National Forum on Climate and Pests (NFC&P)
October 4-6, 2016
National Academy of Sciences
Washington, DC

Regional Integrated Pest Management (IPM) Centers
National Research Council of the National Academy of Sciences
Cornell Institute for Climate Smart Solutions
American Society of Agronomy
USDA Regional Climate Hubs

Climate change is impacting the severity of pest outbreaks, the emergence of new pests, and pest distribution patterns. Research has addressed these areas, but we are only beginning to understand the impacts on the environment, economies, and society and culture. Growers and land managers have little information to know which practices, current and new, will help them prepare for the changes coming.

Despite the known correlation between climate change and pests and an increased number of peer-reviewed publications, there has been no single event where researchers and extension can: 1) learn about critical research being conducted on the effects of climate on pests and host-pest interactions, 2) understand the consequences of potential shifts in agriculture and forestry-related land use due to climate-related pest outbreaks or reductions, and 3) develop regional frameworks to support pest management decisions that will lead to more sustainable US agriculture and forestry ecosystems in changing climates

The **National Forum on Climate and Pests** will bring together leading scientists that are working in the area of climate and pests along with the scientific community at the National Academies in Washington, DC. The experts will share the latest, science-based information and strategize ways to plan for adaptable and resilient agriculture and forestry ecosystems that are increasingly vulnerable to climate and pests.

The cross-disciplinary forum will encompass research advances related to climate and the three main pest categories (weeds, insects, and plant pathogens) that impact the fields of agricultural and forestry sciences. The **Regional IPM Centers**, **National Research Council of the National Academy of Sciences**, **Regional Climate Hubs**, the **American Society of Agronomy**, and the **Cornell Institute for Climate Smart Solutions** are partnering in organizing the Forum with support from the USDA National Institute of Food and Agriculture. The National and Regional forums will foster discussion about current needs, information gaps, and opportunities for increased research investment and collaboration.

The long-term goal of this project is to help U.S. agriculture and forestry minimize risks that are associated with the increased severity and expansion of pest distributions as a result of increased climate variability. The major outcomes of the forums will be 1) new understanding of the vulnerabilities with regard to pests in our agriculture and forestry ecosystems and 2) strategies to mitigate the effects of pests due to climate change and variability and develop resilient production systems. Advancing work in the area of climate and pests is critically needed and will significantly help us address global challenges of food security, nutrition and health, environmental sustainability, food safety, and agricultural productivity.

Day 1 – October 4, 2016

12:00p	Buffet lunch provided by NFC&P

Introduction [live online streaming]

1:00p	Welcome; forum background (Steve)
Session I	**Climate Change & Weed and Insect Pests**
1:30p	Topics: distribution, patterns, models, extreme weather events, legacy effects
	Invited talks and participant discussion: Dr. Keith Dixon – NOAA/Geophysical Fluid Dynamics Lab, Princeton University, climate models; Dr. Nathan Mueller – Harvard University, agriculture and global environmental change; Dr. Matt Ayres – Dartmouth College, forest entomology; Dr. Ken Linthicum – USDA-Center for Medical, Agricultural & Veterinary, animal pests; Dr. Chonggang Xu – Los Alamos National Laboratory, modeling ecosystem processes
5:00p	Adjourn

Day 2 – October 5, 2016

7:00a	Breakfast provided by NFC&P

Introduction [live online streaming]

8:30a	Welcome back; recap Day 1 (Steve)
Session II	**Climate Change & Weed and Disease Pests**
8:45a	Topics: distribution, patterns, models, extreme weather events, policy
	Invited talks and participant discussion: Dr. Jim Stack – Kansas State University, plant pathology; Dr. Ben Cook – Columbia/NASA, climate models; Dr. Lew Ziska – USDA-ARS, Beltsville, MD, weeds; Dr. Jeff Dukes – Purdue University, invasive species
12:00p	Lunch provided by NFC&P
Session III	**Climate Change & Insect Pests**
1:00p	Topics: distribution, response to extremes, legacy effects, anthropogenic impacts
	Invited talks and participant discussion: Dr. Jeff Hicke – University of Idaho, forestry models insects; Dr. Karen Garrett – University of Florida, plant pathology, modeling; Dr. Steve Frank – North Carolina State University, insects and climate
3:00p	Break
Session IV	**Open Discussion - feedback from invited and online participants**
3:15p	Topic 1: comments, thoughts
4:00p	Topic 2: needs, gaps, focus areas
4:45p	Topic 3: developing the next steps
5:00p	Adjourn

Day 3 – October 6, 2016

7:00a	Breakfast provided by NFC&P

Introduction [no live online streaming]

08:30a	Recap Session IV (Steve)
Session V	**Strategic Planning Session – invited speakers and participants only**
8:45a	Topic 1: comments, thoughts
9:45a	Topic 2: needs, gaps, focus areas
10:45a	Break
11:15a	Topic 3: developing the next steps
12:00p	Adjourn and lunch provided by NFC&P