

Kimberly F. Wallin
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USDA Forest Service
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A. EDUCATION AND EMPLOYMENT INFORMATION

1. Education

University of Wisconsin-Madison	Ph.D. Entomology (fall)	2002
	Minor Genetics	
University of Wisconsin-Madison	M.S. Entomology	1996
University of Minnesota-Twin Cities	B.S. Forestry	1994

2. Professional Experience

The University of Vermont, Burlington, VT and USDA Forest Service, South Burlington
The Rubenstein School of Environmental and Natural Resources.

08/07-present. Research Assistant Professor. Specialization in Forest Ecosystem Health. This appointment is a non-tenured full-time, 12-month appointment funded by University of Vermont and USDA Forest Service. I conduct research in the areas of forest ecosystem health and forest entomology. Specifically, I link and synthesize insect host selection behaviors, and tree and insect genetics with landscape level population dynamics of forest insects. I developed and teach three undergraduate courses: 1) Forest Ecosystem Health, 2) Biodiversity and Land Use and 3) an international field course: Environment and Arts in Arid Ecosystems: Israel. I mentor and advise ~30 undergraduate and 2-6 graduate students and 2-8 undergraduate interns.

Oregon State University, Corvallis, OR

Department of Forest Science renamed Department of Forest Ecosystems and Society
08/07-current. Courtesy Professor. I co-major advisor for MS student Sarah Grubin (successfully defended Jan. 2011). Chamaemyiid predators of the hemlock woolly adelgid in the Pacific Northwest. OSU primary advisor is Dr. Darrell Ross.

04/07-08/07. Assistant Professor, Senior Research. Supervisor: Dr. W.T. Adams. I conducted research the areas of forest entomology. I funded 88% of my salary by obtaining external funds from granting agencies. The remaining 12% of my salary was compensating by the department for my role as Graduate Student Coordinator.

10/03-04/07. Research Associate. Supervisor: Dr. W.T. Adams. I was originally hired by Forest Science and offered 0.5 FTE for 6 months but more importantly I was provided the opportunity to pursue and develop independent research program in the department.

College of Agriculture.

06/04-11/04; 02/05. Extension. Provided research based information to Oregon State University County Extension agents regarding black fly populations. Collaborated with county agents and successfully established short- and long-term monitoring program. OSU Extension provided 0.1 FTE during the dates listed.

Department of Environmental and Molecular Toxicology.

01/03- 09/03. Faculty Research Associate—Extension Specialist. Supervisors: Drs. Miller, Jenkins, Sudakin (Ph.D. MD) Provided information to general public on toxicity and environmental fate of pesticides. Answered and addressed over 500 telephone-inquires from people with diverse educational backgrounds and language skills.

University Northern British Columbia, Prince George, Canada

08/06- 08/09. Ecosystem Science and Management. Adjunct Professor. Supervisor: Vice-President (Academic) and Provost, Dr. J.H. Brunt. Conduct research to understand the genetic variation of resistance in host trees. This provides me the opportunity to work with tree breeders to examine variation in resistance among hosts to a naturally occurring insect-fungal system. In addition, this provides me the opportunity to expand and bring recognition to my research program and my home University. 0.0 FTE is provided by UNBC.

Northern Arizona University, Flagstaff, AZ

06/00-09/02. Department of Forestry. Research Associate. Supervisors: Dr. T. Kolb and Dr. M. Wagner. Conducted research on ponderosa pines and associated herbivores; effects of fire, thinning, and restoration treatments on tree physiology and resistance to insects. I served as M.S. committee member and secured funds for additional M.S. student, Monica Gaylord. I started this post-doctorate after collecting all the data for my Ph.D. but before I began writing my dissertation. I completed and defended my Ph.D. at U of WI-Madison while conducting research and being employed as a post-doctorate at NAU.

University of Wisconsin-Madison, Madison, WI

Department of Entomology

02/97-10/02. Research Assistant. Ph.D. Major Advisor: Dr. Kenneth Raffa. Conducted research on density-dependent host acceptance behavior as a possible contributing factor to the population outbreaks of insect herbivores.

09/94-11/96. Research Assistant. M.S. Major Advisor: Dr. Kenneth Raffa. Conducted research on the impacts of jack pine budworm defoliation on subsequent growth, survival, physiology, and pest susceptibility of jack pine trees.

06/94-09/94. Research Technician. Supervisor: Dr. Karl Kliener. Conducted research on genetic basis of willow resistance to folivores.

University of Minnesota, Minneapolis and St. Paul, MN

Department of Entomology

06/92-06/94. Research Assistant II. Worked in Dr. Moon and Dr. Andow laboratories. Reared and maintained colonies of flies and their associated predators, and European corn borer. Laboratory colonies were used by graduate students, post-doctoral associates for laboratory and field experiments.

06/93-06/94. Volunteer scientist for Valerie Cervenka on Forensic Entomology Case Studies. I assisted her during visits to crime scenes and morgues. Assisted in collection of insect specimens from the corpse, soil, water, and tissue samples when appropriate.

Kunde, Company. 06/92-06/93. Internship as Urban Forester. Supervisor: Steve Kunde. Worked with homeowners to identify insect pests and diseases. Fielded approximately 150 calls from homeowners. Conducted citywide surveys for Oak Wilt and Dutch Elm Disease. Wrote annual report for cities describing insect and disease pests in their counties.

USDA Forest Service, Bonner's Ferry ID. 06/89-09/90. Forestry Technician. Worked on tree planting, vegetative management, trail maintenance, and fire crews.

B. TEACHING, ADVISING, AND OTHER ASSIGNMENTS

1. Teaching

a. Credit courses

The University of Vermont

The Rubenstein School of Environment and Natural Resources

Spring. Developed an undergraduate service-learning course in *Forest Ecosystem Health*. This is the first time the course has been offered at UVM. There is not a textbook for this course therefore I developed all of the material from readings. The course synthesizes tree physiological responses to abiotic stressors such as climate disturbances, and biotic stressors such as forest pathogens and insects. We also cover contemporary forest health issues such as invasive species and biodiversity. This is a 4-credit course with a 4 hr lab that meets weekly. The service-learning partner is State of Vermont Department of Forests and Recreation. Students work with landowners to determine susceptibility of their land to emerald ash borer infestation. I teach this every spring semester. In 2008, my overall evaluation (1=excellent – 5=poor) was 1.26 from students and 1.4 from faculty; 2009 it was 1.2 from students; 2010 it was 1.03 from students.

Spring 2009 and 2010. I developed an undergraduate course in *Biodiversity and Land Use*. This is the first time the course has been offered at UVM. I developed the course based on scientific

and popular readings. The course introduced students to biological forest disturbance and the role that genetics (relatedness) of trees within natural systems and plantations play in community ecology and genetics. Both years the course evaluation was 1.0 (1=excellent - 5=poor).

Summer. I am the lead faculty of a 3-credit *Environment and Arts in Arid Ecosystems: Israel*. This is an international service-learning experience and practicum in environmental concerns of the Negev Desert in Israel. Our service-learning partners include the Democratic School, Bustan, Society for the Protection of Nature in Israel, and Arava Institute for Environmental Studies.

Oregon State University

Department of Forestry Science

2004. Lecturer. *Posing Researchable Questions in Forestry: Plant-Insect Interactions*. FS 520. I volunteered to develop and teach this 3 week, 1-credit module. The overall student evaluation of my contribution to the course was 5.8/6.0. (1=poor – 6=excellent)

University of Wisconsin-Madison

Department of Entomology

1996. Teaching Assistant. *Plant-Insect Interactions*. Entomology/Botany/Zoology 473. I was responsible for leading weekly 1-hr recitations, weekly 1-hr journal discussion groups, and assisting in exam preparation for this 4-credit undergraduate course. Teaching assistants are not financially compensated for time spent on courses. I received 1 graduate credit.

Departments of Entomology and Plant Pathology

1995, 1996. Teaching Assistant. *Forest Insects and Diseases*. Forestry/Entomology/Plant Pathology 500. I was responsible for leading 2 weekly 3-hr laboratories, weekly 1-hr group discussions that focused on critiquing current theories using published empirical studies, and gave 2 class lectures. Teaching assistants are not financially compensated for time spent on courses. I received 1 graduate credit each year.

b. Guest lecturer

The University of Vermont

The Rubenstein School of Environment and Natural Resources

2009. Forest Management. FOR 272. I delivered 3 50-minute lectures in this undergraduate course. I based my lectures on *Restoration Ecology* and *No Analog Forestry*. The faculty that traditionally teaches this course is on sabbatical (Dr. William Keeton) and I offered to assist the faculty member, Dr. Jeffrey

Hughes that assigned to teach the course in Dr. Keeton absence. I assisted in the laboratory session.

2009. Pollution Ecology. NR. I delivered 1 50-minute lecture on *Potential Implications of Global Climate Disturbance on Insect Distributions*.

Oregon State University

Department of Forestry Science

2006. *Posing Researchable Questions in Forestry*. FS 520. I led 1 30-minute interactive session on preventing the introduction of invasive wood boring insects.

2004. *Forest Insect and Disease Management*. FS/BOT 415/515. I led 1 45-minute interactive discussion on plant defense theories and 1 on bark beetle population dynamics.

2003. *Integrated Forest Protection*. FS 450/550. I led 1 45-minute interactive discussion on population dynamics of native and non-native forest insects.

University of Wisconsin-Madison

Department of Entomology

2001. *Plant-Insect Interactions*. Entomology/Botany/Zoology 473. I presented 2 1-hr lectures on population dynamics of forest insects.

