

**51st Southern Forest Insect Work Conference,
August 4-7, 2008
Marriot at the Convention Center, Chattanooga, TN**

PROGRAM

Monday, August 4th

- 9:30-11:30AM **Forest Health Task Force Meeting** – Plaza A
- 1:00-3:30 PM **SPB Working Group (Organizer: Stephen Clarke)** – Plaza A
- Southwide SPB Database, Tony Courter, USFS-FHTET
- FHM mortality map standards, Frank Sapio, USFS-FHTET
and Dale Starkey, USFS-FHP
- SPB Encyclopedia – Kier Klepzig and Robert Coulson
- Update on systemic insecticide injection research and
product registration – Don Grosman, Texas Forest Service
- Economic benefits of SPB prevention – John Nowak
- Economic benefits of SPB suppression – Stephen Clarke
- SPB Strategic plans – Stephen Clarke
- 3:00-5:00 PM **Poster Set Up (Organizer: Carla Dilling, UT)** – Plaza C
- 3:00-7:00 PM **Meeting Registration** - Lobby
- 3:00-4:30 PM **State Cooperators Meeting** – Plaza A
- 4:30-5:15 PM **AD Hopkins Award Committee Meeting** – Plaza A
- 6:30-9:00 PM **Mixer and Reception** – Tennessee River Room

Tuesday, August 5th (all events in Plaza A/B)

- 7:30-8:30AM **Continental Breakfast**
- 8:00-12:00PM **Registration**
- 8:15-8:30AM **Welcome-** Keith Wilkinson, Chattanooga Area Visitors Bureau
- 8:30-9:15AM **Opening Business Meeting**
- 9:15-9:30AM **Roger F. Anderson Award**
AD Hopkins Award
- 9:30-10:00AM **Break and Group Photos**
-

10:00-12:00PM

Plenary Session **Climate Change and Forest Health**

Matching up the pieces: The Eastern Forest Threat Center and Climate Change

Danny Lee, USFS, EFETAC

Quantitative regionalization as a basis for long-term national monitoring of forest threats

Bill Hargrove, USFS, EFETAC

Drought and disease interactions in southern forest trees

Steve Oak, USFS, Forest Health Protection

Carbon and ecosystem service markets: Challenges and opportunities for southern forestry

Donald Hodges, U of Tennessee Dept. of Forest Policy and Economics

12:00-1:30PM Lunch

1:30-4:30PM

Graduate Student Session

Moderated by Gina Davis, Virginia Tech and Kelly Felderhoff, NCSU

Hemlock susceptibility to hemlock woolly adelgid attack in the Chattooga River watershed

Mark Faulkenberry, Clemson University

**Colonization and dispersal of two HWA predators:
Laricobius nigrinus (introduced) and *L. rubidus* (native)
in eastern hemlock forests**
Gina Davis, Virginia Tech

**Competitive interactions among three congeneric
species of *Laricobius*, predators of hemlock woolly adelgid**
Heather Story, Virginia Tech

**A novel approach to understanding trophic interactions
of the hemlock woolly adelgid: Preliminary data on
development of an adelgid-specific monoclonal antibody**
Rachael Mallis, University of Kentucky

Feeding behavior of the hemlock woolly adelgid
Kelly Felderhoff, North Carolina State University

2:45-3:15PM

Break

**Effects of application timing and method on the translocation
and concentration levels of imidacloprid within the canopy of
eastern hemlock, *Tsuga canadensis* (L.) Carrière.**
Carla Dilling, University of Tennessee

**Quarantine evaluation of *Eucryptorrhynchus brandti* (Harold)
(Coleoptera: Curculionidae), a potential biological control
agent of tree-of-heaven, *Ailanthus altissima* in Virginia, USA**
Nathan Herrick, Virginia Tech

**Silvicultural disturbances influence the insect prey base
of forest-dwelling bats - Luke Dodd, Research Assistant, U of KY**

Development of southern pine beetle in a non-traditional host
Micah Gardner, North Carolina State University

**Spatial and temporal patterns of host tree response to red oak
borer infestation - L. J. Haavik, U of Arkansas**

6:30-9:30PM

Banquet and Cruise, Boarding 6:30, Departs 7:00, Docks 9:30

Wednesday, August 6th

7:00-8:00AM Continental Breakfast

8:00-10:00AM **Concurrent Session 1**

Southern Pine Beetle Prevention Program - John Nowak, Moderator - Plaza A

On the ground accomplishments of the SPB Prevention Program and overview of SPB hazard maps for the Southern Region

John Nowak, USFS, FHP

The Georgia Forestry Commission's landowner education program on SPB prevention and healthy forest management - James Johnson, GFC

Comparison of stand thinning regimes using the computer simulation model SPBLOB - John Bishir, NC State, retired

An assessment of SPB Program effectiveness and landowner response in the Southern United States - Frederick Rossi and Douglas Carter, Univ. of Florida

Biological Control of HWA: Operational Activities and Research in the South - Scott Salom and Rusty Rhea, Moderators – Plaza B

Operational Activities

Summary of Rearing Activities and Predator Releases

Rusty Rhea, USDA Forest Service, FHP

Research

Whole-tree impact assessment of HWA predators Jerome Grant, Univ. Tenn.

