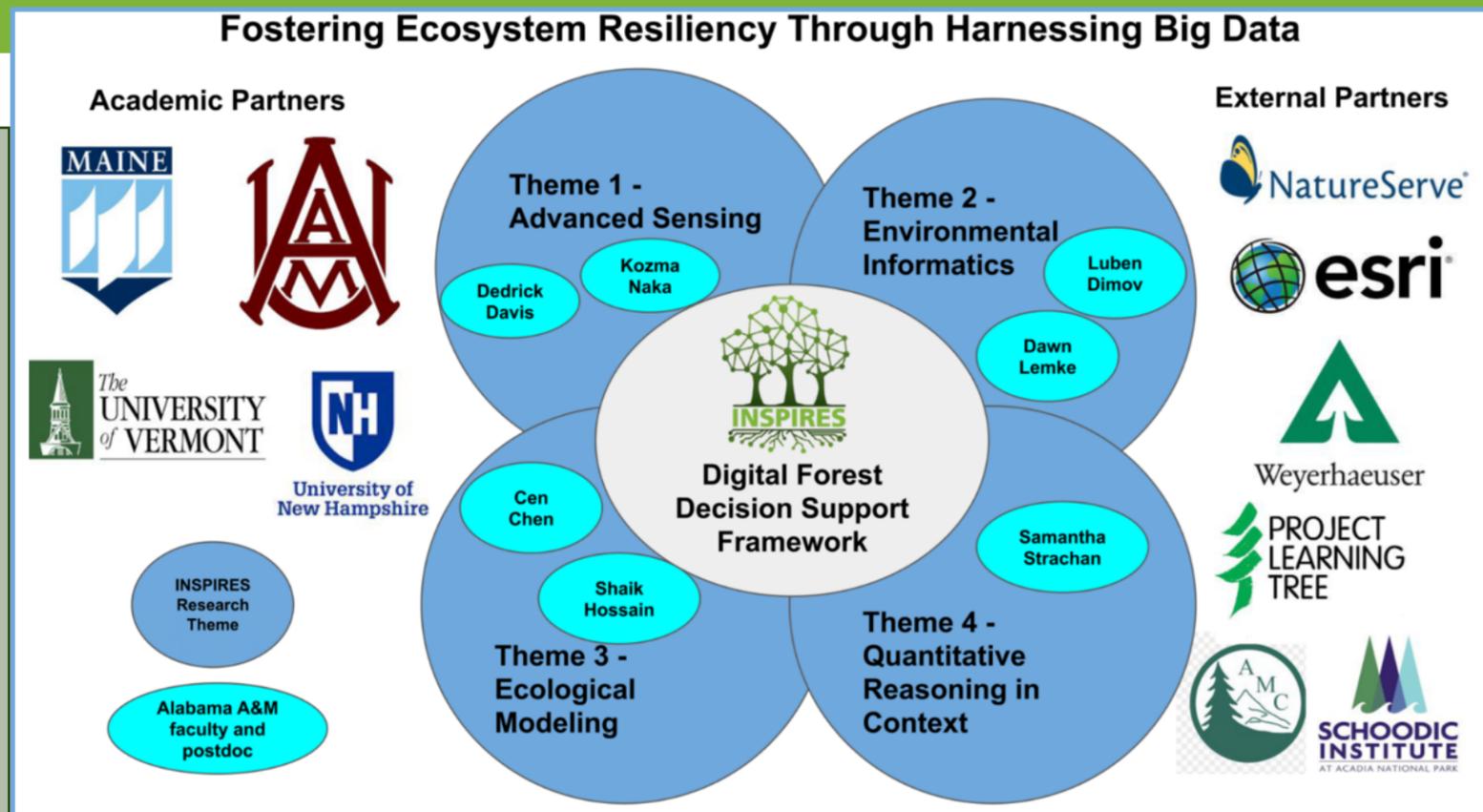
SNOTEL-East Update

SNOTEL, a federally-funded and managed snow monitoring network, has been gathering standardized, routine snowpack data since the 1970s in the western US, with just one site located in the northeast (Mt Washington).

