
Forest Health Monitoring Program
February Monthly Update
February 6, 2008

Recent Happenings

The USDA Forest Service Pacific Southwest Research Station has issued a request for proposals for Sudden Oak Death / *Phytophthora ramorum*. Proposals are due on or before March 14, 2008. Complete instructions for submitting a proposal are in the Request for Proposals link <http://www.fs.fed.us/psw> . If you have any questions, contact Susan Frankel, Sudden Oak Death/ *Phytophthora ramorum* Research Program Manager at sfrankel@fs.fed.us or 510-550-6472.

Upcoming Events (items beginning with * indicate a new listing or new information added)

*February 11 – February 14, 2008. San Antonio, TX. The 14th Annual Forest Health Monitoring Work Group Meeting will be held at the St. Anthony Hotel, in downtown San Antonio. The San Antonio Forest Health Monitoring Meeting is fast approaching! We have an exciting agenda planned around the forest health issues of oak woodlands. This year’s focus groups are very important and timely; the results of the focus groups will help shape how FHM addresses the challenges of climate change, ground survey, and aerial survey/disturbance tracking. Abstracts and agendas for the focus groups are attached at the end of this Update. The Thursday field tour through the Hill Country of Central Texas will showcase the fight to manage oak wilt (the good, the bad, and the ugly). The last stop on the tour will include a catered Texas barbecue by the famous Salt Lick BBQ, a stop that will help to heal “what ails you.” You’re fixin’ to see a Texas that was, is, and can be. The cost of the BBQ will depend on attendance but should be between \$15-20. Money will be collected on Tuesday, Feb. 12 in San Antonio. Similar to previous workshops, a poster session will include status and results of FHM-funded Evaluation Monitoring (EM) projects and other topics of interest. All recipients of EM funding are expected to present a poster at this workshop. Poster abstracts and registration forms were due by Jan. 12, 2008. Meeting registration was due Jan. 25, 2008. A block of rooms was being held at the St. Anthony Hotel (tel. no. 210-227-4392) at the workshop rate of \$112 per night until Jan. 18, 2008. Complete information about the workshop, including the agenda, hotel information, and registration forms, is posted on the FHM website (www.fhm.fs.fed.us). The Chair of this year's Meeting Planning Committee is Michael Bohne (USDA Forest Service, Forest Health Protection, R5) (mbohne@fs.fed.us). A revised meeting agenda should accompany this Update.

April 15-17, 2008. Salt Lake City, UT. The Twelfth Biennial Remote Sensing Applications Conference. The theme for the conference is “Supporting Resource Management with Technology.” The conference will emphasize applications of remote sensing technologies that benefit the resource management community. Papers and posters for all phases of remote sensing and related geospatial technologies used in resource management activities will be presented. As in the past, the conference is national in scope, and all projects are welcome as abstract submittals. For more information about the conference and specifics about submitting abstracts, please visit the conference website at www.fs.fed.us/eng/rsac/RS2008 .

November 17-20, 2008. Hot Springs, AR. The 15th Biennial Southern Silvicultural Research Conference. The conference will consist of concurrent technical sessions, a poster session, and an optional field trip. Abstracts for offered papers and posters currently are being accepted. For more information about the conference and specifics about submitting abstracts, please visit the conference website at <http://www.srs.fs.fed.us/bssrc2008/index.htm>.

Publications of Interest

Steber, A.; Brooks, K.; Perry, C.H.; Kolka, R. 2007. Surface compaction estimates and soil sensitivity in aspen stands of the Great Lakes states. *North American Journal of Applied Forestry* 24(4): 276-281