Behavioral responses of *Laricobius nigrinus* to chemosensory cues associated with plant material – Kimberly Wallin^{1,2}, Tanya Latty³, and Darrell Ross²

¹University of Vermont, ²Oregon State Univ., ³Univ. of Sydney

HWA and Natural Enemies in Japan; Predator Release Database

Ashley Lamb, Scott Salom, Loke T. Kok, Andy Roberts, and Jessie Beck, Virginia Tech

The Prospects of Having Three *Laricobius* Species in the

Eastern U.S., Part 2 - Tree Dellinger, Scott Salom, and Loke Kok, Virginia Tech

Alternative Rearing Strategies for Predators of the Hemlock Woolly Adelgid

Robert Jetton¹, Allen Cohen², Fred Hain¹, and Carol Cheah³

¹NC State Univ., ²Insect and Diet Rearing Research, LLC, ³CT Agric. Exp. Sta.

10:00-10:30AM Break

10:30-12:30PM **Concurrent Session 2**

Burn Baby, Burn. Prescribed Fire: Boon or Bust for Forest Health?

Stephen Clarke, Moderator – Plaza A

Introduction. Stephen Clarke

Prescribed fire as a silvicultural tool – “There's an opportune time to do things, a right time for everything on the earth”

Steve Jack, J.W. Jones Ecological Research Center, Newton, GA

Effects of Fire on Insects and Insect Diversity.

Jim Hanula, USDA, Southern Research Station, Athens, GA

Diseases and Prescribed Fire: An Infectious Combination.

William Otrosina, USDA, Southern Research Station, Athens, GA

Discussion

Systemic Insecticides: What's New? - Don Grosman, Moderator – Plaza B

Systemic insecticide treatments for protection of pine seedlings against pine tip moth - Billi Kavanagh, Jason Helvey & Don Grosman

FPM Cooperative & Texas Forest Service, Lufkin, TX.

Imidacloprid and hemlocks: Lessons from the field.

Theresa Dellinger, Brian Eisenback, Tom McAvoy & Scott Salom, Virginia Tech

Cone and seed insect control -- Efficacy tests of new products

Don Grosman & Bill Upton, FPM Cooperative & Texas Forest Service

Evaluation of QUIK-Jet and Tree IV applications of emamectin benzoate for leaf-feeding and wood-boring insect pests of shade trees.

Fredric Miller, The Morton Arboretum & Joliet Junior College, Joliet, IL

Systemic insecticide injections for protection of western conifers from bark beetles - what have we learned?"

Christopher Fettig (USFS-PSWRS, Davis, CA), Steve Munson (USFS-FHP-Ogden, UT), Carl Jorgensen (USFS-FHP-Boise, ID) & Don Grosman (TXFS –Lufkin, TX).

Injectables and elicitors: New ways to cure the blues?

Kier Klepzig, Brian Strom & Jolie B. Mahfouz, USFS-SRS-Pineville, LA.

12:30-4:30PM Lunch and Afternoon Activities

4:30-6:00PM

Poster Session/Insect Photo Salon – Plaza C

***Agrilus prionurus*, a recently- detected invasive pest of soapberry in Central Texas**

R. F. Billings and H. A. Pase, III, Texas Forest Service

An evaluation of detection systems for native and non-native siricids in Louisiana - B. Ross¹ and W. Johnson²

¹ LA Tech University

² USFS, Forest Health Protection, Region 8, Pineville, LA

SPBIS - Southern Pine Beetle Information Guide - V. Peacher

U.S. Forest Service, Forest Health Protection, Pineville, LA

Two-year protection of loblolly pine from southern pine bark beetles with systemic insecticide injections

W. W. Upton¹, S. Clarke², and D. M. Grosman³

^{1,3} Texas Forest Service, ² USDA Forest Service-FHP,

Influence of Vertical Stratification on Community Response of Predators to Insecticides Used for Management of Hemlock Woolly Adelgid

A. Hakeem¹, J. F. Grant¹, P. L. Lambdin¹, F. Hale¹, and R. Rhea².

¹ University of Tennessee, Entomology and Plant Pathology

² USDA Forest Service, FHP, Asheville, NC

Formation of the Western Bark Beetle Research Group-USDA Forest Service Research and Development - B. J. Bentz¹, C. J. Fettig², N. G. Gillette³, E. M. Hansen², J. L. Hayes⁴, R. G. Kelsey⁵, J. E. Lundquist⁶, A. M. Lynch⁷, J. F. Negrón⁸, C. Niwa⁵, R. A. Progar⁴, and S. J. Seybold²

