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Region

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Forest Health Protection International Activities

Accomplishment Report for Fiscal Year 2008

Prepared by the FHP International Activities Team



Rich Sniezko next to North American white pine seed lot to be tested for resistance against South Korean strains of white pine blister rust in cooperative study with Dr. Kwan-Soo Woo of the Korean Forest Research Institute.

FOREST HEALTH PROTECTION INTERNATIONAL ACTIVITIES FOR FISCAL YEAR 2008

Summary

This report is a consolidation of the Forest Health Protection (FHP) international activities in FY 2008. Funding for these activities comes from a variety of sources including FHP staff units and FHP International Activity Team (IAT) funds, USDA Forest Service International Programs (IP), USDA Animal and Plant Health Inspection Service (APHIS), US Agency for International Development (USAID), United Nations Food and Agriculture Organization (UN/FAO), and support from hosting countries.

During FY 2008, FHP specialists were involved in approximately 42 international-related activities with 17 countries. These activities included: providing technical assistance and training, cooperating on projects and pest risk assessments, giving presentations, and participating in international meetings. The number of international activities was down in FY2008 because several planned activities were deferred until FY2009 due to the fire transfer situation.

There are four FHP International Activity Goals. These goals are:

Goal 1. U.S. Forests are protected from exotic pests.

Goal 2. North American countries have strong forest pest management programs.

Goal 3. Biological control options are in place to protect U.S. forests from exotic pests.

Goal 4. Forest health technology and expertise are shared worldwide.

FY 2008 Highlights

Mexico – After many years of work, the “Forest Diseases of Mexico” book was printed. The book is a large full color format book with excellent pictures and information and is a companion book to the “Forest Insects of Mexico” book that was published several years ago. Forest Health Protection pathologists provided input and review for this book, and Forest Health Protection in the Washington Office provided cost-share funding for the printing.

Sweden – A IUFRO Conference, “Adaptation of Forests and Forest Management to Changing Climate with Emphasis on Forest Health” was held in Umea, Sweden. The relationships of climate change and forest health are focal areas for FHP. Borys Tkacz attended the conference and gave two presentations: “Forest Health in North America: Current Conditions, Historic Trends, and Future Risks” and “Monitoring Large-Scale Tree Mortality in the United States of America”.

Brazil – In 2008, Phil Cannon, Regional Pathologist in R5, initiated a study, reviewed available research facilities, and developed a working agreement with the Federal University of Vicosa, Brazil to conduct a critical set of studies on the genetic diversity of guava rust (*Puccinia psidii*). Guava rust has the potential to infect and cause serious impact to the native Ohia trees in Hawaii. These tests are crucial for the State of Hawaii because Ohia comprises about 85% of the trees in the native forests of Hawaii. Currently Hawaii has an interim measure in place blocking the entrance of all myrtaceous species into that State. These studies will develop the information needed to determine if it is important to make that measure permanent.

Vietnam – The Asia-Pacific Forest Invasive Species Network sponsored the APFISN Workshop in Hanoi, Vietnam. Over 20 member countries were represented. The purpose of the Workshop was to transfer invasive

species risk mapping information and technology to member countries. FHP and FHP/FHTET forest health specialists represented the U.S. and provided risk assessment information and technologies. FHP provided funding to help support the workshop, and participated in the workshop by giving a presentation on “Risk-based targeted surveillance for invasive forest species”.

FHP is involved in support, development, and participation of three international invasive species organizations and networks – the Insect and Disease Working Group of the North American Forestry Commission (NAFC), the Asia-Pacific Forest Invasive Species Network (APFISN), and the Forest Invasive Species Network of Africa (FISNA).

The attached table summarizes the primary FHP international activities in FY 2008 by country. Source of funding and participation are listed in order to show the cooperation and participation that goes to support FHP international activities.

Additional information can be obtained either through the IAT or the regional FHP international activity coordinators. Previous Activity Reports and many of the project and trip reports prepared by FHP specialists can be found on the FHP International Activities website:

http://www.fs.fed.us/foresthealth/forest_health_management.shtml and click on “International Activities”

IAT – Dayle Bennett, Iral Ragenovich, Noel Schneeberger, Denny Ward, and Larry Yarger

Regional FHP IAT Coordinators

WO and FHTET – Larry Yarger	R3 – Debra Allen-Reid	R8 – Denny Ward
R1 and R4 – Dayle Bennett	R5 – Phil Cannon	R10 – Mark Schultz
R2 – Tom Eager	R6 – Iral Ragenovich	NA – Noel Schneeberger