Job Announcements

The USDA Forest Service Forest Health Protection Staff, State and Private Forestry is advertising a GS-434-13/14 Forest Pathologist position. The position is located in the Forest Health Protection staff in the Washington Office, in Arlington, VA. This position has responsibilities for the forest pathology aspects of the Forest Health Protection program providing national leadership in protecting and improving the health of urban, rural and wildland forests. Provides technical leadership and guidance in forest pathology to other Forest Service staffs and units, State forestry and agriculture agencies, Native Americans Tribes, other Federal agencies, and partners to improve the health of the forest lands. Provides scientific and/or technical advice and guidance to international, national, state, and/or local government agencies, universities, health-related organizations, or private and public foundations with regard to plant pathology programs involved in developing new methods for study and pest management and control. Participates in project planning or training activities related to the work of the organization. Serves as a technical authority for the full range of duties involved in the evaluation of programs or resource areas. Conducts program reviews and assistance trips to evaluate compliance with policies objectives, and standards, overall effectiveness of operations, and to provide technical assistance. Keeps current on forest health trends, nationwide. Analyzes and evaluates program, identifies problems and deficiencies, and typically provides workable solutions, and implements improvement plans to meet established goals and objectives. The vacancy announcement number is ADS08-WO-FHP-5288DP (NW) (US citizens) and ADS08-WO-FHP-5288G (NW) (current federal employees). One position will be filled. Application deadline is March 3, 2008. The detailed announcements may be accessed at <http://usajobs.opm.gov> . If you would like more information about this opportunity, please contact Larry Yarger, Deputy Director, Forest Health Protection, at lyarger@fs.fed.us, or 703-605-5332. *USDA Forest Service is an Equal Opportunity Employer.*

The Ohio State University Department of Plant Pathology is advertising a faculty position in molecular plant pathology. A 9-month tenure-track position at the Assistant Professor level is available in the Department of Plant Pathology, The Ohio State University, Ohio Agricultural Research and Development Center (OARDC), located in Wooster, OH. The position is 90% research and 10% teaching. The successful candidate will conduct basic research on plant pathogens and their interactions with host plants. Candidates should have documented experience with modern techniques of cell biology, biochemistry, molecular biology, genomics and/or proteomics. The individual selected for this position will be expected to develop a strong interdisciplinary and extramurally-funded research program in pathogen biology. Potential research topics may include but are not limited to: the molecular basis of pathogen interactions with their hosts, comparative and functional genomics of plant pathogens, molecular ecology of plant pathogens in managed or natural ecosystems, and/or the evolution of pathogenicity in oomycetes, fungi, bacteria or nematodes that infect plants. The assigned laboratory is housed in the same building as the Molecular Cellular Imaging Center, a premier core facility housing the latest instrumentation for conducting molecular research. Collaborations with other faculty in the Department and OSU's Plant Molecular Biology and Biotechnology (PMBB) Program will be encouraged. The incumbent should have a strong commitment to graduate education, teach an advanced course in molecular plant pathology, and participate in team-taught courses in support of the Department's core curriculum. A Ph.D. in plant pathology or related biological sciences is required. Research experience in molecular plant-microbe interactions, a strong publication record in pathogen biology, grant writing experience, and postdoctoral experience are preferred. The application deadline is March 21, or until a suitable

applicant is found. Applicants must submit a curriculum vita, a copy of academic transcripts, a concise statement of research plans and teaching goals, a copy of two relevant manuscripts, and the names and complete addresses of four references to be contacted. Applications materials should be sent to Dr. Brian McSpadden Gardener, MPP Search Committee Chair, Department of Plant Pathology, The Ohio State University-OARDC, 1680 Madison Avenue, Wooster, OH 44691 or via e-mail to menspadden-garden.1@osu.edu as a single .pdf document. For additional information or questions please contact the Department Chair, Dr. Mike Boehm, at 614-292-1375 or boehm.1@osu.edu. *The Ohio State University is an Equal Opportunity, Affirmative Action Employer. Women, minorities, Vietnam-era veterans, disabled veterans and individuals with disabilities are encouraged to apply.*

FHM Homepage: : www.fhm.fs.fed.us
or access via the USDA Forest Service homepage at www.fs.fed.us

Focus Group for Ground Surveys

Leads: Jim Steinman (FHP, NA) and Iral Ragenovich (FHP, R6)

Introduction

This focus group will meet for the second year to examine when and where ground-based surveys are used *in lieu of* aerial surveys to detect insect and disease pests and associated damages that can not be easily detected from the aerial methods. Our continuing discussion will present progress made on resolutions from the 2007 National FHM Working Group Meeting and propose future direction for how ground survey data can be utilized in national reporting efforts.

