

IUFRO WP 7.03.05 & 7.03.07  
 FOREST INSECTS AND ENVIRONMENTAL CHANGE  
 Jackson Hole, WY September 27 - October 2, 2009

**SUNDAY**

4:00 - 6:00 Registration, Snowking Resort  
 6:00 - 8:00 pm Welcome Social, Lodge Room, Snowking Resort

**MONDAY**

|                 |            |   |   |
|-----------------|------------|---|---|
| 8:30 - 9:00 am  | Lodge Room | Introduction to IUFRO Working Parties 7.03.05 and 7.03.07 |   |
| 9:00 - 9:20     |            | Vince Nealis  | Risk of dispersal in Western Spruce Budworm   |
| 9:20 - 9:40     |            | Brian Aukema  | Range-expansion of mountain pine beetle: Breach of the historic geoclimatic barrier of the Rocky Mountains in central British Columbia, Canada                                    |
| 9:40 - 10:00    |            | Beat Forster  | Bark beetle outbreaks driven by extreme meteorological events.  |
| 10:00 - 10:30   | Break      |   |   |
| 10:30 - 10:50   |            | Paivi Lyytikäinen-Saarenmaa                               | Remote sensing and bioclimatic models as tools for a survey of insect outbreaks on boreal forests.  |
| 10:50 - 11:10   |            | Andrew Liebhold   | Regional characterization of Emerald Ash Borer effects revealed by forest inventory data.   |
| 11:10 - 11:30   |            | Andrew McMahan  | Integrated modeling of beetles, fires, forests, and climate change.   |
| 11:30 - 11:50   |            | Bill Riel   | Incorporating climate change into large scale risk assessment of mountain pine beetle.  |
| 12:00 - 1:45 pm | Lunch      |   |   |
| 1:45 - 2:05     |            | Fredrik Schlyter  | Semiochemical diversity- A new dimension of biodiversity to protect conifer forests: Mechanisms and management options.   |
| 2:05 - 2:25     |            | Nancy Gillette  | Managing bark beetles in the face of climate change.  |
| 2:25 - 2:45     |            | Rastislav Jakus   | Management of bark beetle population in Sumava NP after Storm Kyril.  |
| 2:45 - 3:05     |            | Beat Wermelinger  | Attack preferences of bark and wood boring insects in a declining scots pine forest   |
| 3:05 - 3:35     | Break      |   |   |
| 3:35 - 3:55     |            | Martin Schroeder  | Colonization of storm gaps by the bark beetle <i>Ips typographus</i> : Influence of gap and landscape characteristics.  |
| 3:55 - 4:15     |            | Fraser McKee  | Host-selection behavior among principal and rare sympatric hosts a function of landscape diversity and population Density: Selection of pine vs. spruce by mountain pine beetles. |
| 4:15 - 4:35     |            | Nadir Erbilgin  | Does water limitation influence tree defenses against mountain pine beetle and its fungal associates? Linking chemical ecology to tree physiology and genomics.                   |
| 4:35 - 4:55     |            | Kenneth Raffa   | From critical driver to unrealized potential: Population dependent manifestation of host defense in conifer-bark beetle interactions.   |

**TUESDAY**

|                 |   |                           |  |
|-----------------|---|---------------------------|--|
| 8:30 - 8:45 am  | Lodge Room  | Welcome                   |  |
| 8:45 - 9:05     |   | Diana Six                 | Ophiostoma and <i>Grosmannia</i> associates of the lodgepole pine beetle, <i>Dendroctonus murrayanae</i> , and the discovery of a species complex within <i>Leptographium terebrantis</i> .              |
| 9:05 - 9:25     |   | Sepideh Massoumi Alamouti | Single nucleotide polymorphisms reveal cryptic speciation in <i>Grosmannia clavigera</i> , a pathogenic fungus associated with the mountain and Jeffrey pine beetles.                                    |
| 9:25 - 9:45     |   | Theresa Dahl              | The role of nutrient use in niche partitioning of two bark beetle mutualistic fungi.   |
| 9:45 - 10:05    |   | Dimitrios Avtzis          | Wolbachia in the bark beetle <i>Pityogenes chalcographus</i> (Coleoptera, Scolytinae).   |
| 10:05 - 10:35   | Break   |                           |  |
| 10:35 - 10:55   |   | Rudolf Wegensteiner       | Geographical distribution and prevalence of pathogens on the spruce bark beetle, <i>Ips typographus</i> L. (Coleoptera, Curculionidae) from distinct European countries.                                 |
| 10:55 - 11:15   |   | James Zanzot              | Seasonal changes in abundance of root feeding Curculionids and Ophiostomatoid Fungi at Fort Benning, GA.   |
| 11:15 - 11:35   |   | Aaron Adams               | Role of symbiotic bacteria in the reproductive success of bark beetles.  |
| 11:35 - 11:55   |   | Anna Sala                 | Does the mountain pine beetle have access to host resources stored in the sapwood?   |
| 12:00 - 1:45 pm | Lunch   |                           |  |
| 1:45 - 2:05     |   | Zdenek Landa              | Use of local strains of entomopathogenic fungi as components of IPM against spruce bark beetle in National Park Šumava   |
| 2:05 - 2:25     |   | Gina Davis                | Spatial distribution of an introduced and native <i>Laricobius</i> species in hemlock woolly adelgid infested hemlock stands   |
| 2:25 - 2:45     |   | Fred Stephen              | History and dynamics of red oak borer in Arkansas  |
| 2:45 - 3:05     |   | Jose Negron               | Stand characteristics and downed woody debris accumulations associated with a mountain pine beetle outbreak in Colorado lodgepole pine forests.  |
| 3:05 - 3:35     | Break   |                           |  |
| 3:35 - 3:55     |   | Erinn Powell              | Does wildfire lead to subsequent mountain pine beetle outbreaks? Separating the roles of host resistance, host stability, and interspecific competition in fire-injured and neighboring lodgepole pines. |
| 3:55 - 4:15     |   | Jesse Logan               | A historical perspective on collapse of Greater Yellowstone Ecosystem whitebark pine ecosystems  |
| 4:15 - 4:35     |   | Wally McFarlane           | Monitoring mountain pine beetle impact in the Greater Yellowstone Ecosystem  |
| 5:30 - 6:30 pm  | Poster Session, Teton Room  |                           |  |
| 6:30 - 9:00 pm  | Dinner Banquet and Presentation by Mark Gocke (Wyoming Game and Fish) - Wildlife of the Greater Yellowstone Ecosystem |                           |  |