**FY 2008 FOREST HEALTH PROTECTION
INTERNATIONAL ACTIVITIES**

COUNTRY	ACTIVITIES	TECHNICAL SPECIALISTS	SOURCE OF FUNDING
AUSTRIA	Visit forest modelers to study their advanced work in landscape level physiology modeling, including simulations of climate change impacts. Share information about insect and disease risk rating and impact simulations and discuss opportunities for model integration.	Smith (FHTET)	FHP
BRAZIL	Review facilities and set up a working agreement with the Federal University of Vicosa, Brazil to conduct a critical set of studies on the genetic diversity of guava rust (<i>Puccinia psidii</i>), and for determining the capacity of various strains of this rust for attacking varieties of ohia (<i>Meterosideros polymorpha</i>) in Hawaii.	Cannon (R5)	IAT
CANADA	<p>Attend Western Regional Gypsy Moth Meeting in Vancouver, BC.</p> <p>Give a presentations on the Spray Advisor Model at the Spray Efficacy Research Group- International (SERG-I) Workshop, Nova Scotia</p> <p>Give presentation on drift into riparian areas; attend the SERG-I Executive meeting to review proposals and attend and participate in the Canadian Agricultural Aviators Assoc. meeting, Nova Scotia</p> <p>Attend presentations at the Spray Advisors Workshop hosted by the Canadian Forest Service, Canadian Ecology Center, Mattawa, Ontario</p> <p>Continue cooperation with Canadian Forest Service, Pacific Forestry Center for maintaining the Goose Lake-1 DFTM colony and transfer of the colony to the Northern Research Station</p> <p>Work with Canadian Forest Service and University of Alberta to collect parasitized amber marked birch leaf miners, and transport them for release in Alaska</p>	<p>Bridgwater (R6)</p> <p>A.Onken (NA)</p> <p>Thistle (FHTET)</p> <p>A. Onken (NA)</p> <p>Reardon(FHTET) Ragenovich (R6) Podgwaite (NS)</p> <p>Reardon (FHTET) Lundquist (R10)</p>	<p>FHP</p> <p>FHP, IAT</p> <p>FHP</p> <p>FHP</p> <p>FHP</p> <p>FHP</p>

CANADA	Attend the North American Plant Protection Organization (NAPPO) annual meeting and participate in the meetings of the NAPPO Invasive Alien Species Panel charged with developing regulatory protocols and guidelines for managing pathways for nonnative plants which have the potential to be invasive in the North American countries.	Smith (WO)	FHP
	Initiate a cooperative project to evaluate tree mortality and growth patterns in stands and trees infested with <i>Sirex noctilio</i> with Canadian Forest Service and Harvard (University) Forest	Dodds (NA)	FHP
	Participate in US-Canadian bilateral meeting on emerald ash borer (EAB) in Toronto. Objective is to develop a coordinated response to EAB in both countries.	Schneeberger (NA)	FHP
	Participate in trilateral N. American “Weeds Across Borders” conference to identify invasive plant issues of mutual concern and discuss cooperative approaches. Banff, Alberta	Smith (WO)	FHP
	Develop contract with Sylvar, a private Canadian forestry enterprise devoted to production of insect viruses, to produce Gypchek	Reardon (FHTET)	FHP
	Conduct Douglas-fir tussock moth slow releaser elution study with partial funding from SERG-I executive committee	Ragenovich (R6) Reardon (FHTET) Kelsey (PNW)	FHP/PNW FHTET SERG-I partners

<p>People’s Republic of CHINA</p>	<p>Continue development of a semiochemically based monitoring and control program for <i>Tomicus yunnanensis</i> in the People’s Republic of China</p> <p>Begin organizing the 2nd International Workshop: Biological Control of Invasive Species of Forests in the United States</p> <p>Continue cooperation in preparing the English version of “Forest Diseases of China” book</p> <p>Continue coordination with various organizations in China on biological control projects – these projects test natural enemies of invasive pests to determine their host range:</p> <ul style="list-style-type: none"> • Continue host range testing for selective pathogenic fungi and herbivores of mile-a-minute weed.□ • Continue field studies on biology, life cycle, etc. of two species of weevils to control tree of heaven. • Complete cooperative agreement on biological control of kudzu project using imitation rust and herbivores. • Continue to search for natural enemies and conduct host range studies on biological control of Japanese knotweed.□ • Continue effort with Southern Research Station to import into quarantine at the Univ. of Georgia a natural enemy for biological control of Chinese privet. • Collect and test the host range for newly discovered natural enemies for hemlock woolly adelgid. 	<p>Clarke (R8) Eager (R2)</p> <p>Yun Wu, Reardon (FHTET)</p> <p>Yun Wu, Reardon (FHTET)</p> <p>Reardon, Yun Wu (FHTET)</p>	<p>FHP, IAT</p> <p>FHP</p> <p>FHP</p> <p>FHP</p>
<p>FRANCE</p>	<p>Attend the Forest STAT2007 Biennial Conference, and present “Building a Nationwide 30-Meter Forest Parameter Dataset for Forest Health Risk Assessments, in Montpellier.</p>	<p>Ellenwood (FHTET)</p>	<p>FHP</p>

