

**Ellen V. Crocker, Ph.D.**  
Forest Health Research and Education Center  
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## EDUCATION

**Ph.D.** 2009-2015  
Plant Pathology and Plant Microbe Biology, Cornell University, Ithaca, NY  
Mentor: Dr. Eric Nelson  
Minors: Natural Resources, Ecology and Evolutionary Biology

**B.A.** 2002-2006  
Biology and History, Williams College, Williamstown, MA  
Graduated with honors (Senior thesis: Plant-insect interactions)  
Mentor: Dr. Joan Edwards

## EXPERIENCE

**Assistant Professor of Forest Health Extension** 2019-present  
Department of Forestry and Natural Resources, University of Kentucky, Lexington, KY

- 80% Extension, 15% Teaching, 5% Service

**Postdoctoral Scholar** 2015-2019  
Forest Health Research and Education Center (FHC), Department of Forestry and Natural Resources, University of Kentucky, Lexington, KY  
Mentor: Dr. Jeff Stringer  
Conducting outreach and research activities in the area of forest health including invasive plants, insect pests, and pathogens. Synthesizing and disseminating forest health information for a broad range of audiences as a member of the UK Forestry Cooperative Extension specialist team.  
Projects include:

- Regular presentations to the landowners, industry professionals, the general public, and youth related to forest health and invasive species, integrated with Cooperative Extension
- Development of the citizen science mobile app, TreeSnap, [www.TreeSnap.org](http://www.TreeSnap.org)
- Promoting better public understanding of biotechnology as it applies to forest trees
- Collaboration in forest health-related research projects (ex. the distribution of the pathogen *Phytophthora cinnamomi* and potential impact on chestnut restoration, expert opinion survey of white oak threats and their potential impacts)

**Graduate Researcher** 2009-2015  
Cornell University, Ithaca, NY  
Mentor: Dr. Eric Nelson  
Investigated the potential for soil pathogens to influence community dynamics and contribute to the success of the invasive plant *Phragmites australis*. Projects included:

- Effects of soil conditioning by invasive *P. australis* on different life stages of competing native plants

- Pathogenicity and virulence of *P. australis*-associated oomycetes
- Viability of overwintering seeds and the role of soil pathogens on germination
- Plant-soil feedbacks in wetlands and corresponding changes in soil pathogen communities

**Staff Research Associate**

2007-2009

University of California, Berkeley, CA

Studied forest pathogens and assisted with a range of field and lab research. Projects included:

- Distribution and abundance of *Phytophthora ramorum* on Bay Laurel
- *Phytophthora cinnamomi* infection in the endangered Ione Manzanita and potential for treatment with phosphonate application
- Aerial monitoring of *Fusarium circinatum* in pine forests

**Honors thesis researcher**

2005-2006

Williams College Biology Department, Williamstown, MA

- Plant-insect interactions: “Adaptive significance of cryptic coloration in the sawfly *Empria obscurata* in Isle Royale National Park, MI”

**OTHER POSITIONS HELD**

**Organizing committee**, IUFRO 6th International Workshop on the Genetics of Tree-Parasite Interactions: Tree Resistance to Insects and Diseases: Putting Promise into Practice, 2018.

**Founder and chair**, UK Ag Biotech Day, Summer 2017. Organized an outreach event for 35 high schoolers, parents, and teachers to visit labs at UK and learn about agricultural biotechnology.

**Founder and chair**, UK Expanding Your Horizons STEM Conference, 2017-2018. Organized a STEM outreach event with 120 middle schoolers participating in inquiry-based workshops led by UK undergraduate and graduate students. Attending parents and teachers participated in concurrent sessions on preparing for college.

**Program Coordinator of Microbial Friends and Foes NSF REU**, Cornell University, Summer 2014. Helped design and run an NSF Research Experience for Undergraduates (REU) program in its first year. Mentored visiting undergraduates, led summer seminar and discussion series, and coordinated an end-of-project poster session for all undergrad researchers.

**Graduate Teaching Assistant Fellow**, Center for Teaching Excellence, Cornell University, Fall 2012-Spring 2014. Designed and led workshops for graduate students on a range of topics including: Introduction to Experiential Learning, Engaging Approaches to Quantitative Courses, Designing Student Assignments to Evaluate Yourself as a Teacher, Building Communication Skills, Facilitating Class Discussions, and Addressing Learning Styles in the Classroom.