Although FHP survey funds and sometimes FHM Evaluation Monitoring funds are often used for State-level ground surveys, ground survey data are not well incorporated into regional and national FHP mapping and reporting efforts used as important communication tools. The goal of this session is to therefore determine the feasibility of utilizing ground survey data in regional and national reporting efforts.

Resolutions from the 2007 National FHM Working Group

Whereas: 1) ground surveys are a significant component of national insect and disease detection efforts, but few ground survey data are included in national survey maps and not easily accessed by state and federal partners; and 2) there is a particular need to include geo-spatial ground survey data for exotic-invasive insects and diseases in national maps and make the data readily available to state and federal partners so they can monitor rates of spread.

We resolve to: 1) request that the 5 FHM Regional Managers gather and compile the metadata for ongoing ground surveys used for exotic pests, and prepare a summary report describing what data are available (i.e., which pests, what states, what attributes are available); and 2) request that FHM Management and FHTET use the summary report to determine the utility and feasibility of including ground survey data into a national database that can be used to make national maps and provide access to state and federal partners to monitor exotic pest rates of spread.

Discussion Topics for the 2008 National FHM Working Group

1. Progress on Resolution 1: Review and discuss findings compiled from a questionnaire distributed to all State and Federal FHP partners
 - A. how often and why ground surveys are used as an alternative to aerial surveys
 - B. commonalities in ground survey protocols among pests
 - C. commonalities in collected data attributes among pests and among FHP partners
2. Progress on Resolution 2: Discuss potential application in reporting efforts led by FHTET
 - A. utilization of survey attributes into national databases, maps and pest condition reports.
 - B. utilization of ground survey data to enhance Risk Map models.

Also, we encourage discussion among focus group participants that will help further define how biological evaluations and site visits relate to ground surveys primarily designed to delineate detected pest problems and monitor their rate of spread. Finally, we hope the group's continuing discussion on the topic of ground surveys will lead to resolutions that will help provide future guidance on how we can improve the ability to better utilize ground survey data in national reporting and continue to support State-level needs to conduct ground surveys.

Discussion Timeline for Ground Survey Focus Group

8:30 – 10:30

- Background introduction on “Why are we talking about Ground Surveys?” – 30 min
- 2007 Resolutions – 30 min
- Discussion of Findings from Ground Survey Questionnaire ('07 Resolution #1) - 60 min
 - What is the scope of ongoing efforts for insects and diseases?
 - What is the variability between states and regions?
 - Is there significant information not being captured from aerial surveys?

10:30 – 11:00 - Break

11:00 – 12:00

- Potential Use of Ground Survey Info. in National Reporting ('07 Resolution #2) – 60 min
 - What did we learn?
 - How does this all fit with the new template for pest condition reporting?
 - Do results suggest any further opportunities for national reporting / risk mapping?
 - What are the group concerns and issues?
 - Other questions?

12:00 – 1:30 - Lunch

1:30 – 3:00

- Continued Open Discussion of questions, opportunities, concerns, issues
- Possible Resolutions

3:00 – 3:30 - Break

3:30 – 4:30

- Resolutions related to the use of Ground Survey Information – 1hr

Aerial Detection Survey (ADS) / Disturbance Tracking Focus Group

Leaders: **Jeff Mai, FS, WO; Aviation Safety Manager FHP, Chair ASWG**
 Frank Sapio, FS, WO; Director FHTET
 Gail Durham, Nevada Division of Forestry

The Focus Group will briefly review and provide updates to FHM Resolutions and relevant Aerial Survey Working Group (ASWG) Key Issues from the January 2007 meetings. The remainder of the session will center on issues identified by the FHM management team.