ISRAEL	Continue technical exchanges in the field of forest health protection, forest health monitoring, and tree improvement with the Jewish National Fund (Israeli Forest Service).	Mangold (WO) Sapio (WO)	Israeli Forest Service
IRAQ	Serve active duty for a year in Iraq	Kruse (R10)	FHP
JAPAN	Complete cooperative agreement with Dr. Kamata at Tokyo University-surveys and host range testing of natural enemies of mile-a-minute weed and kudzu. Paper published in Florida Entomologist—"Herbivorous Insect Fauna of Mile-a-minute Weed, <i>Persicaria perfoliata</i> (Polygonaceae), in Japan" Give presentations of forest insect and disease issues, reforestation, and other resource concerns in the Pacific Northwest, to a group of 9 visiting Japanese Natural Resource professionals	Reardon (FHTET) Daoust (R6)	FHP FHP
MEXICO	Determine the distribution and ecological role of a new species of <i>Dendroctonus</i> bark beetle in Mexico Identify potential application sites of methylcyclohexenone (MCH) to reduce Douglas-fir beetle (<i>Dendroctonus pseudotsugae</i>) attacks on Douglas-fir trees in Mexico. Attend and give presentation on Forest Health Protection in the US to the North American Forestry Commission meeting in Quintana Roo, Mexico. "Forest Diseases of Mexico" book printed.	Clarke (R8) Mehmel (R6) Allen-Reid (R3) Mangold (WO) Mangold (WO)	FHP, IAT FHP, IAT FHP FHP
NICARAGUA	Provide additional support and technical assistance to Nicaragua concerning mortality associated with insects and diseases of <i>Pinus caribbea</i> and <i>P. oocarpa</i> .	Ward (R8) Menard (R8)	FHP, IAT
RUSSIA	Continue cooperation in the joint Russia/United States Lymantriid Monitoring program. Visit ports and review protocols. Initiate ambrosia beetle monitoring in the 3 larger Russian ports.	Munson (r4) McMillin (R3) Mastro (APHIS) Simon (APHIS) Kummen (CFIA)	FHP APHIS CFIA
SOUTH AFRICA	Participate in the International Congress of Entomology in Durban, South Africa. Give presentation entitled: Laurel wilt in the southeastern US: a new disease caused by a fungal associate of <i>Xyleborus glabratus</i> .	Rabaglia (WO) Fitzgibbon (R3)	FHP

SOUTH KOREA	Participate in IUFRO Working Party 2.02.15 – The Breeding and Genetic Resources of Five-Needle Pines Conference in Yangyang, Korea.	Snieszko (R6)	IAT
SPAIN	Collect isolates of <i>Armillaria</i> and <i>Heterobasidion annosum</i> from Douglas-fir, radiate pine, and Lawson cypress from three field sites in Spain as part of an effort to continue to genetically characterize <i>Armillaria</i> from isolates around the world.	Mee-Sook Kim (RMRS)	RMRS, IAT
SWEDEN	Attend the IUFRO Conference: Adaptation of Forests and Forest Management to Changing Climate with emphasis on Forest Health in Umea, Sweden. Give presentations of Forest Health Conditions in North America, and on monitoring large-scale tree mortality.	Tkacz (WO)	FHP
UNITED KINGDOM	In cooperation with CABI-Bioscience – conduct survey and host range testing for pathogens, parasites and predators of knotweeds collected throughout Europe to determine if they are suitable for release in England.	Reardon (FHTET)	FHP
	In cooperation with CABI-Bioscience – conduct survey and host range testing for three species of weevils for control of garlic mustard.	Reardon (FHTET)	FHP
	Hosted a plant pathologist from UK Department of the Environment, Food, and Rural Affairs and visit Sudden Oak Death sites near Brookings, OR	E. Goheen (R6)	FHP
	Host two social scientists from UK Centre for Environmental Policy, Imperial College of London and visit Sudden Oak Death sites near Brookings, OR	E. Goheen (R6)	FHP
VIETNAM	Attend Asia-Pacific Forestry Commission meeting and help coordinate and make presentations at the Asia-Pacific Forest Invasive Species Network Workshop on “Risk-based targeted surveillance for invasive forest species” in Hanoi	Yarger (WO) Downing (WO)	FHP
	Provide funding for APISN meeting held in Hanoi	Mangold (WO)	FHP

OTHER	Continue cooperation in the joint Lymantriid Monitoring program in Japan and South Korea (no trip in 2008).	Munson (r4) McMillin (R3) Mastro (APHIS) Simon (APHIS)	FHP APHIS
	Host International Tree Failure Database and arrange training through International Society of Arboriculturists in various countries. Participation in database and training included Belgium, Canada, Czech Republic, Germany and United Kingdom in 2008.	Jones(R8)	FHP

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