**Student Intern**, National Plant Diagnostic Network, 2013-2014. Researched emerging plant diseases and created educational modules for non-scientists.

## TEACHING EXPERIENCE

- **Instructor, FOR 310, Introduction to Forest Health**, Spring 2019, Department of Forestry and Natural Resources, University of Kentucky.
- **Instructor, NRE 390, Special Topics, Introduction to Urban and Community Forestry**, Fall 2018, University of Kentucky. Designed and taught an introduction to urban and community forestry focused on trees and tree health, green infrastructure planning and design, environmental education, and human health, wellness and trees.
- **Instructor, FOR 310, Introduction to Forest Health**, Spring 2018, Department of Forestry and Natural Resources, University of Kentucky. Designed and taught an introduction to forest health, pathology, and mycology for forestry students.
- **Instructor, EXP 396/650 Engaging Girls in STEM: Leadership and Service Learning** for the Expanding Your Horizons Conference, Spring 2018, Experiential Education, University of Kentucky.
- **Instructor, FOR 399**, mentored 2 Forestry Seniors in a white oak sampling internship, Fall 2017, Department of Forestry and Natural Resources, University of Kentucky.
- **Guest lectured “Biotechnology and Forestry,”** FOR 400 Human Dimensions of Forestry and Natural Resources, Oct 18, 2017, Department of Forestry and Natural Resources, University of Kentucky.
- **Guest lectured “Emerging Forest Epidemics,”** FOR 602, Global issues in Forestry, Sept 20, 2017, Department of Forestry and Natural Resources, University of Kentucky.
- **Instructor, EXP 396/650 Engaging Girls in STEM: Leadership and Service Learning** for the Expanding Your Horizons Conference, Spring 2017, Experiential Education, University of Kentucky.
- **Guest Instructor,** FOR 310 (Introduction to Forest Health and Protection), 2016 and 2017 Department of Forestry, University of Kentucky
- **Facilitator, Urban tree workshop series**, Fall 2016 to present. Organized a series of monthly hands-on workshops for the general public related to urban trees. Each month selected a topic, reserved guest speakers, coordinated reservations, and managed continuing education credits for participants.
- **Facilitator, UK Forest Health Journal Club**, Fall 2015- Spring 2017.
- **Guest Lecturer**, introductory mycology component of Forest Entomology course, UK, Sept 26, 2016.
- **Instructor, “Mushrooms 101”** weekend course at Floracliff Nature Preserve, Oct 14-15, 2016.
- **Instructor, UK GEAR UP Program in Tree Health**, July 25-28, 2016. Designed course module in tree health and care and taught to high school students as part of a 3-week summer program to prepare students from low-performing high schools for college.
- **Facilitator, UK300-003 IAmAWomenInSTEM**, Spring 2016. Designed and led class for undergraduates about issues facing women in STEM fields.

- **Guest Instructor**, Invasive Species course, Eastern Kentucky University, Feb 16, 2016.
- **Guest Instructor**, Chemistry department orientation program, Cornell University Summer 2013. Designed and taught a workshop to introduce best teaching practices for all incoming Chemistry Department graduate students.
- **Teaching assistant** for Veterinary and Medical Mycology, Cornell University, Spring 2011 and 2012.
- **Teaching assistant** for Field Botany, Williams College, Spring 2006.