Focus Group attendees should come prepared to discuss progress on last year’s resolutions and topics for 2008 (Digital Aerial Mapping System, field checks, ADS as it relates to Criterion and Indicators of Sustainability, metadata, and disturbance tracking). Specific issues include:

1. How do we improve the consistency, quality, and coverage of disturbance tracking and reporting Nationally?
2. What is the real cost of aerial survey? Who benefits from this cost?
3. What are the obstacles to “complete” National Reporting?

Evaluating successes and continuing to improve upon existing methods of data collection and reporting will be the focus. Advances in mapping technology and guidelines for ground checks hone aerial sketchmapper skills and increase the reliability and accuracy of data collected. Missions Metadata and standards via DASM may assist users in assessing the conditions under which aerial survey data is collected, facilitating determination of appropriate data use. Perseverance in these endeavors is necessary to best meet the needs of forest health professionals and the public concerned with forest planning and management at all levels. Utilizing these data in related studies and reports, such as the Roundtable for Sustainable Forestry, Criterion and Indicators and pest event reporting, continues to be explored and enhanced where applicable. Near Real Time Disturbance mapping using MODIS will be discussed as a tool to aid identifying areas of mortality and Disturbance immediately prior to surveys being flown to potentially augment flight planning and increase data utility and efficiency. Further development of tools and technology to facilitate cost-effective, safe operations remains a recurring theme in this year’s focus group.

Hours Allotted	Topic	Discussion Leader
1.0	Progress Report on Last Year’s Resolutions & Pertinent ASWG Key Issues. Carryover Resolutions.	Jeff Mai – WO
1.0	MODIS Disturbance Tracking. Discuss Resolutions.	Everett Hinkley (Mark Finco or Eric Nielsen) – WO
0.5	Cost of Aerial Survey. Discuss Resolutions.	Jeff Mai - WO
2	Obstacles to National Reporting. Discuss Resolutions.	Frank Sapio – WO
1	Wrap-up, Refine New Resolutions.	Frank Sapio – WO

Discussion Timeline for Those Wishing to Attend Multiple Focus Groups

8:30 – 10:30

- 2007 Resolutions – 30 min
- ASWG Issues – 30 min
- Cost Aerial Survey – 30 min
- Current Data Issues & Possible Resolutions
 - National Reporting Issues from FHTET - 30 min

10:30 – 11:00 - Break

11:00 – 12:00

- Current Data Issues & Possible Resolutions
 - National Reporting Issues from FHTET – 45 min
 - PTIPS List (Clean up and How to Deal with Biological Complexes) – 15 min

12:00 – 1:30 - Lunch

1:30 – 3:00

- Current Data Issues & Possible Resolutions
 - Further Discussion – 30 min
- MODIS Disturbance Tracking – 45 min talk 15 min Q&A
 - How can Disturbance Mapping Help in ADS Mission Planning in Near Real Time
 - How can Disturbance Mapping Help in QA/QC

3:00 – 3:30 - Break

3:30 – 4:30

- Resolutions to Enhance National Reporting and any Other Resolutions – 1hr

Abstract
Climate Change and Forest Health Focus Group
National Forest Health Monitoring Work Group Meeting
San Antonio, Texas, February 13, 2008

Purpose

Global climate change is a topic of intense international concern with many implications for forest health. It is one of the top three priorities of the Chief of the U.S. Forest Service. The Forest Health Monitoring (FHM) program (<http://fhm.fs.fed.us/>) wants to explore its potential role in this evolving arena. This Focus Group will establish a forum whereby members of the forestry community working on climate change issues can interact with the Forest Health Monitoring Program.

Objectives

1. To describe what climate change is and is not (including which physical indicators are useful for measuring climate change at various levels— global, national, regional, and local).
2. To describe the potential problems and issues posed by climate change to forest ecosystems (i.e., describe the threats to forest health).
3. To describe current research, information gaps, and opportunities for further research on the effects to forest ecosystems.
4. To identify ways that FHM might advance the understanding of climate change and its implications. Discussions will include:
 - identifying which forest health indicators are important and sensitive enough to monitor with respect to climate change (including current indicators, indicators that can be developed from existing data, and new indicators to consider for future implementation);
 - ways to best establish correlations between physical indicators and key forest health indicators (i.e., how, when, and where to measure the effects of climate change on forest health);
 - useful and enlightening ways to predict the effects of climate change on key forest health indicators.
5. To identify opportunities for the FHM Program to collaborate with others working in this arena.
6. To explore how climate change might change the business of FHM (e.g., should the Program give priority to Evaluation Monitoring & Intensive Site Monitoring Proposals that deal with climate change topics?).