Department of Forestry

1999 and 2000. *Tree Physiology*. Forestry/Botany 500. I presented 1 1-hr lecture each year on plant defense theories.

c. National and International non-credit courses

2004. Training workshop for 3 Ph.D. and 1 M.S. students at University of Montana. *Methods in gas liquid chromatography*. Hosted by Dr. Diana Six and K.R. Skov, Missoula, MT USA. I taught students how to properly collect and process field samples, store samples until analysis, extract samples, basics in programming GLC, troubleshooting, interpreting output, and analyzing data. This hands-on training was done in a ~ 4-hr block of time. I also provided students with written protocol and appropriate literature.

2000. Training workshop for 2 Ph.D. students at University of Northern British Columbia. *Methods in gas liquid chromatography*. Hosted by Dr. Staffan Lindgren, Prince George, BC Canada. I taught students how to properly collect field samples, store samples until analysis, extracting samples, basics in programming GLC, troubleshooting, interpreting output, and analyzing data. This

hands-on training was done in a ~ 4-hr block of time. I also provided students with written protocol and appropriate literature.

2. *Advising Students*

a. Undergraduate

i. The Rubenstein School of Environment and Natural Resources Advisees

Brumberg, Madeline (ENSC, 2009-current)
Cooney, Daniel (ENSC, 2009-current)
Drozd, Stephanie (ENSC, 2009-current)
Gustafson, Matthew (FORandENSC, 2008-current)
Harbison, William (RM, 2008-current)
Jackson, Kevin (Undecided, 2008-current)
Levy, Daniel (ENSC, 2009-2011)
Limberger, Evan (Undecided, 2009-current)
Mcauliff, Kelsey (ENSC, 2008-current)
McGlenn, Michael (WFB, 2008-current)
McGoldrick, Catherine (ENSC, 2008-current)
Ogger, Francis (ENSC, 2009-current)
Packard, Owen (Undecided, 2009-current)
Parker, Marissa (2009-current)
Passman, Jeffrey (ENSC, 2008-current)
Patterson, Mehgan (WFB, 2008-current)
Pollander, Kaylee (NR, 2009-current)
Potter, Emily (FOR, 2007-current)
Powell, Stephen (WFB, 2008-2010)
Spezzano, Brittany (FOR, 2011-current)
Talbot, Cole (ENSC, 2009-current)
Theberge, Zachary (ENSC, 2009-current)
Watson, Edward (2008-current)

Honors Thesis

Autumn Amici (May 2010-current) Effects of arthropod prey availability for woodpeckers along an urbanization gradient in Mass
Tyler Martin (Jan. 2011-current) Prioritization models for management of non-native invasive plant species in Vermont
Theresa Ruswick (Jan. 2011-current) Impact of non-native invasive worm on biodiversity of native species

Student Interns

Elisabeth Fenn (2011-current). Correlations of microhabitat and distribution of gastropods on forest floor.
Elisabeth Elmstrom (2011-current). Beaver ponds as potential sources of greenhouse gas emissions. EPSCoR Summer Undergraduate Research Fellow.
Stephanie Drozd (May 2010-Jan. 2011). Food Systems in Urban Areas.

- Emily Menzel (January 2010—Jan. 2011) Biodiversity of VT bark beetles
- Kyle Koister (January—June 2010) Impacts of increased winter rain on diversity of ground-dwelling arthropods
- Megan Bennett (May 2009—March 2010) Documentary film of service-learning in Arad, Israel (3 credits)
- Jeffrey Fromuth (May—December 2009) Research on food and land use in arid ecosystems (3 credits)
- Catherine Hyman (May—August 2009) Environmental educational tools and supplemental teaching aids for teachers in Arad
- Serach Ramu (May 2009—current) Photojournalist reporting of service-learning in Arad, Israel (3 credits)
- Anya Rifkin (May 2009—March 2010) Picture book of sustainable practices for Barnes elementary school, and schools in Arad (3 credits)
- Kellie McMahon (December 2008—December 2009) Cross-border environmental and Marketing—Domestic Research (3 credits)
- Julia Katz (May—July 2009) Artistic compilation of group poetry, stories, and Experiences (3 credits)
- Addison Kasmarek (March 2008 –Dec. 2008) Understanding the role of specific wavelength reflectance in insect host location behaviors (3 credits)
- Drew Cameron (April—December 2008) Estimating environmental and genetic variation in host responses to insects (1 credit)
- James Baros (May 2008—May 2009) Environment and Arts Service- (3 credits)

b. Graduate

i. Advisor

Fall 2011. Bart Gengler, M.S. The Rubenstein School of Environment and Natural Resources.

Fall 2011. Arielle Arsenault, M.S. The Rubenstein School of Environment and Natural Resources.

Fall 2010. Chenin Limbak, Ph.D. The Rubenstein School of Environment and Natural Resources. What factors make an invasive organism successful?

Fall 2010. Helen Yurchenco, M.S. The Rubenstein School of Environment and Natural Resources. Effects of winter climate change on tree physiology and tree-herbivore interactions in the northern hardwood forest.

ia. Completed

Fall 2009-summer 2011. Dan Comerford, M.S. The Rubenstein School of Environment and Natural Resources. *Quantifying the impacts of fine-scale variation at altitudinal boundaries on patterns and diversity of plant-insect interactions*. Currently employed Minnesota Department of Natural Resources as Forest Health Specialist.

Winter 2009-Jan. 2011. Sarah Grubin, M.S. OSU Department of Forest Science. Co-major advisor with Dr. Darrell Ross. *Chamaemyiid predators of the hemlock woolly adelgid in the Pacific Northwest*. Currently employed West Virginia Department of Agriculture as Forest Health Specialist.

Fall 2008-Fall 2010. Sarah Pears, M.S. The Rubenstein School of Environment and Natural Resources. *Genetic and environmental based variation of host response to Sirex-fungal-mucus complex*. Currently employed Massachusetts Department of Natural Resources and Conservation as Forest Health Specialist.

Summer 2006- Jan. 2010. Daniel Ott, M.S. UNBC Ecosystem Science and Management. *Characterizing genetic variation of resistance in lodgepole pine to attack by mountain pine beetle and one associated fungus*. Employed as Research Laboratory Assistant; currently touring Central America.

Spring 2007-2008. Glenn Kohler, Ph.D. OSU Department of Forest Science. Co-major advisor with Dr. Darrell Ross. *Chamaemyiid predators of the hemlock woolly adelgid in the Pacific Northwest* Currently employed as State of Washington Forest Entomologist.

2005-2008. Glenn Kohler, M.S. OSU Department of Forest Science. Co-major advisor with Dr. Darrell Ross. *Predators associated with HWA infested western hemlock in the Pacific Northwest*

ii. Committee member

2009-current. Kristen Williams, M.S. UVM Plant and Soil Sciences

2009-current. Joshua Halman, Ph.D. UVM Rubenstein School

2009-11. Thomas Siellie, M.S. UVM Rubenstein School

2008-09. Homer Eliot, M.S. UVM Rubenstein School

2006-07. Matt Knight, M.S. OSU Department of Exercise and Sports Science

2004-06. Wyatt Maloy, M.S. OSU Department of Exercise and Sports Science

2004-05. David Stricklin, Ph.D. OSU Department of Exercise and Sports Science

2000-02. Kjerstin R. Skov, M.S. NAU School of Forestry

iii. Visiting international scholar

March – April and September – November 2006. Tanya Latty, Ph.D. candidate University of Calgary. She conducted research on feeding behavior of hemlock woolly adelgid predators. We developed and published methodology necessary for a research proposal.

3. *Extension and Outreach*

2010. Diagnose insect and pathogen damage of Milton, VT homeowner trees. September

2010. Intervale Conservation Nursery Advisory Board Meeting. State of invasive insects in Vermont and New England. February 9, 2010. Intervale Conference Room, Burlington, VT.

2009. Israel Education Initiative. Transboundary Approaches to Environmental Challenges Facing Arid Ecosystems. December 1, 2009. UVM Living and Learning Campus, Burlington, VT.

2009. Green Mountain Division, Society of American Foresters, Field Meeting. Seeing the Forest for the Tree. 4.5 SAF Category 1 Credit and 3 NH Forester CEU Credits. March-Billings-Rockefeller National Historic Park, Woodstock, VT.

2004-2008. Black fly monitoring training workshop. I led this workshop that trained volunteer groups of landowners, Idaho irrigation districts personnel, and county extension agents from Oregon and Idaho. Approximately 30 people from eastern Oregon and western Idaho attended the training workshop. In 2008, we began our 4th year of monitoring.

2005. Initiated extension program that awarded an internship to one undergraduate student. I trained an undergraduate student intern on monitoring protocols, how to communicate with landowners, and insect identifications. This student worked with the Malheur County Rangeland and Wildlife Extension Specialist as a paid intern from February-September 2005. She also worked with volunteers that participated in our volunteer based program established in 2004.

2004. Lead Speaker at Oregon State University Malheur Experiment Station Field Days. Presented the biology and ecology of black fly populations in the region. Discussed IPM, including cultural, pesticide, and classical biological control options. Approximately 300 people of various backgrounds and interests were present during the session. Distributed Black Fly Fact sheet. Hosted by Dr. Clint Shock Oregon State University Malheur Experiment Station Supervisor and Marni Porath Malheur County Extension Agent.