#### AWARDS, GRANTS, AND FELLOWSHIPS

- **Crocker E**, Stanton M, and J Stringer. HealthyWoods: A New Mobile App Tool to Guide Landowners in Forest Health Assessment. USDA RREA NFF, \$100,000, Oct 2018.
- Agouridis C, **Crocker E**, Odom S, and R Hirsh. “Expanding Your Horizons- a STEM Workshop for Middle School Girls” NSF EPSCoR, \$10,000, Sept. 2018.
- **Crocker E** and CD Nelson. Supporting The 2018 Conference "Tree Resistance To Insects And Diseases: Putting Promise Into Practice.” USDA AFRI Foundational Program Area, Pests and Beneficial Species in Agricultural Production Systems, \$35,000, July 2018.
- **Crocker E**, Arthur M, Rieske-Kinney L, Nelson D, Lhotka J, and J Christian. Development of an Undergraduate Certificate in Urban and Community Forestry. USDA HEC, \$149,734, March 2018.
- Arthur M, Williamson N, Coy G, Rieske-Kinney L, Dameron B, **Crocker E**, Borden S, Jennings C, and A Powell. Roots to Branches. UK Sustainability Challenge Grant Program, \$38,890, Nov. 2017.
- Agouridis C, **Crocker E**, Stamper D, Thomas L, Springer M, Sanderson W, Gumbert A, Barton C, Belton C, and W Long. Developing a KY Master Naturalist Program. UK Sustainability Challenge Grant Program, \$14,257, Nov. 2017.
- Agouridis C, **Crocker E**, Odom S, and R Hirsh. “Expanding Your Horizons- a STEM Workshop for Middle School Girls” NSF EPSCoR, \$5,600, Sept. 2017.
- Arthur M, Williamson N, Coy G, Rieske-Kinney L, **Crocker E**, et al... “Mobilizing Tree Ambassadors” Sustainability Challenge Grant, \$49,774, Nov. 2016.
- **Crocker E**, Condon B, and S Odom. “Expanding Your Horizons- a STEM Conference for Middle School Girls” NSF EPSCoR, \$10,000, Sept. 2016
- **Crocker E** and M Seifert. “Using forest health assessment as a tool for citizen engagement and education” Lexington Fayette Urban County Government Sustainable Environmental Grant, \$3,520, May 2016.
- Stringer J, **Crocker E**, Nelson CD, and Gracey E. “Kentucky Oak Genetic Improvement Program” USDA State and Private Forestry Landscape Scale Restoration Grant, \$350,000, April 2016.
- Arthur M, Williamson N, Coy G, Rieske-Kinney L, **Crocker E**, et al... “Creating Tree Ambassadors” Sustainability Challenge Grant, \$32,636, Nov. 2015.

- **Crocker E.** Graduate Teaching Assistant Fellow Program, \$1,000/year, 2012-14
- **Crocker E.** Plant Sciences Outstanding Teaching Assistant Award, 2012
- **Crocker E** and L Martin. Andrew W. Mellon Student Research Grant, \$1,000, 2012
- **Crocker E.** Atkinson Center Sustainable Biodiversity Fund small grant, \$6,000, 2011
- **Crocker E.** State University of New York (SUNY) Fellowship \$29,200 plus tuition, 2009 and 2015
- **Crocker E.** Thesis Research Grant, Williams College Biology Department, \$3,400, 2005

## RESEARCH PUBLICATIONS

- **Crocker E**, Condon B, Abdullah A, Abbott A, Nelson CD, and M Staton. 2019. TreeSnap: a citizen science app connecting tree enthusiasts and forest scientists. *Plants, People, Planet*. 00: 1-6
- Fang L, **Crocker E**, Yang J, Yan Y, Yang Y, and Z Liu. 2019. Competition and Burn Severity Determine Post-Fire Sapling Recovery in a Nationally Protected Boreal Forest of China: An Analysis from Very High-Resolution Satellite Imagery. *Remote Sensing*. 11-603: 1-22
- Sena K, Dreaden TJ, **Crocker E**, and C Barton. 2018. Detection of *Phytophthora cinnamomi* in Forest Soils by PCR on DNA Extracted from Leaf Disc Baits. *Plant Health Progress*. 10 (3): 193-200.
- Sena K, **Crocker E**, Vincelli P, and C Barton. 2018. *Phytophthora cinnamomi* as a driver of forest change: Implications for conservation and management. *Forest Ecology and Management*. 409: 799-807.
- **Crocker E**, Nelson EB, and B Blossey. 2017. Soil conditioning effects of *Phragmites australis* on native wetland plant seedling survival. *Ecology and Evolution*. 7(15): 5571-5579.
- **Crocker EV**, Lanzafane J, Karp MA, and EB Nelson. 2016. Overwintering seeds as reservoirs for seedling pathogens of wetland plant species. *Ecosphere*. 7 (3).
- **Crocker EV**, Karp MA, and EB Nelson. 2015. Virulence of oomycete pathogens from *Phragmites australis*-invaded and non-invaded soils to marsh wetland plant species. *Ecology and Evolution*. 5: 2127-2139.

