IFTNC Portfolio

Rationale

Forestry as a solution

recent proposal request topics

- Sustainable Bioenergy
- Climate Variability and Change
- Minimize effects of insects and pathogens
- Utilize insect-killed trees
- Fire management
- Water availability and quality

Applications of external research

opportunities for discovery

- What are land owner objectives, and what factors can we manage to meet those objectives?
  - What controls forest productivity?
  - What controls soil sustainability?
- How can we use fundamental knowledge to improve forest management practices?
- What are other scientists learning in other fields that can be applied to forest management?

Application example

Organic N cycling

Amino peptidase activity (nmol/g*h)

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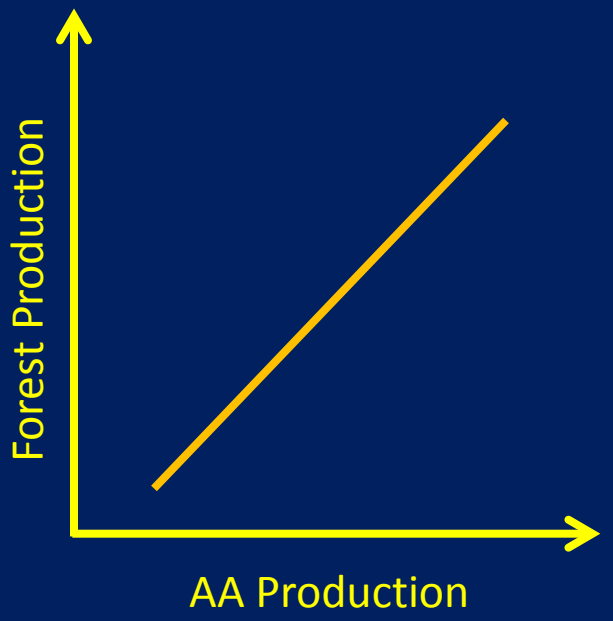


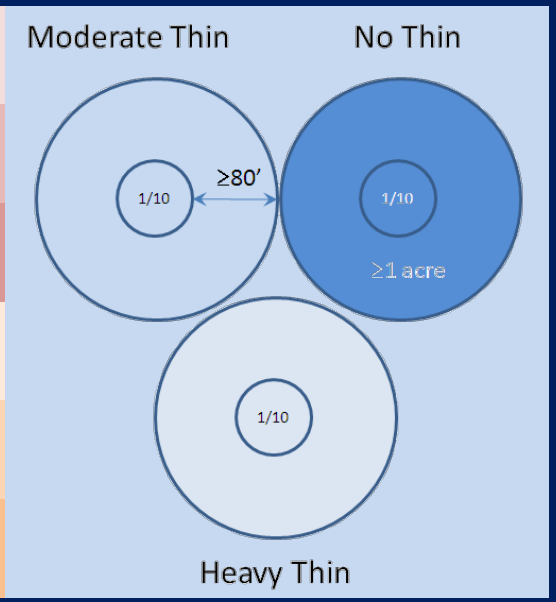
Paired Plot Density Management

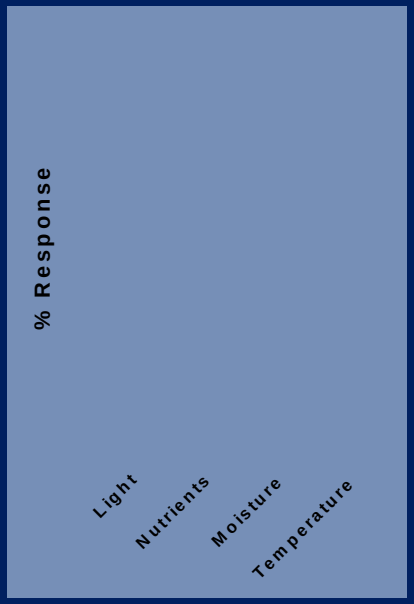
AFRI Sustainable Bioenergy

Matrix of sites

RD 20 Site I	RD 20 Site II
RD 40 Site I	RD 40 Site II
RD 60 Site I	RD 60 Site II
RD 20 Site III	RD 20 Site IV
RD 40 Site III	RD 40 Site IV
RD 60 Site III	RD 60 Site IV

Paired at each location





- Total of 100 to 150 locations

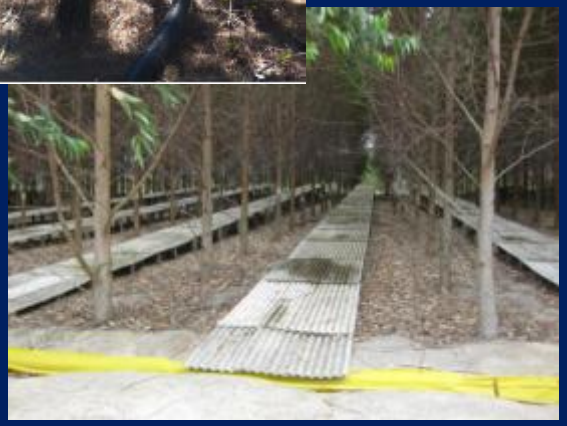
Soil Quality

- Harvest Impacts
- Biochar
- Sustainable bioenergy
- Poplar coppice

Enhanced Drought Tolerance of Forests: Managing Stand Density along Stress Gradients

A proposal in response to Climate Variability and Change RFA

In collaboration with
Doug Maguire, OSU
Greg Ettl, UW



Granier sap flow

Litter traps

Soil respiration

Rain guage
PVC Pipe
Cedar stake

Soil Temp & Moisture

Intercepted radiation

IFTNC

- Addresses numerous forest management questions
- Relevant to land management organizations
- Members support core projects
  - Harvest impacts
  - Site classification
  - Density management
- Other funds expand and diversify study efforts