**WEDNESDAY**

8:00 to 5:00 Field Excursion to high elevation forests in the Greater Yellowstone Ecosystem

**THURSDAY**

|                |            |                        |   |
|----------------|------------|------------------------|---|
| 8:30 - 8:45 am | Lodge Room | Welcome                |   |
| 8:45 - 9:05    |            | Barbara Bentz          | Mountain pine beetle adaptation to local environments.  |
| 9:05 - 9:25    |            | Ryan Bracewell         | What is a mountain pine beetle anyway? A synthesis of recent research involving divergent populations.                              |
| 9:25 - 9:45    |            | Lange Holger           | Life cycle development of bark beetles under climate change.  |
| 9:45 - 10:05   |            | Stephen Clarke         | The southern pine beetle: Whether weather fazes phases.   |
| 10:05 - 10:35  | Break      |                        |   |
| 10:35 - 10:55  |            | Massimo Faccoli        | Climatic change affects phenology of the spruce bark beetle, <i>Ips typographus</i> (Coleoptera Curculionidae) in the SE Alps.      |
| 10:55 - 11:15  |            | Paal Krokene           | Effects of climate change on the interaction between <i>Ips typographus</i> and Norway spruce.                                      |
| 11:15 - 11:35  |            | Lidia Sukovata         | Melolontha spp. and changes in environment  |
| 11:35 - 11:55  |            | Richard Werner         | Climate warming in Alaska: Effects of climate change on forest insect populations.  |
| 12:00 - 1:45   | Lunch      |                        |   |
| 1:45 - 2:05 pm |            | Robert Coulson         | The Southern Pine Beetle II.  |
| 2:05 - 2:25    |            | Anthony Courter        | The southern pine beetle data portal and spatial web application.   |
| 2:25 - 2:45    |            | Keith Douce            | Resources to support forest insect and forest health research and education. <a href="http://www.bugwood.org">www.bugwood.org</a> . |
| 2:45 - 3:15    | Break      |                        |   |
| 3:15 - 4:00    |            | IUFRO Business Meeting |   |

**POSTERS**

Fernanda Colombari Parasitoids associated with *Ips acuminatus* (Gyllenhal) in the South-Eastern Alps.  
 Eric Ott The evolution of bark and ambrosia beetle-associated fungi using phylogenetics.  
 Andrew Birt Climate change effects on regional population dynamics of the southern pine beetle.  
 Ronald Billings Southern pine beetle outbreaks associated with climate change in Honduras.  
 Simon Karvemo Spatial distribution of tree mortality caused by the spruce bark beetle *Ips typographus* in the managed forest of Sweden.  
 Celia Boone Comparison of whitebark and lodgepole pine defenses against mountain pine beetle.  
 Eric Smith National Insect and Disease Risk Map.  
 Hui Ye Response of the pine shoot beetle, *Tomicus yunnanensis* (Coleoptera: Curculionade: Scolytinae), to infested and uninfested *Pinus yunnanensis* bolts.  
 Nadir Erbilgin Will major bark beetles become invasive and what would be the outcome?  
 Nancy Gillette Semiochemicals for monitoring and control of *Conophthorus* spp. cone beetles (Coleoptera: Scolytinae) in Michoacan.  
 Matt Hansen The influence of mountain pine beetle outbreaks on carbon and nitrogen dynamics in lodgepole pine ecosystems.  
 Jean-Noel Candau Forecasting the response of spruce budworm defoliation to climate change in central Canada  
 Keith Douce Resources to support information exchange and education on invasive forest insects: Cooperation between CISEH and UWH-FF  
 Nadir Erbilgin The TRIA Project: Mountain pine beetle system genomics  
 Petter Öhrn Flight activity and development of the spruce bark beetle *Ips typographus*