## RESEARCH PRESENTATIONS

- **Crocker E**, Condon B, Abdullah A, Abbott A, Nelson CD, and M Staton. TreeSnap: a citizen science tool to help our forests. Presentation at Tree Resistance Workshop, Aug 9, 2018.
- **Crocker E**, Condon B, Abdullah A, Abbott A, Nelson CD, and M Staton. TreeSnap: a citizen science tool to help our forests. Presentation at Association of Natural Resource Extension Professionals (ANREP) meeting, Biloxi MI, May 2, 2018.
- **Crocker E**, Conrad A, Thomas W, Li X, Ochuodo T, Holmes, T and CD Nelson. Delphi expert opinion survey to assess threats to oaks in the eastern United States. Poster

presentation at Association of Natural Resource Extension Professionals (ANREP) meeting, Biloxi MI, May 1, 2018.

- **Crocker E.** Organized and presented at TreeSnap scientific partners meeting, Lexington KY, July 11-12, 2018.
- **Crocker E,** Condon B, Abdullah A, Abbott A, Nelson CD, and M Staton. TreeSnap: a citizen science tool to help our forests. Seminar at UK Forestry and Natural Resources Department Seminar Series, University of Kentucky, Feb. 21, 2018.
- **Crocker E,** Condon B, Abdullah A, Abbott A, Nelson CD, and M Staton. TreeSnap: a citizen science tool to help our forests. Seminar at UK Biology Department EcoLunch Seminar Series University of Kentucky, Oct 27, 2017.
- **Crocker E,** Condon B, Abdullah A, Abbott A, Nelson CD, and M Staton. TreeSnap: a citizen science tool to help our forests. Poster presentation Oak Symposium, Knoxville TN, Oct 24, 2017.
- Conrad A, **Crocker E,** Thomas W, Li X, Ochuodo T, Holmes, T and CD Nelson. Delphi expert opinion survey to assess threats to oaks in the eastern United States. Poster presentation at Oak Symposium, Knoxville TN, Oct 24, 2017.
- Sena K, **Crocker E,** Dreaden T, Clark C, Yang J, and C Barton. Tracking a tree-killer: Detecting *Phytophthora cinnamomi* in Appalachian forests. EcoLunch Seminar Series University of Kentucky. Lexington, KY, October 13, 2017.
- **Crocker E,** Condon B, Abdullah A, Abbott A, Nelson CD, and M Staton. TreeSnap: a citizen science tool to help our forests. Oral presentation at meeting group of “Standards and CyberInfrastructure That Enable "Big-Data" Driven Discovery For Tree Crop Research,” NSF PGRP grant, Storrs, Connecticut, July 31- August 1, 2017.
- Sena K, **Crocker E,** Dreaden T, Clark C, Yang J, and C Barton. Tracking a tree-killer: detecting *Phytophthora cinnamomi* in eastern Kentucky. Lilley Cornett Woods Research Symposium. Skyline, KY, June 8, 2017.
- **Crocker E,** Condon B, Abdullah A, Abbott A, Nelson CD, and M Staton. TreeSnap: a citizen science tool to help our forests. Poster presentations at ECU Biology Department Annual Retreat, Lilly Cornett Woods, June 8, 2017.
- **Crocker E.** An Introduction to the Forest Health Research and Education Center. Poster presentations at ECU Biology Department Annual Retreat, Lilly Cornett Woods, June 8, 2017.
- Sena K, **Crocker E,** Dreaden T, Clark C, Yang J, and C Barton. Tracking a tree-killer: Improving detection and characterizing species distribution of *Phytophthora cinnamomi* in Appalachian forests. Graduate Appalachian Research Community (GARC) Appalachian Research Symposium and Arts Showcase. Lexington, KY, February 19, 2017.
- Sena K, **Crocker E,** Dreaden T, Clark C, Yang J, and C Barton. Tracking a Tree-killer: Improving detection and characterizing species distribution of *Phytophthora*

*cinnamomi* in Appalachian forests. Sharing Work Across Appalachia. University of Kentucky Appalachian Center, Lexington, KY, February 15, 2017

- **Crocker EV**, Lanzafane J, Karp MA, and EB Nelson. Role of fungi and oomycetes in marsh wetland seed bank viability. Poster presentation at American Phytopathological Society, August 2014.
- **Crocker EV**, Karp MA, and EB Nelson. Potential role of oomycete pathogens in the success of the invasive plant *Phragmites australis*. Invited Oral Presentation at Society of Wetland Scientists Annual Meeting, Duluth MN June 2013.
- **Crocker EV**, Karp MA, and EB Nelson. Potential for pathogen mediated invasiveness; Oomycete communities associated with native and non-native *Phragmites australis*. Oral presentation at Ecological Society of America Conference, Austin TX, August 2011.
- **Crocker EV**, Karp MA, and EB Nelson. Virulence of plant-pathogenic oomycetes to freshwater wetland plant species. Poster presentation at the Ecology and Evolution of Infectious Diseases Conference, Santa Barbara, CA June 2011.
- **Crocker EV** and M Garbelotto. Possible use of AgriFos to prevent *P. cinnamomi* infection of *A. myrtifolia* (Ione Manzanita). Poster presentation at the Sudden Oak Death Science Symposium, Santa Cruz, CA. June 2009.