Recent droughts, winters with bare ground or early melt, more frequent forest fires, and winters with relatively little snow challenge the assumption that the Northeast has plenty of snow to support our ecosystems, our ways of life, our wildlife, and rural communities. SNOTEL sites use automated collection and antenna data transmission operates unattended and without maintenance for a year or more.

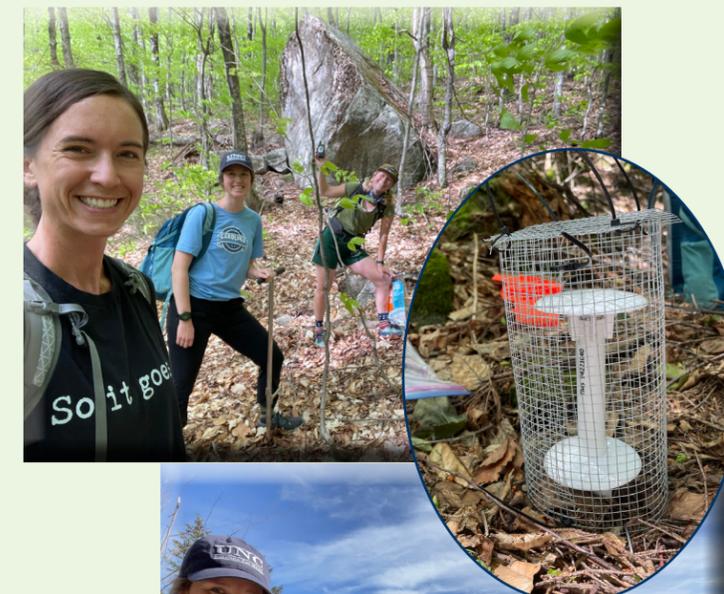


Sarah Nelson of AMC and others are advocating congressional representatives for appropriations to build and maintain SNOTEL-East sites that would collect crucial ecosystem data to serve decisionmakers, local snow-dependent businesses, and scientists in the region. In August, AMC and White Mountain National Forest staff met with Senator Shaheen (NH) to celebrate funding she secured for a 5-year project to repair and realign the Franconia Ridge Loop Trails on National Forest lands. This was also an opportunity for AMC staff to discuss climate research, including changing winters and the need to expand SNOTEL to the East.



Cold Air Pooling Project

This summer, the cold-air pooling team (photos: Melissa Pastore, Karin Rand, Marie English) finished setting up elevation transects across Vermont, New Hampshire, and Maine to determine whether cold-air pooling influences forest composition and ecosystem functions. In total, they established 100 plots, deployed high-frequency sensors in each, measured over 2,700 overstory trees and over 7,000 understory plants, and conducted soil analyses.



Key Priorities for Year 4

Connecting with Key Stakeholders through Outreach
 Enhancing Collaboration, particularly with Alabama A&M University
 Synthesis Publications & Sustaining Proposals

UNH undergrad Colby Leroux setting up a phenocam & snow stake at the Bartlett Experimental Station INSPIRES site. Team members visited the site in May 2022. Photo by Sarah Nelson.



INSPIRES Links
 Don't forget to tag us!
 Twitter: @InspiresForest1
 INSPIRES videos on YouTube
 Instagram: inspiresforest1
 INSPIRES Year 3 Annual Report
 INSPIRES/New England Sustainability Consortium (NEST) website

May All-Team Meeting

Nearly 30 INSPIRES team members gathered at the Attitash Grand Summit Hotel in Bartlett, NH, for a day of team building, research updates, theme breakouts, and cross-theme/cross-institution discussions. The meeting was followed by a full day in the field touring a variety of ecosystem data monitoring systems installed by INSPIRES researchers and learning more about forest management and research being conducted at the Bartlett Research Forest.



INSPIRES: Harnessing the Northern Forest Region's complex landscape and digital information diversity to support hypothesis formulation and testing across various social-ecological dimensions

<https://bit.ly/InspiresForestResearch>