1/03-9/03. Oregon State University, Environmental and Molecular Toxicology. I worked as an extension specialist for the National Pesticide Information Center. NPIC is a cooperative effort between EPA and OSU. I was responsible for answering questions posed by the general public. There were a wide range of questions but most were regarding human and domestic animal health concerns, toxicology, environmental fate, policy and registration, and application rate of pesticides. During my 9 months at NPIC I fielded over 500 calls.

4. *News releases and press*

UVM Assists State and Campground Owners. By Vermont Campground Association Newsletter. December Issue 2008. Highlights the service-learning with State of Vermont Department of Forestry and Recreation.

Earth-friendly peace studies attract Vermonters to Holy Land. By Joel Banner Baird, Free Press Staff Writer for Burlington Free Press. December 21, 2008. Highlights our efforts to establish a minor at UVM by partnering with Arava Institute of Environmental Studies.

<http://www.burlingtonfreepress.com/article/20081221/NEWS02/812210310/1001/NEWS>

Beetle Epidemic Escalates: Applying pheromones and injecting insecticides may help prevent bark beetles from decimating trees. By Rachel Petkewich, Science Journalist for Chemical and Engineering News <http://www.cen-online.org>. A service of the American Chemical Society December 22, 2008 Volume 86, Number 51 pp. 36-37. Highlights our research on host defenses against mountain pine beetle. http://pubs.acs.org/cen/email/html/cen_science_86_8651sci1.html

C. SCHOLARSHIP

1. *Accomplishments in Research*

I have 28 publications in peer-reviewed journals, authored one and co-authored two invited book chapters. I have published in leading international journals, such as *Canadian Journal of Forest Research*, *Ecology*, *Journal of Chemical Ecology*, and *Ecological Monographs*.

2. *Refereed Publications (*indicate Wallin as intellectual leader on publication)*

Accepted or published

28) Grubin, S., **Wallin, K.F.**, and Ross, D.W. 2011. Prey Suitability and Phenology of *Leucopis* spp. (Diptera: Chamaemyiidae) Associated with Hemlock Woolly Adelgid (Hemiptera: Adelgidae) in the Pacific Northwest. Environmental Entomology in press.

27) Ott, D.S., Yanchuk, A.D., Huber, D. and **Wallin, K.F.** 2011. Genetic variation of Lodgepole Pine (*Pinus contorta* var. *latifolia*) chemical and physical defenses that affect mountain pine beetle, *Dendroctonus ponderosae*, attack and tree mortality. Journal of Chemical Ecology.

26) **Wallin, K.F.**, Latty, T.M. and Ross, D.W. 2011. Orientation Behavior of the Predator *Laricobius nigrinus* (Coleoptera: Derodontidae) to Hemlock Woolly Adelgid and Host Tree Odors in a Multi-Chambered Olfactometer. Environmental Entomology 40: 864-872.

25) Raffa, K.F., Aukema, B., Bentz, B.J., Carroll, A., Erbilgin, N., Herms, D., Hicke, J., Hofstetter, R., Katovich, S., Lindgren, S., Logan, J., Mattson, W., Munson, S., Robison, D., Six, D., Tobin, P., Townsend, P., and **Wallin, K.F.** 2009. A Literal Use of Forest Health Safeguards Against Misuses and Misapplications. Journal of Forestry 7/8: 276-277.

24) Kohler, G.R., Stiefel, V.L., **Wallin, K.F.**, and Darrell W. Ross. 2008. Parasitoids reared from predators of hemlock woolly adelgid (Hemiptera: Adelgidae) and the hymenopterous parasitoid community on western hemlock in the Pacific Northwest. Environmental Entomology 37:1477-1488.

23) Ross, D.W. and **Wallin, K.F.** 2008. High Release Rate MCH Dispensers Prevent Douglas-fir Beetle (Coleoptera: Curculionidae) Infestation of Live Douglas-fir. Journal of Economic

Entomology 101:1826-1830.

- 22) Kohler, G.R., Stiefel, V.L., **Wallin, K.F.**, and Ross, D.W. 2008. Community structure and phenology of predators associated with the hemlock woolly adelgid (Hemiptera: Adelgidae) in the Pacific Northwest. *Environmental Entomology* 37:494-504.
- *21) **Wallin, K.F.**, Skov, K.R., Wagner, M.R., and Kolb, T.E. 2008. Forest management treatments, tree resistance, and bark beetle resource utilization in ponderosa pine forests of northern Arizona. *Forest Ecology and Management* 255:3263-3269.
- *20) **Wallin, K.F.**, and Latty, T.M. 2008. Novel intermediate-term marking technique of terrestrial slugs. *Journal of Molluscan Studies* 74:299-301.
- 19) Yanchuk, A.D., Murphy, J., and **Wallin, K.F.** 2007. Evaluation of genetic variation of attack and resistance in lodgepole pine to mountain pine beetle. *Tree Genetics and Genomics* 4:171-189.
- 18) Marajo, L.S., Bogdanowicz, **Wallin, K.F.**, Raffa, K.F., and Harrison, R.G. 2007. Phylogeography of spruce beetles (*Dendroctonus rufipennis* Kirby) (Curculionidae: Scolytinae) in North America: distinctive mtDNA lineages associated with different species of host trees. *Molecular Ecology* 16:2560-2573.
- 17) Gaylord, M. L., Kolb, T.E., **Wallin, K.F.**, and Wagner, M.R. 2007. Seasonal dynamics of tree growth, physiology and resin defenses in a northern Arizona ponderosa pine forest. *Canadian Journal of Forest Research* 37:1173-1183.
- 16) Gaylord, M. L., Wagner, M.R., Kolb, T.E., and **Wallin, K.F.** 2006. Seasonality and lure preference of bark beetles (Coleoptera: Scolytinae) and associates in a ponderosa pine forest in Northern Arizona. *Environmental Entomology* 35:37-47.
- 15) Skov, K. R., Kolb, T.E., and **Wallin, K.F.** 2005. Growth response to restoration thinning and burning treatments in northern Arizona: variation between young and old *Pinus ponderosa* (Dougl. Ex Laws) trees. *Western Journal Applied Forestry* 20:36-43.
- *14) **Wallin, K.F.** and Raffa, K.F. 2004. Density-dependent effects on host acceptance behavior: Implications on intraspecific diet breadth. *Ecological Monographs* 74:101-116.
- 13) Skov, K. R., Kolb, T.E., and **Wallin, K.F.** 2004. Tree size and drought affect ponderosa pine physiological response to thinning and burning treatments. *Forest Science* 50:1-11.
- *12) **Wallin, K.F.**, Kolb, T.E., Skov, K.R., and Wagner, M.R. 2004. Seven year influence of thinning and burning restoration treatments on pre-settlement ponderosa pines at Gus Pearson Natural Area. *Restoration Ecology* 12:239-247.
- *11) **Wallin, K.F.**, Skov, K.R., Kolb, T.E., and Wagner, M.R. 2003. Effects of crown scorch on ponderosa pine resistance to subcortical insects in northern Arizona. *Environmental*

Entomology 32:652-661.

- *10) **Wallin, K.F.**, Rutledge, J., and Raffa, K.F. 2002. Heritability of host acceptance and gallery construction behaviors of the bark beetle *Ips pini* (Coleoptera: Scolytidae). *Environmental Entomology* 31:1276-1281.
- *9) **Wallin, K.F.** and Raffa, K.F. 2002. Prior encounters modulate host acceptance behavior of *Ips pini* (Say) (Coleoptera: Scolytidae). *Entomologia Experimentalis Applicata* 103:205-218.
- *8) **Wallin, K.F.** and Raffa, K.F. 2002. Density-mediated responses of bark beetles to host allelochemicals: A link between individual behavior and population dynamics. *Ecological Entomology* 27:484-492.
- 7) Redmer, J.S., **Wallin, K.F.**, and Raffa, K.F. 2001. Abiotic and biotic factors influencing brood production of *Ips pini* (Say) (Coleoptera: Scolytidae). *Environmental Entomology* 30:844-849.
- *6) **Wallin, K.F.** and K.F. Raffa. 2001. Host - mediated interactions among feeding guilds: Incorporation of temporal patterns can integrate plant defense theories to predict community level processes. *Ecology* 82:1387-1400.
- *5) **Wallin, K. F.** and Raffa, K. F. 2000. Influences of external chemical cues and internal physiological parameters on the multiple steps of post-landing host selection behavior of *Ips pini* (Coleoptera: Scolytidae). *Environmental Entomology* 29:1234-1244.
- *4) **Wallin, K.F.** and Raffa, K.F. 1999. Altered constitutive and inducible phloem monoterpenes following natural defoliation of jack pine: implications to host mediated interguild interactions and plant defense theories. *Journal of Chemical Ecology* 25:861-880.
- *3) **Wallin, K.F.** and Raffa, K.F. 1998. Association of within-tree and within-needle water, nutrient, and monoterpenes contents with jack pine budworm feeding patterns. *Canadian Journal of Forest Research* 28:228-233.
- 2) Garvey, C., **Wallin, K.F.**, Sexon, D., and Steffan, S. 1998. Restricted-use pesticides should be used only with a prescription by and independent, certified crop advisor. *In* Important Issues in Ecologically Sound Integrated Pest Management. (ed) P. Whitaker. *American Entomologist* 44:142-165.
- *1) **Wallin, K.F.**, Hoffstetter, R., Steffan, S., and Rabey, T. 1996. Should the United States attempt to enhance the efficacy of biological control by regulating pesticide use? *In* Environmental Issues Associated with Enhancing the Impact of Biological Control Agents. (eds) F. Gould, G. Kennedy, R. Kopanis. *American Entomologist* 42:160-173.