Activities

1. Listen to presentations by researchers and policy makers to provide participants with necessary background and context of climate change issues relative to forest health. This will achieve objectives 1-3.
2. Engage participants in group discussion focusing on objectives 4-6.
3. Develop a list of specific resolutions that FHM can pursue to advance the understanding of climate change and collaborate with others working on this issue.

Agenda
Climate Change and Forest Health Focus Group
National Forest Health Monitoring Work Group Meeting
San Antonio, Texas, February 13, 2008

8:45-9:35 **Part 1. Introduction**

- 10 minutes Focus Group Organization and Goals: **Alison Nelson** (West Coast FHM Coordinator)
- 30 minutes Description of Climate Change and Related FS Policy
Speaker: **Al Solomon** (National Program Leader for Global Change Research, USFS, Arlington VA)
- 10 minutes Questions/Discussion

9:35-10:00 **Part 2: Threats to Forest Health (potential problems and issues posed by climate change to forest ecosystems)**

Panel: Specific Threats to Forest Health

- 10 minutes Fire
Panelist: **Don McKenzie** (Research Landscape Ecologist, Pacific Northwest Research Station, USFS, Seattle WA)
- 10 minutes Tree Species Range Shift
Panelist: **Bill Hargrove** (Ecologist, Eastern Forest Environmental Threat Assessment Center, USFS, Asheville NC)

10:00-10:20 **Break**

10:20-11:05 **Part 2 Panel Continued.**

- 10 minutes Weather
Panelist: **Steve McNulty** (Southern Global Change Team Leader, Eastern Forest Environmental Threat Assessment Center, USFS, Raleigh NC)
- 15 minutes Forest Pest Dynamics (insects and disease)
Panelist: **Susan Frankel** (Sudden Oak Death Program Manager, Pacific Southwest Research Station, USFS, Albany CA)
- 10 minutes Genetic Response
Panelist: **Kevin Potter** (Research Assistant Professor, North Carolina State University, Raleigh, NC)
- 10 minutes Phenology Effects
Panelist: **Mark Losleben** (Assistant Director, National Phenology Network, Tucson, AZ)

11:05-12:00 **Group Discussion** (Discussion of Panel Topics and their relationship to Focus Group Objectives 4-6)

12:00-1:00 **Lunch**

1:00-2:00 **Part 3: Perspectives of FHM partners working on climate-change issues (in terms of current research, information gaps, and opportunities for further research on the effects to forest ecosystems)**

Panel: Partner Organizations

10 minutes Western Threat Center Perspective
Panelist: **Jerry Beatty** (Director, Western Wildland Environmental Threat Assessment Center, USFS, Prineville OR)

10 minutes Eastern Threat Center Perspective
Panelist: **Danny Lee** (Director, Eastern Forest Environmental Threat Assessment Center, USFS, Asheville NC)

10 minutes FS Research Perspective
Panelist: **John Hom** (Deputy Program Manager, USFS, Northern Global Change Research Unit, Newtown Square PA)

10 minutes FHP Perspective
Panelist: **Rob Mangold** (Director, Forest Health Protection, USFS, Arlington VA)

10 minutes FHM Perspective
Panelist: **Borys Tkacz** (Program Manager, Forest Health Monitoring, USFS, Arlington VA)

10 minutes State Perspective
Panelist: **Mark Tjoelker** (Associate Professor, Forest Ecology, Texas A&M University, College Station TX)

2:00-3:00 **Group Discussion** (Discussion of Panel Topics and their relationship to Focus Group Objectives 4-6)

3:00-3:20 **Break**

3:20-4:30 **Part 4. Formulate Results of Panel Input and Discussion into FHM Program Resolutions**