¹ Western Bark Beetle Research Group, USDA Forest Service,

Rocky Mountain Research Station, Logan, UT

² Western Bark Beetle Research Group, USDA Forest Service,

Pacific Southwest Research Station, Davis, CA

³ Western Bark Beetle Research Group, USDA Forest Service,

Pacific Southwest Research Station, Albany, CA

⁴ Western Bark Beetle Research Group, USDA Forest Service,

Pacific Northwest Research Station, La Grande, OR

⁵ Western Bark Beetle Research Group, USDA Forest Service,

Pacific Northwest Research Station, Corvallis, OR

⁶ Western Bark Beetle Research Group, USDA Forest Service,

Pacific Northwest Research Station, Anchorage, AK

⁷ Western Bark Beetle Research Group, USDA Forest Service,

Rocky Mountain Research Station, Tucson, AZ

⁸ Western Bark Beetle Research Group, USDA Forest Service,

Rocky Mountain Research Station, Fort Collins, CO

Synchrony and host preference of *Leucopis* spp. (Diptera:

Chamaemyiidae) predators of hemlock woolly adelgid in the Pacific Northwest - G. R. Kohler¹, K. F. Wallin², and D. W. Ross³

¹ Washington Department of Natural Resources, Olympia, WA

² Rubenstein School of Environment and Natural Resources, University of Vermont, Burlington, VT

³ Dept. of Forest Science, Oregon State University, Corvallis, OR

Community response of non-target phytophagous and transient insects associated with eastern hemlock to horticultural oil and imidacloprid treatments in the southern Appalachians

C. I. Dilling¹, P. L. Lambdin¹, J. F. Grant¹, J. R. Rhea²

¹ Univ. of Tennessee, Entomol. and Pl. Pathology, Knoxville, TN

² USDA Forest Service, FHP, Asheville, NC

Feeding site characteristics may influence susceptibility to the hemlock woolly adelgid, *Adelges tsugae* :

P. Ayayee¹, L. K. Rieske¹, F. Yang²

¹ University of Kentucky Department of Entomology

² Univ. of Kentucky, Dept. of Chemical and Materials Engineering

Modeling future forests in the wake of invasive species

H. L. Spaulding¹ and L. K. Rieske-Kinney, Department of Entomology, University of Kentucky, Lexington, KY

Genetic variation of lodgepole pine chemical and physical defenses that affect mountain pine beetle attack and tree mortality

Ott, D.S.¹, Huber, D.P.W.¹, Yanchuk, A.D.², and Wallin, K.F.^{1,3}

¹ Univ. of Northern British Columbia, Prince George, BC, Canada

² Province of BC Ministry of Forests, Victoria, BC Canada

³ The University of Vermont, Rubenstein School of Environment and Natural Resources, Burlington, VT

Orientation of the predator *Laricobius nigrinus* Fender (Coleoptera: Derodontidae) to insect hosts and plant material in a multi-chambered olfactometer

Wallin, K.F.^{1,2}, Latty, T.M.³ and Darrell W. Ross²

¹ The Univ. of Vermont, Rubenstein School of Environment and Natural Resources, Burlington, VT

² Oregon State University, Dept. of Forest Science, Corvallis, OR

³ The University of Sydney, School of Biological Sciences, Sydney Australia

Title: Status of germplasm conservation of Carolina hemlock in the Southern Appalachian Mountains.

Robert Jetton, Andy Whittier, Bill Dvorak, and Rusty Rhea¹.

Camcore, North Carolina State University, Raleigh, NC

¹ Forest Health Protection, Asheville, NC

Thursday, August 7th

7:00-8:00AM Continental Breakfast

8:00-10:00AM **Concurrent Session 3**

Regulating firewood movement to combat the spread of invasive pests: State perspectives - Chris Asaro, Moderator – Plaza A

Actions against firewood movement in the Mid-west, Northeast, and Virginia in response to the emerald ash borer

Chris Asaro, Virginia Department of Forestry

Trapping and Detection of EAB

David Wakarchuk, Synergy Semiochemicals Corp.

Florida Perspectives - Bud Mayfield, Florida Division of Forestry

Georgia Perspectives - James Johnson, Georgia Forestry Commission

Tennessee Perspectives - Steven Powell, Tennessee Department of Agriculture

Discussion

Issue or Issue Not a Cause for Concern? Hot Topics in SPB IPM Steven Clarke, Moderator – Plaza B

Potential discussion items.

1. Do spot disruption techniques exacerbate area-wide SPB problems?
2. Should cut-and-remove always be the preferred treatment when ground conditions allow removal, or should time between detection and suppression help determine treatment recommendation?
3. When should cut-and-leave be applied? Is time of year important? Does size matter?
4. When you see red are you out of control? Vacated trees, take em or leave em.
5. Are longleaf pines less susceptible to SPB?
6. Virginia pine: should it be planted as a sink for SPB?

10:00-10:30AM Break

10:30-12:00PM Closing Business Meeting