- Wallin, K.F. 2011. Integrating insect behavior into biological control efforts, pp. XX-XX. In Implementation and Status of Biological Control of the Hemlock Woolly Adelgid, B. Onken and R. Reardon, eds. USDA Forest Service, Forest Health Technology Enterprise Team, Morgantown, WV. (in press).
- Ross, D.W., S.D. Gaimari, G.R. Kohler, K.F. Wallin, and S.M. Grubin. 2011. Chamaemyiid predators of the hemlock woolly adelgid from the Pacific Northwest, pp. XX-XX. In Implementation and Status of Biological Control of the Hemlock Woolly Adelgid, B. Onken and R. Reardon, eds. USDA Forest Service, Forest Health Technology Enterprise Team, Morgantown, WV. (in press).
- Raffa, K.F., Aukema, B.H., Erbilgin, N., Klepzig, K.D., and **Wallin, K.F.** 2005. Interactions among conifer terpenoids and bark beetles across multiple levels of scale: An attempt to understand links between population patterns and physiological processes. Chapter 4: Recent Advances in Phytochemistry Volume 36.
4. *Non-refereed publications, proceedings, general technical reports (GTR)*
- 8) Wallin, K.F.; Ott, D. 2010. Behavior of potential insect predator of HWA. In: Proceedings, 52nd Southern Forest Insect Work Conference, Wilmington, NC.
- 7) Wallin, K.F.; DePasquale, K.; Leff, S.; Murray, B. 2010. Beyond book learning in natural resources: cultivating pedagogy of service-learning through international partnerships. In: Proceedings, 52nd Southern Forest Insect Work Conference, Wilmington, NC.
- 6) Pears, S.L.; Wallin, K.F. 2010. North American host tree response to *Amylostereum areolatum*, the fungal symbiont of the woodwasp, *Sirex noctilio*. In: Proceedings, 52nd Southern Forest Insect Work Conference, Wilmington, NC.
- 5) Yanchuk, A.D. and **Wallin, K.F.** 2006. Genetic and phenotypic resistance in lodgepole pine to mountain pine beetle attack. In Proceedings from the Third Workshop on Genetics of Bark Beetles and Associated Microorganisms. Technical coordinators: Bentz, B. and Raffa, K. Proc. RMRS-P-45. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station.
- 4) Raffa K.F., Maroja, L.S., Bogdanowicz, S.M., Harrison, R.G., and **Wallin, K.F.** 2006. Phylogeography of *Dendroctonus rufipennis* Based on mtDNA and Microsatellites Pp. 27-28. In Proceedings from the Third Workshop on Genetics of Bark Beetles and Associated Microorganisms. Technical coordinators: Bentz, B. and Raffa, K. Proc. RMRS-P-45. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station.
- *3) **Wallin, K.F.**, Kolb, T.E, and Wagner, M.R. 2001. Effects of defoliation on host defenses, acceptance behavior and population dynamics of bark beetles. Abstract. North American Forest Insect Work Conference. Edmonton, Alberta Canada.

2) Skov, K. R., **Wallin, K. F.**, and Kolb, T. E. 2001. Effects of Restoration thinning treatments on water relations and photosynthesis of four size-classes of ponderosa pine. Abstract. North American Forest Insect Work Conference. Edmonton, Alberta Canada.

*1) **Wallin, K.F.** and Raffa, K.F. 1999. Environmental and genetic influences on host selection behavior of the spruce beetle: Roles of population phase and geographic origin. Pp. 35-37. *In* Proceeding of a workshop on Bark Beetle Genetics: Current Status of Research. Technical coordinators: Hayes, J.L., and Raffa, K.F. 1998 July 17-18. General Technical Report PNW-GTR-466. Portland, OR: USDA Forest Service, Forest Service, Pacific Northwest Research Station.

5. *Professional Meetings, Symposia, Conferences, and Seminars*

a. Invited

35) Wallin, K.F. 2011. Western, Eastern, and Carolina Hemlock susceptibility to HWA in Pacific Northwest. Alliance for Saving our Threatened Forests. Oct. 26, 2011. Waynesville, NC.

34) Wallin, K.F. and Havill, N.P. 2011. Invasive Ecology and Biological Control as a Management Strategy. Vermont Forest Health Annual Meeting. April 19, 2011. White River Junction, VT.

33) Wallin, K.F. 2011. Linking invasion ecology and management of our natural ecosystems. New England Society of American Foresters Annual Meeting. March 31, 2011. Morrey Lake, VT.

32) Wallin, K.F., D. Ross, S. Grubin, D. Ott, and G. Kohler. 2010. Behavior of potential insect predators of HWA. IUFRO Biological Control and Population Dynamics. Eberswald, Germany. September 2010.

31) Wallin, K.F. and D. Ott. 2010. Behavior of potential insect predator of HWA. Southern Forest Insect Work Conference. Wilmington, NC July 19-23, 2010.

30) **Wallin, K.F.**, K. DePasquale, S. Leff, and B. Murray. 2010. Beyond book learning in natural resources: cultivating pedagogy of service-learning through international partnerships. Southern Forest Insect Work Conference. Wilmington, NC July 19-23, 2010.

29) **Wallin, K.F.** 2009. TBD. Entomological Society of America. What's New in Forest Entomology. Indianapolis, IN. December 12-16, 2009.

28) **Wallin, K.F.** 2009. Local adaptation theory and extended phenotypes. Dartmouth College. Department of Biological Sciences. Hanover, NH. May 5, 2009.

27) Grubin, S.M., D. Ross, and **K. Wallin**. Research Proposal: Evaluation of two *Leucopis*

species (Diptera: Chamaemyiidae), as potential biological control predators of the hemlock woolly adelgid (HWA). 1st Annual Student Research in Entomology Symposium, Oregon State University, February 28, 2009.

- 26) Grubin, S.M., D. Ross, and **Wallin, K.F.** Evaluating two *Leucopis* species (Diptera: Chamaemyiidae) as potential biological control agents of the hemlock woolly adelgid. Poster presented for the Insect Explorer Series, Oregon State University, November 10, 2009.
- 25) **Wallin, K.F.**, Kohler, G., and Ross, D.W. 2008. Insights from hemlock – HWA system in the Pacific Northwest provide glimmer of hope for Eastern Hemlocks. University of Vermont, Department of Plant and Soil Science, Burlington, VT. November 12, 2008.
- 24) **Wallin, K.F.**, Latty, T.M., and Ross, D.W. 2008. Behavioral responses of *Laricobius nigrinus* Fender (Coleoptera: Derodontidae) to chemosensory cues associated with plant material. Southern Forest Insect Work Conference. Chattanooga, Tennessee. August 4-7, 2008.
- 23) **Wallin, K.F.** 2008. Local adaptation theory tested using hemlock woolly adelgid: natal and novel host transfers as tests for specialization within and among hemlocks. University of Vermont, Department of Biology, Burlington, VT. April 14, 2008.
- 22) **Wallin, K.F.**, Kohler, G., and Ross, D.W. 2008. Linking hemlock host resistance to hemlock woolly adelgid populations. 4th Symposium on Hemlock Woolly Adelgid. Hartford, CT, Feb. 12, 2008.
- 21) **Wallin, K.F.**, Stiefel, V., Kohler, G., and Ross, D.W. 2007. Local adaptation theory tested using hemlock woolly adelgid: conversations and thoughts on data. Department of Zoology Spring Seminar Series. Oregon State University, Corvallis, OR. April 23, 2007.
- 20) **Wallin, K.F.** 2007. Impact of host resistance and density dependent host selection behavior of bark beetles on their population dynamics department. Biology Seminar Series. Boise State University. Boise, ID. March 9, 2007.
- 19) **Wallin, K.F.** 2007. Local adaptation theory tested using hemlock woolly adelgid: natal and novel host transfers as tests for specialization within and among hemlocks. Western Forest Insect Work Conference, Boise, ID. March 9, 2007.
- 18) **Wallin, K.F.**, Skov, K.R., and Kolb, T. 2007. Temporal gradient of the impacts of forest restoration treatments on host tree physiology and bark beetle response. Western Forest Insect Work Conference, Boise, ID. March 7, 2007.
- 17) **Wallin, K.F.** 2006. Effects of host tree genetics on population dynamics of native and non-native insect system in North America. Western Forest Genetics Association, Anchorage, AK. June 22-27, 2006.

