

FPC Strategic Planning Meeting December 7-10, & 15: 12 to 3 pm EST (check agenda for details)

Meeting Registration

Meeting registration is \$60 at www.fpc.frec.vt.edu. Only **one person per member company** needs to register but up to two people from a respective company are welcome to attend any Topical Session. The one-time registration fee covers the independent moderator.

Overview

Each Topic Session (details below agenda) has an individual zoom registration link. Please have **each person attending register by December 1st for each individual session** they plan to attend. We will sort participants into “break out groups” so we need to know who will be at which session ahead of time.

Sessions are of different lengths to account for scope of topics. All times are in Eastern Standard Time.

Monday, December 7

<https://ncsu.zoom.us/meeting/register/tJ0qfu6oqDoiEtRDcKQUoMwzucBI9x1gOUbM>

- 12:00-1:00 Introduction: Accomplishments since last strategic plan, survey results, overview of structure of meeting
1:00-3:00 Nutrition (2 hr)

Tuesday, December 8

<https://ncsu.zoom.us/meeting/register/tJErfumqqzwvHN2MjhFclj-6hDeSib006cH6>

- 12:00-2:00 Vegetation Management (2 hr)
2:00-3:00 Density Management & Early Silvicultural Treatments (1 hr)

Wednesday, December 9

<https://ncsu.zoom.us/meeting/register/tJYvce2srDspGtzKo5PV181oysGs3zLUTvx6>

- 12:00-3:00 Remote Sensing: LiDAR and Satellite Imagery (3 hr)

Thursday, December 10

<https://ncsu.zoom.us/meeting/register/tJMpdO6tpzpkGNYIbyKBQF-ROcM ISnTH-iG>

- 12:00-1:30 Decision Support Systems (1.5 hr)
1:30-3:00 Wrap-up, final comments & discussion, voting procedure

Friday, December 11

Turn in votes by Close of Business

Tuesday, December 15

https://ncsu.zoom.us/meeting/register/tJcldu2qgzMuGNPH_R tSGPQjB-Ilck5OuYU

- 12:00-1:00 Final Vote Summary and Conclusions

Details on Topical Session Subtopics

Each bullet point is considered a “subtopic” that would generate a new study and will be the level for voting on the final day. New subtopics can be added during sessions and subtopics can be refined or changed based on member input. Subtopics were defined based on one-on-one member interviews and survey feedback.

Monday, Day 1: Nutrition and Site-Specific Resource Supply (2 hr)

Overview of Current Research: Soil mapping, P-carryover, Indicators (biotic/abiotic) of potential supply, Nutrient carryover (P carryover, ¹⁵N seedling carryover), RW20 Resource allocation/Nutrient use efficiency, Single tree plots w/Cu on Organic soils

- Soil mapping for potential response and productivity to fertilization
- Refining which/how much fertilizer to use on different soils
- LAI-based rate applications
- Micronutrients application (how, when, which ones)
- Long-term availability within rotation
- Long-term nutrient availability within a rotation (magnitude and duration of response by soils)
- Long-term nutrient cycling across rotations (¹⁵N availability studies, litter, decomposition)
- Mid-rotation fertilization: Crown recession & potential response (interactions with genetics)

Tuesday, Day 2 Part 1: Vegetation Management (2 hr)

Current research: ¹⁵N Timing of Fertilization vs Herbicide with different levels of understory competition at Appomattox, VA

- Vegetation Control vs Fertilization: Midrotation release response (Soil specific response)
- Vegetation Control vs Fertilization: Timing during rotation (pre vs post thin)
- Type of competition & intensity (Competing vegetation succession)
- Effect of duration of competition presence (i.e. how much is there and how long has it been there?)
- Volunteer pine: extent of the problem (position paper), edge effects, control in SMZs & edges
- Volunteer pine: how best to control (chemical vs pct)
- Volunteer pine: does fire create additional need for fertilization?
- Site preparation: Herbicide Sensitivity (imazapyr damage)
- HWC fall vs spring
- Banding vs broadcast
- Duration of control (i.e. how long do we need to keep it out?)

Tuesday, Day 2 Part 2: Density Management & Other Silviculture Questions (1 hr)

Current research: Genetics x Silviculture x Spacing (RW20), Thinning x Fertilization & Second thinning (RW19)

- Genetic improvement and initial stocking
- Lower initial densities & veg control
- Growth & resilience (Heat tolerance & drought stress)
- Tip moth control (long term growth & variability; in collaboration with forest health coops)
- Timing of early silviculture

Wednesday Day 3 Remote Sensing (3 hr)

Current research: Variable Rate Fertilizer application (Cohrs), Sentinel-2 vs LiDAR LAI estimation (Trlica), Understory estimation with LiDAR (Sumnall), UAV LiDAR biomass/understory estimation (Sumnall), Scan angle optimization (improving utilization of LiDAR; Sumnall)

- Precision applications (Stand selection vs sub-stand level)

LiDAR

- Competing veg quantification (LAI, biomass, other indices for predicting response)
- Crop tree LAI
- Ground truthing
- Stand inventory (Ht & BA), young and post thin stands with LiDAR (Juvenile fert or veg control)
- Genotype structure (in collaboration with TIP)
- How to operationalize
- Slash pine

Satellite

- LAI (crop tree)
- Competing veg LAI estimates (current and past)
- Slash pine
- Explore: NAIP, Sky sat, Planet, SAR

Thursday Day 4: Tech Transfer & Decision Support Tools (1hr)

- Soil mapping (average vs potential site index; fertilizer response)
- Lidar Support Center
- Modeling - LobDSS update
- Economic decision calculator

Wrap up of research topics, final thoughts, and how to vote