FY 2013 PROPOSED WORK PLAN

As presented to the Forest Health Cooperative Advisory Committee

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AUBURN UNIVERSITY - FOREST HEALTH COOPERATIVE

FY 2013 WORK PLAN

GOAL A: RESEARCH

Objective 1. Identify research projects

Proposed FY2013:

- 1. Ecology of siricids and fungal associates in southeastern pine forests: potential for biological control and competition APHIS for travel, supplies and graduate student \$99,493 Decision pending dependent upon continuation of funds
- 2. Exploring soil microbial communities as mediators of complex threats to southern conifers Agriculture and Food Research Initiative Competitive Grant (3 years) \$497,000 Will resubmit fall with modifications if suitable RFP released
- 3. Sudden Oak Death (*Phytophthora ramorum*) Detection Survey (Stream Sampling) in AL and MS FHM, USFS for all travel, supplies and laboratory technician \$42,000 *Will submit August*

Newly Funded FY2013:

- 1. Field evaluation of a controlled vapor delivery method in an integrated pest management system for citrus and loblolly pine AU-IGP in collaboration with AU Chemical Engineering for all travel, supplies and student worker \$97,000
- 2. Root disease model to determine how pine decline and annosum root rot interact SFWS for travel, supplies, graduate student stipend \$64,000
- 3. Mycorrhizal fungal colonization and disease resistance SFWS and University of Mississippi for all travel, supplies and graduate student stipend \$25,000
- 4. Wood chemistry and disease resistance SFWS (to get preliminary data for larger grant) \$5,000

Funded FY2012:

- 1. Hylastes population dynamics and forest health evaluation in association with thinning and fertilization on new RW19 in Louisiana Funding through FHP and FHC
- 2. Delineating loblolly pine decline in the Southeast using FHM/FIA data submitted to FHM, USFS for all travel and supplies associated with the project \$35,000 (Funded Year 2 for \$17,000)
- 3. Sudden Oak Death (*Phytophthora ramorum*) Detection Survey (Stream Sampling) in AL and MS FHM, USFS for all travel, supplies and laboratory technician \$47,000

Objective 2. Recruit graduate students

Currently searching for masters student for FY2012 starting Fall to continue family screening.

Objective 3. Initiate and continue research projects: Determine location, cooperators, and set up research plots dependent upon projects chosen by the membership.

Cogongrass and ecologically based weed management strategies: Impacts on insect diversity and pine decline in the southeastern United States.

1. Plot data currently being collected: tree measurement and vigor, root infection, and resin.

Resistance of *Pinus taeda* families under artificial inoculations with native and non-native *Leptographium* species involved in premature mortality.

- 1. Family screening data being collected and analyzed.
- 2. Need to identify families for FY14 screening and growing location. Need to identify species to be screened: loblolly and slash.

Hylastes population dynamics and forest health evaluation in association with thinning and fertilization.

- 1. Plots and insects have been installed on the RW19 study in Leesville, LA. Eight weeks of insect trapping was completed prior to thinning treatments. The 52 weeks of collections following treatments are underway.
- 2. Waiting for plots to be installed on the RW19 study in GA (Rayonier and Plum Creek). Once installed, insect traps will be installed for eight weeks of insect trapping prior to thinning will be initiated.

Forest health evaluation of stand health in association with biomass removal and standard silvicultural practices between two land managers.

1. Treatments currently underway. Insect traps will be reinstalled upon completion.

Blue-stain fungi associated with feral hogs causing rooting damage in longleaf and loblolly pine stands.

1. Working on manuscripts for publication.

Field evaluation of a controlled vapor delivery method in an integrated pest management system for citrus and loblolly pine.

1. Sites have been located. Traps will be deployed February 2013.

Root disease model to determine how pine decline and annosum root rot interact.

1. Proposal will be written and sites selected for inoculations Spring 2013.

Mycorrhizal fungal colonization and disease resistance.

1. Families selected and growing at Ole Miss. Will be transferred in September 2012 to AU growth chamber for mycorrhizal inoculation.

GOAL B: TECHNOLOGY TRANSFER

Objective 1. Serve as a clearinghouse of information related to forest health issues.

Maintain and Update Forest Health Cooperative Web Site

The Forest Health Cooperative Staff will continue to update the Forest Health Cooperative website for use by Forest Health Cooperative Members. (Eckhardt)

Leveraging Forest Health Cooperative Data

The Forest Health Cooperative staff will continue to stress the importance of the Cooperative membership and when possible, leverage Cooperative information for grant proposals. (Staff)

Objective 2. Efficiently and regularly transfer the results of cooperative research to the membership.

Research Reports (Staff)

We plan on producing Research Reports and Technical Notes in FY13.

Newsletters

Newsletter distribution will be planned for September (Fall). Members are encouraged to submit articles.

Objective 3. Provide a limited consultancy function to the membership in the area of forest health.

Individual and Organized Contacts

An on-going activity and is handled as individual situations and cases arise. (Eckhardt/Anderson)

Short Courses

The Forest Health Cooperative will offer a Forest Health Short Course in Auburn for member personnel in July 2014. We need a minimum of 20 attendees and will survey the membership in January 2014 for interest.

GOAL C: COOP DEVELOPMENT

Objective 1. Provide for the continual relevancy and efficiency of the Cooperative research and technology transfer programs.

Advisory Committee Meeting

The FY13 Advisory Committee Meeting will be held on June 19-20, 2013. A 2 day meeting will be planned. If there are any meetings that conflict with this time frame, let us know and we can try and accommodate Advisory Members. (Eckhardt/Bowersock)

Forest Health Cooperative Membership

The Forest Health Cooperative staff should make an effort to recruit new members. (Staff)

Update the Cooperative Membership Directory

An on-going activity with an updated directory distributed annually. (Bowersock)

Objective 2. Increase the visibility and effectiveness of the Cooperative as a source of information on issues related to forest health.

Presentations at Meetings

Forest Health Cooperative staff will continue to be encouraged to participate as a speaker or attendee in regional and national meetings. (Staff)

Publications

Forest Health Cooperative staff are encouraged to publish research results in scientific journals. (Staff)

Extramural Funding of Forest Health Cooperative Projects

Forest Health Cooperative staff will continue to be encouraged to locate and generate extramural funding opportunities directly related forest health.

Interaction with other Research Cooperatives

The Forest Health Cooperative staff will make efforts to interact, attend, work with other regional and national forest research Cooperatives in an attempt to broaden and strengthen research ties that can benefit forest health.