- 16) **Wallin, K.F.** 2006. Dynamics of host resistance and host selection behavior of eruptive insects: Can we screen for host tolerance and resistance to insects and their fungal associates? Natural Resources and Environmental Studies Institute Colloquium, University of Northern British Columbia, Prince George, B.C., Canada. March 31, 2006.
- 15) **Wallin, K.F.**, Kohler, G., and Ross, D.W. 2006. Host, pest, and predator: Tritrophic interactions impacting HWA populations in Pacific Northwest. 17th USDA Interagency Research Forum on Invasive Species, Annapolis, MD. January 11, 2006.
- 14) **Wallin, K.F.** 2005. Environmental and genetic factors that influence host selection behavior, tree defenses and insect population dynamics. Seminar. Department of Entomology, Purdue University. December 2, 2005.
- 13) **Wallin, K.F.** 2005. Host selection behavior of eruptive insects: A step toward understanding population dynamics of bark beetles. International Union of Forest Research Organizations. Forest Insect Epidemics: Population Dynamics, Dispersal, and Ecosystem Impacts, Prince George, B.C., Canada. July 11-14, 2005.
- 12) **Wallin, K.F.** 2005. Ecosystems to individuals and back again: Feedback between host selection behavior and population dynamics of an eruptive insect. Seminar. Department of Entomology, North Dakota State University, Fargo, N.D. June 2005.
- 11) **Wallin, K.F.** 2005. EXTRA EXTRA HEAR ALL ABOUT IT!! West Nile Virus What you should know & What you can do!! Extension seminar on West Nile Virus. Seminar. Department of Entomology, North Dakota State University, Fargo, N.D. June 2005.
- 10) **Wallin, K.F.** 2005. Dynamics of Forest Health: Managing family owned pine forests in Eastern Oregon. Seminar. Department of Forest Science, Oregon State University, Corvallis, OR. May 2005.
- 9) **Wallin, K.F.**, Skov, K.R., and Kolb, T.E. 2004. Tree and insect response to restoration treatments at Flagstaff Urban Wildland Interface. Oregon State University, Department of Forest Science, Restoration Ecology Seminar Series. January 2004.
- 8) **Wallin, K.F.** 2002. Linking population patterns and physiological processes: who are the key players in bark beetle systems? University of California-Berkeley, Department of Environmental Science and Management. May 2002.
- 7) **Wallin, K.F.** and Raffa, K.F. 2001. Host - mediated interactions among feeding guilds: insects and pathogens. Northern Arizona University, Department of Biology, Ecological Interactions Seminar Series.
- 6) **Wallin, K.F.**, Kolb, T.E, and Wagner, M.R. 2001. Effects of defoliation on host

defenses, acceptance behavior and population dynamics of bark beetles. North American Forest Insect Work Conference. Edmonton, Alberta Canada.

- 5) **Wallin, K.F.** 2000. Population responses to individual actions of a forest insect. Seminar for Extension Entomologist at University of Arkansas. Seminar. Department of Entomology.
 - 4) **Wallin, K.F.** and Raffa, K.F. 1998. Population level implications on host selection behavior of *Dendroctonus rufipennis*. Bark Beetle Genetic Work Conference, Madison, WI. May, 1998.
 - 3) **Wallin, K.F.** and Raffa, K.F. 1998. Behavioral differences between outbreak and non-outbreak insect species. Western Forest Insect Work Conference, Jackson Hole, WY.
 - 2) **Wallin, K.F.** and Raffa, K.F. 1997 Host mediation of feeding guilds: A folivore, a fungus, and two beetles. Western Forest Insect Work Conference, Prince George, B.C., Canada.
 - 1) **Wallin, K.F.** and Raffa, K.F. 1994. Should the United States attempt to enhance the efficacy of biological control by regulating pesticide use?. Entomological Society of America National Meeting, Dallas, TX Student debate team.
- b. Volunteered non-invited (*indicates Wallin in leadership role)
- 50) Yurchenco, H.D., Schaberg, P.G., Templer, P.H., Maroja, L.S. and Wallin, K.F. 2011. Effects of soil freezing on biodiversity of ground-dwelling insects and terrestrial snails in Northern hardwood forests. North American Forest Insect Work Conference. Portland, OR. May 7-11, 2011.
 - 49) Limback, C.K. and Wallin, K.F. 2011. Naturalization of *Alliaria petiolata* and its effects on interactions and distribution of associated invertebrates. North American Forest Insect Work Conference. Portland, OR. May 7-11, 2011.
 - 48) Comerford, D.P., Schaberg, P.G., Templer, P.H., and Wallin, K.F. 2011. Effects of Winter Climate Change on Tree Physiology and Arthropod Diversity in a Northern Hardwood Forest. North American Forest Insect Work Conference. Portland, OR. May 7-11, 2011.
 - 47) Ott, D. and Wallin, K.F. 2011. *Scymnus coniferarum* as a potential biological control agent of HWA in eastern North America. North American Forest Insect Work Conference. Portland, OR. May 7-11, 2011.

- 46) Sarah Pears and Kimberly Wallin North American host tree response to *Amylostereum areolatum*, the fungal symbiont of the woodwasp *Sirex noctilio* Southern Forest Insect Work Conference. Wilmington, NC July 19-23, 2010.
- 45) Pears, S., and Wallin, K. 2010. North American host tree response to *Amylostereum areolatum*, the fungal symbiont of the woodwasp *Sirex noctilio*. Lanier Graduate Student Presentation Competition. North Eastern Forest Pest Council Meeting, York Harbor, ME. March 19-20, 2010. Second Place
- 44) Ott, D., Yanchuk, A., Huber, D., and Wallin, K. 2010. Heritability of lodgepole pine trees response to colonization by mountain pine beetle and its associated fungi. Lanier Graduate Student Presentation Competition. North Eastern Forest Pest Council Meeting, York Harbor, ME. March 19-20, 2010.
- 43) Lee, J., P., Schaberg, P., and Wallin, K. 2010. Direct and indirect calcium mediated influences on tree responses to biotic stresses. Lanier Graduate Student Presentation Competition. North Eastern Forest Pest Council Meeting, York Harbor, ME. March 19-20, 2010. Third Place
- 42) Comerford, D., Templer, P., Schaberg, P., and Wallin, K. 2010. Impacts of reduced snowpack on tree physiology and tree-insect interactions in a northern hardwood forest. Lanier Graduate Student Presentation Competition. North Eastern Forest Pest Council Meeting, York Harbor, ME. March 19-20, 2010.
- *41) Wallin, K.F. and Kasmarek, A. 2008. Role of wavelength in nocturnal insect flight response. Entomological Society of America National Meeting, Reno, NV. November 16-19, 2008.
- 40) Ott, D.S., Yanchuk, A.D., Huber, D., and Wallin, K.F. 2008. Estimating heritability of mountain pine beetle host selection, tree responses to mountain pine beetle complex, and colonization success. Entomological Society of America National Meeting, Reno, NV. November 16-19, 2008.
- 39) Kohler, G.R., **Wallin, K.F.**, and Ross, D.W. 2008. Synchrony and host preference of *Leucopis* spp. (Diptera: Chamaemyiidae), predators of hemlock woolly adelgid in the Pacific Northwest. Southern Forest Insect Work Conference. Chattanooga, Tennessee. August 4-7, 2008.
- *38) **Wallin, K.F.**, Latty, T.M., and Ross, D.W. 2008. Orientation of the predator *Laricobius nigrinus* Fender (Coleoptera: Derodontidae) to insect host and plant material in a multi-chambered olfactometer. Southern Forest Insect Work Conference. Chattanooga, Tennessee. August 4-7, 2008.

- 37) Ott, D.S., Yanchuk, A.D., Huber, D., and **Wallin, K.F.** 2008. Estimating genetic variation of lodgepole pine defenses against mountain pine beetle colonization success. Southern Forest Insect Work Conference. Chattanooga, Tennessee. August 4-7, 2008.
- 36) Ott, D.S., Yanchuk, A.D., Huber, D., and **Wallin, K.F.** 2008. Estimating heritability of tree defensive responses to mountain pine beetle complex. Mountain Pine Beetle: From lessons learned to community-based solutions. University of Northern British Columbia, Prince George, British Columbia June 10-11, 2008.
- 35) Yanchuk, A.D., Murphy, J.C., and **Wallin, K.F.** 2008. Evaluation of genetic variation in attack and resistance in lodgepole pine by mountain pine beetle. Mountain Pine Beetle: From lessons learned to community-based solutions. University of Northern British Columbia, Prince George, British Columbia June 10-11, 2008.
- *34) **Wallin, K.F.** and Kasemerak, A. 2008. Expanding our understanding of insect host location behaviors by investigating the role and heritability of specific wavelength reflectance of host trees.. National Science Foundation Research Day VT EPSCoR Annual State Meeting and Grant Writing Workshop. June 6-7, 2008. UVM Campus Burlington VT
- 33) Kohler, G.R., **Wallin, K.F.**, and Ross, D.W. 2008. Synchrony and host preference of *Leucopis* spp. (Diptera: Chamaemyiidae), predators of hemlock woolly adelgid in the Pacific Northwest. Western Forest Insect Workshop. Boulder, CO. April 10-15, 2008.
- 32) Kohler, G.R., **Wallin, K.F.**, and Ross, D.W. 2008. Synchrony and host preference of fly and beetle predators of hemlock woolly adelgid in the Pacific Northwest. 4th Symposium on Hemlock Woolly Adelgid. Hartford, CT, Feb. 12, 2008.
- 31) Ott, D.S., Yanchuk, A.D., Huber, D., and **Wallin, K.F.** 2007. Estimating heritability of lodgepole pine defense responses to mountain pine beetle and one of its associated fungi. Entomological Society of America National Meeting, San Diego, CA. December 9-15, 2007.
- 30) Kohler, G.R., **Wallin, K.F.**, and Ross, D.W. 2007. Life history and biology of two *Leucopis* species (Diptera: Chamaemyiidae), predators of the hemlock woolly adelgid in the Pacific Northwest. Entomological Society of America National Meeting, San Diego, CA. December 9-15, 2007.
- 29) Ott, D.S., Yanchuk, A.D., and **Wallin, K.F.** 2007. Heritability of lodgepole pine monoterpene composition and its role in mountain pine beetle attack behaviors. Western Forest Insect Work Conference, Boise, ID. March 5-9, 2007.
- 28) Kohler, G.R., Stiefel, V.L., **Wallin, K.F.**, and Ross, D.W. 2007. Predators associated with hemlock woolly adelgid (Hemiptera: Adlegidae) infested western hemlock in the Pacific Northwest. Annual Pacific Branch Entomology Society of America Meeting, Portland, OR. March 22-25, 2007. (Second Place in Student Presentation Competition).

