

**SYMPOSIUM:  
POPULATION PERSPECTIVES IN INSECT ECOLOGY: MODELS AND DATA**

**DATA**

8:30 am-12:00 pm

*Kona 5*

Organizer and Moderator: John E. Banks, University of Washington

8:30 Introduction: John E. Banks, University of Washington

188 8:35 Management of Insect-Transmitted Plant Pathogens: Defining Conditions for Successful Roguing with a Simulation Model. Mark S. Sisterson, <sup>1</sup>USDA-ARS, Parlier, CA

189 9:00 Parasitoids and Ecological Risk Assessment: Using Life History Data to Predict Population Responses to Pesticides. John E. Banks<sup>1</sup>, John D. Stark<sup>2</sup>, Roger Vargas<sup>3</sup>, & Azmy S. Ackleh<sup>4</sup>, <sup>1</sup>University of Washington, Tacoma, WA, <sup>2</sup>Washington State University, Puyallup, WA, <sup>3</sup>USDA-ARS, Hilo, HI, <sup>4</sup>University of Louisiana at Lafayette

190 9:25 Use of Population Models for Protection of Biocontrols in IPM and Endangered Species. John D. Stark<sup>1</sup>, John E. Banks<sup>2</sup>, & Roger Vargas<sup>3</sup>, <sup>1</sup>Washington State University, Puyallup, WA, <sup>2</sup>University of Washington, Tacoma, WA, <sup>3</sup>USDA-ARS, Hilo, HI

191 9:50 Life Table Based Assessment of the Impact of a Classical Biological Control Program for Bemisia tabaci in Arizona. Steven E. Naranjo<sup>1</sup>, Shujuan Li<sup>2</sup>, <sup>1</sup>USDA-ARS, Maricopa, AZ, <sup>2</sup>University of Arizona, Maricopa, AZ

192 10:15 Spatial and Temporal Dynamics of Predator Responses to Variable Prey Density: Lady Beetles and Aphids. Edward W. Evans, Utah State University, Logan, UT

192.5 10:40 Dipteran Parasitoids Enforce Periodic Population Dynamics of Grasshoppers in Subarctic Regions. Dennis Fielding, USDA-ARS, Fairbanks, AK

11:05 Discussion

**INSECT PHOTO SALON**

9:30-10:30 am

*Queen's 5*

Organizer and Moderator: Helen Spafford, University of Hawaii at Manoa

Presentation of photos selected from over 80 entries, including Best in Show, Best Student Photo and the Delegates Award

**SYMPOSIUM: INTEGRATED STRATEGIES FOR ALIEN PREDATORS  
IN CONSERVATION LANDS OF THE PACIFIC**

8:30 am-12:00 pm • *Monarchy*

Organizers: David Foote, USGS, Volcano, HI & Cause Hanna, UC Berkeley

8:30 Welcome and Introduction. David Foote and Cause Hanna

193 8:45 Past, Current, and Future Threats of Social Hymenoptera Invading Hawaii. Neil Reimer, Hawaii Department of Agriculture

194 9:00 Case History of the Impacts and Control of Invasive Invertebrates in New Zealand. Jacqueline Beggs, University of Auckland, NZ

195 9:15 Ecological Effects of *Vespula pensylvanica* on Hawaii Arthropods. Erin Wilson, University of Maryland

196 9:30 Short and Long Term Control of the Western Yellowjacket Wasp (*Vespula pensylvanica*) in Hawaii by Toxic Baiting. Cause Hanna, UC Berkeley, David Foote, USGS Hawaii, Claire Kremen, UC Berkeley

9:45 BREAK

197 10:00 Attractants and Baits for Pestiferous and Social Wasps. Peter Landolt, USDA-ARS, Wapato, WA

198 10:15 Ecology and Genetics of the Invasive Argentine Ant. Andrew Suarez, University of Illinois, Urbana, IL

199 10:30 Management of Little Fire Ants (*Wasmannia auropunctata*) in the Pacific. Cas Vanderwoude, University of Hawaii, Sheri Mann, DLNR, Hawaii

200 10:45 Assessing the Incursion of Alien Ants Within the National Park of American Samoa. Robert Peck<sup>1</sup> & Paul Banko<sup>2</sup>, <sup>1</sup>University of Hawai'i at Hilo, <sup>2</sup>USGS, Hawai'i National Park

201 11:00 **PIAKEY**: Interactive Identification Guide to Invasive Ants of the Pacific Islands. Eli Sarnat, University of Illinois

202 11:15 Long-term Studies of Threats to the Palila, an Endangered Forest Bird on Mauna Kea, Hawaii. Paul C. Banko<sup>1</sup>, Chris Farmer<sup>2</sup> & Kevin Brinck<sup>2</sup>, <sup>1</sup>USGS Hawaii, <sup>2</sup>University of Hawaii at Hilo

203 11:30 Restoring a Slice of Old California: 30 Years of Non-Native Species Removal on Santa Cruz Island. Coleen Cory<sup>1</sup>, Scott A. Morrison<sup>2</sup>, Lotus A. Vermeer<sup>1</sup>, Kathryn R. Faulkner<sup>3</sup>, <sup>1</sup>TNC, Ventura, CA, <sup>2</sup>TNC, San Francisco, CA, <sup>3</sup>Channel Islands National Park, Ventura, CA

204 11:45 Management of Alien Predators to Protect Park Resources. Raina Kaholoaa, Haleakalā National Park, Maui

205 12:00 Integrated Management of Alien Predators in Hawaii Volcanoes National Park. David Foote<sup>1</sup>, Cause Hanna<sup>2</sup> & Eric Spurr<sup>3</sup>, <sup>1</sup>USGS, HAVO, <sup>2</sup>UC Berkeley, <sup>3</sup>Landcare Research Inc., Lincoln, NZ