

Progress Report

Skills Training in Advanced Research & Technology (START)

NC State University, Montgomery Community College, Wayne
Community College
Summer Internship Program,
CAFS.21.91

Rachel Cook and Andrew Trlica, NC State University
Dylan Hurley, Montgomery Community College
Jim Brodie, Wayne Community College

Presented by Rachel Cook



START 2-yr Community College Interns

- Often difficult to find paid internships for students
- Combination of field experience with CAFS member company and research experience at NC State
- Focus on GIS & Remote Sensing
 - Mentored by Drs. Andrew Trlica and Sean Blaszies
- \$3500 per summer
- \$500 travel
- \$300 supplies



Drew Martin – NC Forest Service

Montgomery Community College

Using Survey123 to Digitize NCFS
Field Data for BMPs



Martin Poster

- 4808-1 Forest Water Quality Site Inspection & Compliance Notification Form
- 4203-1A NCFS Field Data Sheet



Figure 1: Workflow including A) paper form, B) a screenshot of smartphone view using Survey 123 app and C) resulting record in GIS. The app can locate your position using the device's GPS.



Mallory Leblanc – Weyerhaeuser

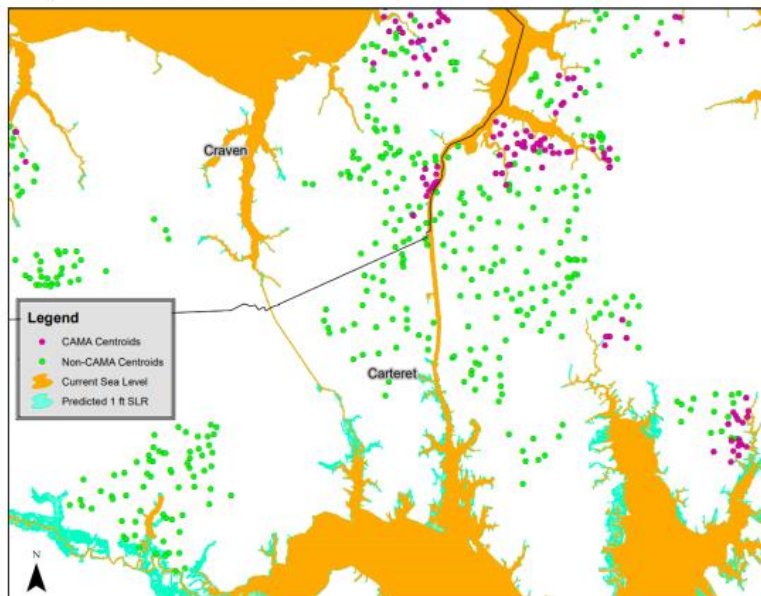


Leblanc Poster



- Wayne Community College
- “Comparable Site Selection Using GIS and Coastal Prediction Models for Future Application”

Coastal Area Management Act (CAMA) sites



Coastal vulnerability indices are no distinguishing between sites with and without early indicators of coastal climate change



Figure 5. This map shows locations of CAMA and Non-CAMA sites in relation to 1 ft. of sea level rise (SLR) vs. current sea level.



Eli Kelly - Manulife



Poster



- Montgomery Community College
- “Midrotation Response to Vegetation Control x Variable Rate Fertilization: Remote Sensing Analysis”

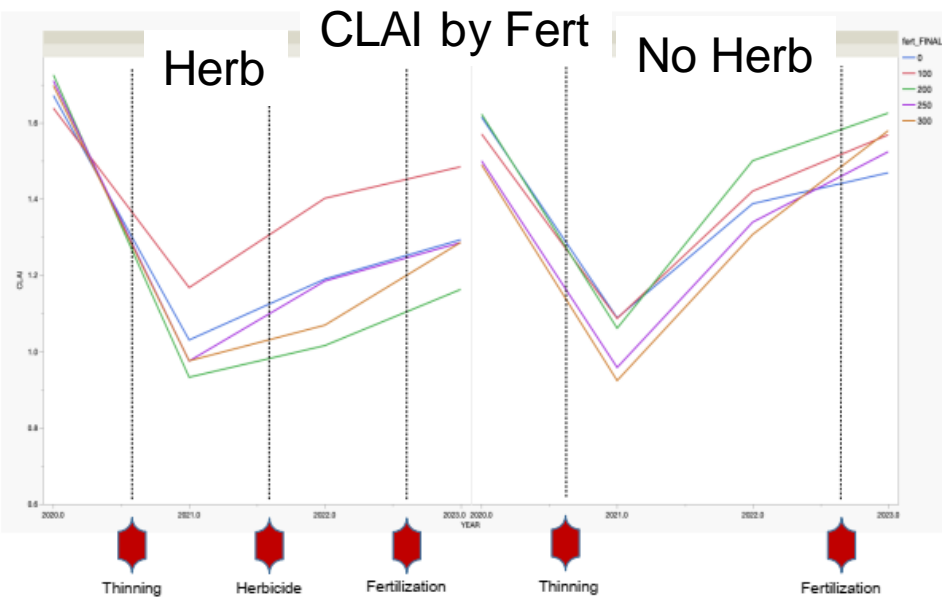


Figure 6: Time series from 2020–2023 for mean canopy LAI (CLAI) for each treatment split by Herb/NoHerb. Thinning was conducted in mid-2020 followed by mid-rotation release in mid-2021 and lastly fertilization in mid-2022.

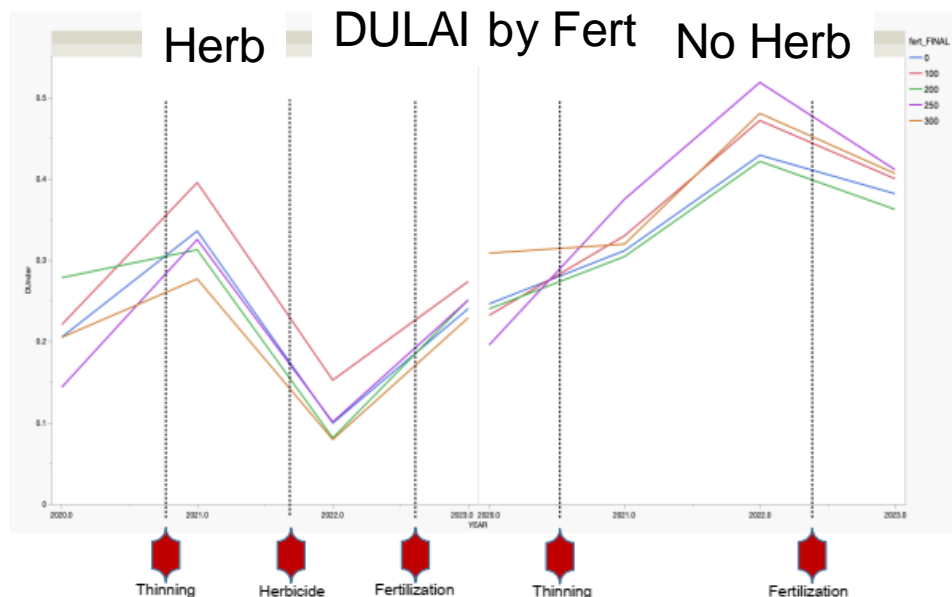


Figure 7: Time series from 2020–2023 for mean Deciduous Understory Index (Dunder), split by Herb/NoHerb

Greater deciduous understory in No Herb



Michael Farmer – NC State & Manulife



Farmer Poster

- Wayne Community College
- Midrotation Fertilizer Rate x Herbicide:
NC Ground Data