- *27) **Wallin, K.F.**, Kolb, T.E, Skov, K.R., and Wagner, M.R. 2007. Impacts of forest restoration treatments on tree-feeding insects and host suitability. Annual Pacific Branch Entomology Society of America Meeting, Portland, OR. March 22-25, 2007.
- 26) Kohler, G.R., Stiefel, V.L., **Wallin, K.F.**, and Ross, D.W. 2007. Predators associated with hemlock woolly adelgid (Hemiptera: Adelgidae) infested western hemlock in the Pacific Northwest. 18th USDA Interagency Research Forum on Invasive Species, Annapolis, MD. January 10-13, 2007.
- 25) Kohler, G.R., Stiefel, V.L., **Wallin, K.F.**, and Ross, D.W. 2006. Predators associated with hemlock woolly adelgid (Hemiptera: Adelgidae) infested western hemlock in the Pacific Northwest. Entomological Society of America National Meeting, Indianapolis, IN. December 2-7, 2006. First Place in Student Poster Presentations.
- 24) Raffa, K. F., Maroja, K. L., Bogdanowicz, S., **Wallin, K.F.**, and Harrison, R. 2006. Phylogeography of *Dendroctonus rufipennis* based on mtDNA and microsatellites. Third Workshop on Genetics of Bark Beetles and Associated Microorganisms, Asheville, NC. May 20-21, 2006.
- 23) Yanchuk, A.D. and **Wallin, K.F.** 2006. Genetic variation in attack by mountain pine beetle on lodgepole pine. Third Workshop on Genetics of Bark Beetles and Associated Microorganisms, Asheville, NC. May 20-21, 2006.
- *22) **Wallin, K.F.**, Kohler, G., Latty, T.M., and Ross, D.W. 2006. Host tree-HWA location behavior of a predator, *Laricobius nigrinus* Fender (Coleoptera: Derodontidae). North American Insect Work Conference, Asheville, NC. May 22-25, 2006.
- 21) Kohler, G., Stiefel, V.L., **Wallin, K.F.**, and Ross, D.W. 2006. Predators associated with hemlock woolly adelgid (Hemiptera: Adelgidae) infested western hemlock in the Pacific Northwest. North American Insect Work Conference, Asheville, NC. May 22-25, 2006.
- *20) **Wallin, K.F.**, Kohler, G., and Ross, D.W. 2005. Estimating relative roles of top-down and bottom-up regulating factors on hemlock woolly adelgid populations. Entomological Society of America National Meeting, Fort Lauderdale, FL. December 2005.
- *19) Maroja, L.S., **Wallin, K.F.**, Harrison, R.G., Bogdanowicz, S., and Raffa, K.F. 2004. Phylogeography of spruce beetles (*Dendroctonus rufipennis*) in North America: Distinctive mtDNA lineages associated with different host trees and possible evidence of a zone of overlap in British Columbia. Western Forest Insect Work Conference, San Diego, CA. March 2004.
- 18) Gaylord, M., Wagner, M.R., Kolb, T.E., and **Wallin, K.F.** 2004. Seasonal dynamics of bark beetle flight and tree growth and physiology in a northern Arizona ponderosa pine forest. Western Forest Insect Work Conference, San Diego,

CA. March 2004.

- 17) Maroja, L.S., Harrison, R.G., Bogdanowicz, S., Raffa, K.F., and **Wallin, K.F.** 2003. Phylogeography of spruce beetles (*Dendroctonus rufipennis*) in North America: Distinctive mtDNA lineages associated with different host trees and possible evidence of a zone of overlap in British Columbia. Evolution Meeting, University of California, Chico, CA. June 2003.
- 16) Gaylord, M., Wagner, M.R., Kolb, T.E., and **Wallin, K.F.** 2002. Seasonal dynamics of bark beetle flight and tree growth and physiology in a northern Arizona ponderosa pine forest. Entomological Society of America National Meeting, Fort Lauderdale, FL. December 2002.
- 15) Kolb, T.E, **Wallin, K.F.**, Skov, K.R., and Wagner, M.R. 2002. Impacts of forest restoration treatments on tree-feeding insects and host suitability. Ecological Society of America National Meeting, Tucson, AZ. August 2002.
- *14) **Wallin, K.F.** and Raffa, K.F. 2002. Spruce beetle ecology and management. Western Forest Insect Work Conference, Whitefish, MT. March 2002.
- *13) **Wallin, K.F.**, Skov, K.R., Kolb, T.E, and Wagner, M.R. 2001. Insect population and tree resistance responses to restoration thinning treatments in ponderosa pine forests. Ecological Society of America National Meeting, Madison, WI. August 2001.
- 12) Skov, K.R., Kolb, T.E., and **Wallin, K.F.** 2001. Effects of restoration thinning treatments on water relations and photosynthesis of four size class of *Pinus ponderosa*. North American Forest Insect Work Conference, Edmonton, Alberta Canada. March 2001.
- 11) Skov, K.R., **Wallin, K.F.**, and Kolb, T.E. 2001. Effects of restoration thinning treatments on water relations and photosynthesis of four size class of *Pinus ponderosa*. Putting the Pieces Together: Practicing Forest Ecosystem Restoration, Flagstaff, AZ. June 2001.
- 10) Skov, K.R., **Wallin, K.F.**, and Kolb, T.E. 2001. Effects of restoration thinning treatments on water relations and photosynthesis of *Pinus ponderosa*. Northern Arizona University Graduate Student Expo, Flagstaff, AZ. August 2001.
- 9) Steed, B., Wagner, M.R., **Wallin, K.F.**, and Lynch, A.M. 2001. Geographic variation in population dynamics of *Ips pini* from Montana and northern Arizona. International Union Forest Research, Scotland. September 11, 2001.
- 8) Raffa, K.F., Erbilgin, N., Aukema, B., and **Wallin, K. F.** 2000. Recent research on pine bark beetles. North Central Forest Pest Workshop, Rhinelander, WI.
- *7) **Wallin, K.F.** and Raffa, K.F. 1999. Role of genetic and environmental parameters

in post-landing host selection behavior of *Ips pini* and *Dendroctonus rufipennis*. Entomological Society of America National Meeting, Atlanta, GA.

- *6) **Wallin, K.F.** and Raffa, K.F. 1998. Environmental and genetic factors influencing host selection behavior of *Ips pini*. North Central Forest Pest Workshop, Dubuque, IA.
- *5) **Wallin, K.F.** and Raffa, K.F. 1998. Effect of population phase and geographic origin on host selection behavior. Ecological Society of America National Meeting, Baltimore, MD.
- *4) **Wallin, K.F.** and Raffa, K.F. 1996. Effect of jack pine budworm feeding on components of host resistance to subcortical insect-fungal complexes. Entomological Society of America National Meeting, Louisville, KY.
- *3) **Wallin, K.F.** and Raffa, K.F. 1996. Effects of jack pine budworm feeding on host resistance to subcortical insects. North Central Forest Pest Workshop, Traverse City, MI.
- *2) **Wallin, K.F.** and Raffa, K.F. 1995. Effect of jack pine budworm feeding on components of host resistance to subcortical insect-fungal complexes. Entomological Society of America National Meeting, Las Vegas, NV.
- *1) **Wallin, K.F.** and Raffa, K.F. 1995. Effect of jack pine budworm feeding on subsequent survival, physiology, and pest susceptibility of jack pine. North Central Forest Pest Workshop, Green Bay, WI.

6. *Grant support (>1.4 million since 2003)*

a. Competitive (*indicates Wallin as intellectual leader of grant)

- 21) \$40,000. 2011-2013. **Wallin, K.F.** Impacts of reduced snow pack on tree physiology and terrestrial arthropod and gastropod biodiversity. USDA Cooperative State Research, Education, and Extension Service. McIntire-Stennis Program.
- 20) \$10,000. 2011-2012. **Wallin, K.F.** Investigating causes for increased decline and mortality of *Acer rubrum*, *Fraxinus americana*, *Fagus grandifolia*, and *Abies balsamea*, in Vermont Forests USDA Theme One: Northern States Research Cooperative.
- 19) \$45,000. 2011-2013. **Wallin, K.F.** Behavioral and electrophysiological responses of coleopteran predators of the hemlock woolly adelgid to prey and host plant volatiles. USDA Forest Service Southern Research Station.
- 18) \$30,000. 2011. **Wallin, K.F.** Invasive Species Survey Green Mountain National Forest Vermont. Department Forest Parks and Recreation. American Recovery and Reinvestment Act.

- *17) \$35,000. 2010. **Wallin, K.F.**, Wang, D. Invasive Species Survey Western Vermont. Department Forest Parks and Recreation. American Recovery and Reinvestment Act.
- *16) \$24,300. 2009-2010. **Wallin, K.F.** Using tree-based response to an invasive insect to achieve sustainable forest management of Northern pine forests. USDA Theme One: Northern States Research Cooperative.
- 15) \$120,000. 2009-2013. Wang, D., Erb, M. D., Ginger, C., Riddle, E., Strong, A.M., Veafagnant, M., and **Wallin, K.F.** Multicultural Scholars Program at UVM-The Rubenstein School of Environment & Natural Resources USDA Higher Education Program.
- 14) \$236,000. 2009-2013. Wang, D., Ginger, C., Pontius, J., Schaberg, P., and **Wallin, K.F.** Forest Ecosystem Health in a Globalizing World: Building a Diverse Community of Scholars. USDA CSREES.
- *13) \$40,000. 2009-2011. **Wallin, K.F.** Quantifying the impacts of fine-scale variation at altitudinal on patterns and diversity of plant-insect interactions. USDA Cooperative State Research, Education, and Extension Service. McIntire-Stennis Program.
- 12) \$12,000. 2008-2010. Shannon, M., **Wallin, K.F.**, and Libby, S. University of Vermont collaborative learning leadership team. Davis Education Foundation. Supported Wallin and Libby travel to attend Engaged Curriculum Workshop in Maine.
- 11) \$38,945. 2008-2009. Ross, D. W and **Wallin, K.F.** Chamaemyiid predators as potential biocontrol agents for the hemlock woolly adelgid. USDA Forest Service.
- *10) \$10,000. Jan-June 2008. **Wallin, K.F.** Expanding our understanding of insect host location behaviors by investigating the role and heritability of specific wavelength reflectance of host trees. The Vermont EPSCoR Innovation Fund.
- 9) \$35,000. 2006-2007. Ross, D. W and **Wallin, K.F.** Chamaemyiid predators of the hemlock woolly adelgid in the Pacific Northwest. USDA Forest Service Cooperative agreement.
- *8) \$10,000. 2005. **Wallin, K.F.** Improving guidelines in intermountain west for slash management to minimize *Ips pini* attack following thinning of ponderosa pine stands. Oregon State University, Research Office, General Research Fund.
- *7) \$180,000. 2005-2008. **Wallin, K.F.** and Yanchuk, A.D. Characterizing genetic variation of resistance in lodgepole pine to attack by mountain pine beetle. British Columbia Ministry of Forest and Range, Victoria, Canada.
\$70,000 additional funds and in-kind services provided by BC Ministry of Forest and Range.
- *6) \$37,250. July 2005-2007. **Wallin, K.F.**, and Ross, D.W. Differences of mechanical resistance mechanisms of eastern, western, and mountain hemlocks to HWA: rapid

screening for breeding for resistance. USDA. Forest Service Forest Health Protection region 8 Participating Agreement Grants—competitive grants program.

- 5) \$15,460. December 2005-2006. Role of pathogenic microsporidia in the hemlock woolly adelgid natural enemy complex. USDA Forest Service Cooperative agreement. Solter, L, Onken, B., Reardon, R., **Wallin, K.**, Salom, S., Shields, K., and Cheah, C. (36% proposals submitted to program were funded) (5% funds to Wallin).
- *4) \$30,000. 2004-2005. Determining black fly (*Simulium* spp.) distribution and dynamics in eastern region of Oregon and western region of Idaho. CSREES. Western Sustainable Agriculture Research and Education. **Wallin, K.F.** and Porath, M.L.
- *3) \$78,900. 2004-2005. **Wallin, K.F.**, Seybold, S.J., and Ross, D.W. Can pheromone-baited traps reduce Douglas-fir beetle-caused tree mortality? USDA FS Western Bark Beetle Initiative.
- *2) \$24,900. 2004. Ross, D.W. and **Wallin, K.F.** Incentive Programs at OSU, Research Equipment Reserve Fund.
- *1) \$99,587. July 2001-2003. Wagner, M.R and **Wallin, K.F.** Seasonality of bark beetles in northern Arizona. Northern Arizona University, School of Forestry. Mission Research Program (McIntire-Stennis). (Conceived and written by Wallin; partially funded M.S. research assistantship for Monica Gaylord in Wagner lab).

c. Non-traditional competitive agreements

These funds required a brief outline of research intentions. The competitive nature lies in that either I was identified and asked (versus them asking one of many other forest scientists) by the funding agency (1, 2, 3, 5, and 6) or we requested (4) funds to conduct preliminary research.

- 8) \$25,000. 2009-2010. **Wallin, K.F.** Tree responses to fungal associate of non-native insect. USDA Forest Service Cooperative Agreement.
- 7) \$26,720. 2009-2011. **Wallin, K.F.** Using behavioral assays to develop quality-based fitness parameters for predators of HWA. USDA Forest Service Cooperative Agreement.
- 5) \$10,000. 2007-2008. Ross, D. W. and **Wallin, K.F.** Natural enemies of HWA in Pacific Northwest. USDA Forest Service Cooperative Agreement.
- *4) \$500. Summer 2006. **Wallin, K.F.**, and Marshall C. Pilot study: Assessing the role of microhabitat on biodiversity and distributional patterns in ground dwelling insects. Long Term Ecological Research Program at H.J. Andrews.
- *3) \$50,000. 2005. **Wallin, K.F.** and Ross, D. W. Natural enemies of adelgids in Western United States: Estimating the relative roles of top-down and bottom-up forces on HWA populations. USDA Forest Service Cooperative Agreement.

- *2) \$213,000. 2004-2007. Ross, D.W. and **Wallin, K.F.** Natural enemies of adelgids in Western United States: Estimating the relative roles of top-down and bottom-up forces on HWA populations. USDA Forest Service Cooperative agreement. USDA Forest Service Cooperative Agreement.
- *1) \$10,000. 2004-2005. Porath, M.L. and **Wallin, K.F.** Monitoring black fly (*Simulium* spp.) distribution and dynamics in eastern region of Oregon. Oregon State University Extension Non-renewable funds.

D. SERVICE

1. *University Service*

a. The University of Vermont-Development Office

03/09-current. I was asked and agreed to deliver presentations to University Campus, Community Groups, etc on behalf of the University of Vermont. The presentations will highlight the community of scholars at the University of Vermont.

May 2010-current. Faculty Initiatives Committee for UVM International Advisory Committee (IAC). IAC was created in May 2009 to advance UVM internationalization efforts through better coordination, communication, and collaboration with faculty, staff, and students.

b. The University of Vermont-The Rubenstein School of Environment and Natural Resources

Accepted Student Days

10/10-current. Graduate Program Director

02/10-6/10. Core curriculum ad hoc Committee

09/09-09/10. Transdisciplinary Research Initiative

06/09-current. Graduate Standards Committee.

10/08-09/09. Trans-boundary Arid Ecosystems Studies Minor Committee. I am the chair of this committee. We are partnering with The Arava Institute of Environmental Studies in Israel to offer a minor in TAES. Students will study environmental issues of arid biomes and peace building at AIES. The overarching goal is through the environment to teach students of today so nations will work together tomorrow.

10/08-10/10. Terrestrial Ecosystem Health Group. I conceived of and developed this UVM-based group of faculty, scientists, and students whose interests provide a trans-disciplinary, multi-scale approach to assess and understand interacting terrestrial communities. Our goals are to 1) move science and understanding of

ecosystems forward by taking a whole system approach to explore the intricacies of terrestrial communities, 2) Establish a cross-linking framework that increases the depth and breadth of our collaborations, and 3) Provide prospective, current, and former students and faculty with an academic, social, and professional network. We meet twice monthly.

02/08-02/09. Space and Program Integration for Sustainability Committee. Charge of this committee is to communicate with The Rubenstein School, Northern Forest Experiment Station, UVM Facilities Design and Construction, Campus Planning Services, Physical Plant, and Telecommunications in the relocation process, while considering the relocation of all functions, including classroom needs, during the renovations of the Aiken Center.

03/08-02/09. Space Policy Committee. Ad-hoc member appointed by the Dean. My charge is to serve as a liaison for the Space Policy Committee, Space and Program Integration for Sustainability Committee, and the Dean's office.

10/07-10/10. Engaged Learning Curriculum Committee. The committee is focused on establishing engaged and service-learning courses in The Rubenstein School curriculum.

Participated in Global Citizenship in the Curriculum November 10-11, 2008 at University of Vermont in Colchester, VT

Participated in Engaged Department Institute January 3-4, 2008 at Bates College in Lewiston, ME.

10/07-current. Diversity Task Force. The Task Force is focusing on two primary areas: 1) Promote multicultural perspectives within The Rubenstein School of Environment and Natural Resources, and 2) Ensure a positive community atmosphere. I attend and participate in monthly meetings.

c. Oregon State University-College of Forestry

10/06-07/07. College of Forestry Advisory Council Member. I was nominated and accepted to represent the Department of Forest Science on the 19 member Advisory Council. Responsibilities included soliciting feedback from persons in the department and providing verbal and written council to Dean Salwasser regarding budget, staffing, and college planning decisions. I participated in six 4-hour meetings from 11/06-07/07.

d. Oregon State University-Department of Forest Science

08/06-07/07. Co-Graduate Program Advisor, ~0.12 FTE, Oregon State University. This administrative position was shared with Dr. Lisa Ganio. Responsibilities included: graduate student recruitment, screening student applications, organizing incoming student orientation, liaison with Graduate

School, approve student programs of study, advise students and faculty on curricula matters, mentor students and advocate for their welfare, oversee student office assignments, and serve on Department Administrative team.

08/06-07/07. Member of sub-committee on Mission and Goals. Chair: Dr. Robin Rose. The committee's charge is to collect and consolidate mission and goal statements of the various programs in the department (e.g. research coops, CFER, LTER) and affiliated units (e.g. other departments, College Strategic Plan, PNW Forest Service Station) to inform the development of Mission and Goal statements for the Department of Forest Science strategic plan.

01/07-07/07. Member of Curriculum Committee. Chair: Dr. Lisa Ganio. The committee's charge is to evaluate current program and course offerings, update program and course listings, and inform the Department of Forest Science a strategic plan for graduate education.

e. Oregon State University College of Agricultural Sciences and Extension

Summer 2004, spring 2005. I was approached by Dr. Karow (Dept. Head Crop and Soil Science), Dr. Krueger (Dept. Head Range Ecology and Management) and Dr. Braunworth (Ag. Extension Assist. Program Leader) to 'be the face of Oregon State University' during a severe landscape level black fly outbreak in Eastern Oregon. I agreed to represent OSU as an entomologist with expertise in behavior and management of landscape level insect outbreaks. Although I received a small stipend for travel and time, most of my time was volunteered.

2. Service to the Profession

a. Regional

2007. Pacific Branch Annual Entomology Society of America Meeting. Co-organizer of symposium entitled "Fire and Forest Insect Interactions". Portland, OR. March 25-28, 2007.

2006. Western Forest Genetics Association Annual Meeting. I was invited to facilitate a special session on "Genetic and Environmental Interactions Between Host Resistance and Bark Beetles Outbreaks". I invited 5 presenters and secured travel funds for 3 of the presenters. The 2-hour session was followed by a 2-hour open round table discussion. Anchorage, AK June 22-29, 2006.

b. National and International

2011-current. Associate Editor for Journal of Forestry.

2007-current. Member of the planning committee for The North American Forest Insect Work Conference is the conclave of the forest entomology community. The conference is scheduled on a five-year cycle and is intended to provide a forum for discussion of contemporary issues in forest entomology. The agenda is broad-based and includes topics relating to research, development, application, and

education. Conference will be held spring 2011. The planning committee members are Dr. Darrell W. Ross, Dr. Daniel Herms, and I.

2005-2011. Western Forest Insect Work Conference. Member of Executive Committee. Chair Memorial Scholarship Fundraising Committee. Lead committee and WFIWC members to raise money for Memorial Scholarship Fund. I lead the organization and host the Annual Silent Auction with Dr. Steve Cook.

March 2005. Served as moderator for Graduate Student Session at Western Forest Insect Work Conference. Organized and led 2-hour student symposium. Approximately 200 people in attendance. Victoria, BC, Canada.

c. Panels

2011. July. Review panel for USDA National Institute of Food and Agriculture (former CSREES). Provided review for 14 proposals and led panel discussion for 5 of the 14 proposals.

2010. August-September. Review panel for German Research Foundation invited full proposals. Reviewed 14 based on outlined criteria.

2010. Review panel for Northern States Research Cooperative invited full proposals. Reviewed 17 proposals based on outlined criteria.

2010. Review panel for Northern States Research Cooperative pre-proposals. Reviewed 33 pre-proposals based on outlined criteria.

2006. Served on panel discussion for Biological Control of Hemlock Woolly Adelgid (HWA) Technical Committee. This was a 10-person panel of experts asked to address the growing concern of HWA caused mortality in eastern Hemlock forests in eastern United States. I was asked by Forest Service Forest Health Technology Enterprise Team to participate and discuss host tree, HWA, and predator interactions. Annapolis, MD. January 10, 2006.

2005. Served on review board for Grant Agency, National Academy of Sciences of the Czech Republic. Reviewed 6 proposals on plant-insect interactions emphasizing host plant defenses. Participated in review board discussion of which proposals to fund.

2005. Served on panel discussion for United States research and management efforts to control hemlock woolly adelgid populations. Participated in conference call as the western USA expert in HWA and its potential movement into and impact on Canadian forest ecosystems. Sponsored by Forest Health Technology Enterprise Team, USDA APHIS. US/Canada Forestry Bilateral Meeting. San Francisco, CA December 12, 2005.

2005. Member of three person panel on biological control of Hemlock Woolly Adelgid populations in North America. This was a 3 person panel of experts asked to address the growing concern of HWA caused mortality in eastern Hemlock forests in eastern United States. I was asked to by FHTET participate and discuss host tree, HWA, and predator interactions. Approximately 200 people attended the 2 hour panel discussion. Save Our Hemlocks 3rd Symposium sponsored by Forest Health Technology Enterprise Team. Asheville, North Carolina. January 2005.

2003. Served on review board for Competitive Grants to Promote Extension in Ohio. Reviewed plant insect proposals that linked basic researchers with extension and outreach. This was a new program to foster relations between researchers and extension. The research proposals needed to included researchers, extension agents and have direct ties to applied problems and would increase visibility to Ohio Extension.

d. Steering Committee

2008-current. Member of Alliance for Saving our Threatened Forests. The Partnership is part of the Center for Integrated Pest Management at North Carolina State University supports research on how tree species prevail when attacked by insect pests. As scientists try to understand the differences in species susceptibility and determine if a selection or breeding program can produce resistant trees, the Partnership looks to the long-term goal of restoring fir and hemlock forests in the Eastern United States that have succumbed to the adelgids.

3. *Peer Reviewer* (since 2000)

Annals of Forestry (1)
Canadian Entomologist (6)
Canadian Journal of Forest Research (4)
Ecology (8)
Ecological Entomology (4)
Ecology Letters (1)
Ecoscience (1)
Environmental Entomology (6)
Forest Ecology and Management (6)
Great Lakes Entomologist (1)
Journal of Chemical Ecology (4)
Journal of Insect Behavior (3)
Oecologia (1)
Oikos (1)
Tree Physiology (1)

Book proposal for Cambridge University Press

4. *Professional Societies*

Entomological Society of America (1994-current)

Ecological Society of America (1997-2004)
Sigma Delta Epsilon-Beta Chapter (1996-2001)
Association for Women in Science (1993-2004)
Society of American Foresters (1995-2003)

5. *Service to the Public* (professionally and non-professionally related)

04/08/08. Represent Women in Science and RSENR at South Burlington High School Career and Job Expo. Attended with Marie Veau-Fagnant.

09/07-current. Branch Out Burlington program, Burlington, VT. Participate in quarterly meetings.

09/04-07/07. Science Education Partnerships (SEPS) program, Corvallis, OR. Serve as scientist mentor for students developing science fair projects. Presented at Math Evenings for local elementary schools. I led two-hour interactive presentation for 100-250 students and their mentors (parents, grandparents, guardians, etc.).

02/06-06/06. Served as Biology tutor for students at Corvallis High School. Corvallis, OR. Worked with small groups of 'at risk' students on a weekly basis to help them understand biological processes necessary to meet state and national testing requirements for graduation.

09/04- 07/07. In class science volunteer for Linus Pauling Middle School, Corvallis, OR. Provided assistance to science classes on a need basis. For example, volunteered in the daylong salmon watch with 6th grade students.

09/03-06/05. Reading and Writing volunteer for Hoover Elementary School, Corvallis, OR. Provided weekly assistance to Mr. Stan Sahnaw 5th grade class. Worked one-on-one with students needing extra attention for various reasons, such as English was their second language.

2001. Earth Circles Environmental Conference for Northern Arizona University. Outreach scientist to Native American students ages 13-17. This program identified potential first generation college students and matched those students with a mentor. We met regularly to discuss academic and social issues they were facing. I initiated small projects with the students to help bridge daily life and scientific discovery.

Fall 2000 and 2001. Continuing Excellence in Education at Northern Arizona University. Science judge in local and regional Science Fairs K-12, 4-H, and scientific presentations 9-12 grades.

1998-1999. Ways of Knowing Biology at University of Wisconsin-Madison. I served as a mentor for incoming freshmen. This program identifies at risk groups and matches those students with a graduate student mentor. We met twice monthly to discuss academics

and social issues they were facing. To introduce them to how and why education is important and its application, I initiated a small research project with the students.

1997-2000. College for Kids at University of Wisconsin-Madison. I participated in after-school science clubs at local elementary schools. We gave interactive instructions on the insect body parts, and honey bee behavior using the Waggle Dance and candy 'rewards'.

1994-1997. Science-by-Mail volunteer through Boston Museum of Science. Corresponded with 8 classrooms and served as a science mentor. I also interacted with parents that were home-schooling their children. This interaction providing partial fulfillment of the science requirement for 7 home-school programs across the nation.

E. AWARDS

1. National and International

National Presidential Leadership Award and Scholarship. Sponsored by University of Minnesota and US Initiative for High Education. 1994 - \$4000.

2. State and Regional

North Central Branch of Entomological Society of America Comstock Award nominee 1999

3. University and Community

a. University of Vermont

Faculty Fellow in Service-Learning 2008 (teaching assistant, \$750, and \$1000)

b. University of Wisconsin-Madison

Department of Entomology

Kinney Merit Award 1997-\$250, 1999-\$600

Women in Science-Beta-Chapter

Ruth and Helen Dickie Research Seminar Competition

Honorable mention 1997, Runner-up 1998

c. University of Minnesota

Minneapolis-St. Paul Campus

National Presidential Leadership Award 1994-\$5000

Henry Schmitz Student Leadership Award and Scholarship 1994-\$3000

Saint Paul Campus

Thomas French Urban Forestry Scholarship 1994-\$500

Student Involvement Award 1993-\$100

Forestry Club Scholarships 1990-1994-\$3350

Daughter of Paul (Bunyan) 1993

4. Student Awards

Glenn Kohler: 2005 and 2007 OSU Oregon Sports Lottery Scholarship
\$12,000/yr

: Entomology Society of America Annual National Meeting
Second Place Student Presentation Competition

: Entomology Society of America Annual Pacific Branch First
Place Student Presentation Competition

Dan Ott: Student Travel Scholarship University of Northern British Columbia
2006 (\$500) and 2007 (\$1000)

Western Forest Insect Work Conference Graduate Student Memorial Scholarship
Award—This annual award recognizes a graduate student that has
conducted exemplary research in western North America. (\$750 plus
travel to present research at the following years WFIWC).

Sarah Pears: North Eastern Forest Pest Council Annual Meeting
Second Place Student Presentation Competition