#### OUTREACH AND EDUCATION PUBLICATIONS

- **Crocker E**, Thomas WT, Niman C, and J Stringer. 2019. White Paper on Economic Loss from the Ash Disaster in KY: Impacts to Landowners from the Emerald Ash Borer. University of Kentucky, College of Agriculture, Food, and the Environment, Department of Forestry and Natural Resources - Extension
- **Crocker E**, Bordas A and D Coyle. 2018. Biology, Ecology, and Management of Biscogniauxia (Hypoxylon) Canker in the Southeastern U.S. SREF Factsheet, SREF-FH-009
- **Crocker E**, Moore H, Niman C, and J Stringer. 2018. White Paper on Ambrosia Beetle Damage to Dead Ash in KY: Prevalence and Economic Impact to Loggers in Northern Kentucky. University of Kentucky, College of Agriculture, Food, and the Environment, Department of Forestry and Natural Resources - Extension  
[https://forestry.ca.uky.edu/files/2017\\_ash\\_ambrosia\\_beetle\\_damage\\_white\\_paper.pdf](https://forestry.ca.uky.edu/files/2017_ash_ambrosia_beetle_damage_white_paper.pdf)
- **Crocker E**. 2017. The Good, The Bad, and the Unknown: A Close Look at Public Concerns About GE Trees. Kentucky Woodlands Magazine.
- Fountain WM, **Crocker E**, Townsend L and NW Gauthier. 2016. After Your Ash Has Died: Making an Informed Decision on What to Replant. Horticulture Extension Publication (ID-241) <http://www2.ca.uky.edu/agcomm/pubs/ID/ID241/ID241.pdf>
- Fountain WM, and **E Crocker**. 2016. What is Your Tree Worth?" Horticulture Extension Publication (ID-240) <http://www2.ca.uky.edu/agcomm/pubs/ID/ID240/ID240.pdf>
- **Crocker E** and N Gauthier. 2016. "Don't Eat Those Mushroom... Unless You Know

What You Are Doing.” Forestry and Plant Pathology Extension Factsheet Publication  
PPFS-GEN14/FORFS-16-01

- **Crocker E.** 2016. Biotechnology: Scientific Advances That Could Save Our Native Forests. Kentucky Woodlands Magazine.  
[http://www2.ca.uky.edu/KYWoodlandsmagazine/Vol10\\_No1/GMOS.pdf](http://www2.ca.uky.edu/KYWoodlandsmagazine/Vol10_No1/GMOS.pdf)
- **Crocker E.** 2015. Decline of our Forests and Trees- Can Modern Genetics Provide a Solution? Kentucky Woodlands Magazine  
[http://www2.ca.uky.edu/KYWoodlandsmagazine/Vol10\\_No1/GMOS.pdf](http://www2.ca.uky.edu/KYWoodlandsmagazine/Vol10_No1/GMOS.pdf)
- **Crocker E.** 2015. Plant Health: Anthracnose. Online article, UK Urban Forest Initiative Tree Talk Series, Summer 2015 <https://ukntrees.ca.uky.edu/treetalk/planthealth-anthrachnose>
- **Crocker E.** 2015. There’s a Fungus Among Us. Online article, UK Urban Forest Initiative Tree Talk Series, Fall 2015 <https://ukntrees.ca.uky.edu/treetalk/fungus-among-us>

#### OUTREACH AND EDUCATION PRESENTATIONS

- “Fantastic fungi!” lesson with elementary students from Booker T Washington STEM Club, Lexington KY, Dec 17, 2018
- “Citizen Science” radio show on From the Woods Kentucky Program, WRFL Lexington KY, Dec 6, 2018
- Organized and facilitated meeting of KY Forest Health Task Force, Frankfort KY, Dec 5, 2018
- Organized and facilitated “Seeing the Forest Through the Trees: A Panel Discussion and Public Forum on Tree Inventories,” Lexington, KY, Nov 28, 2018
- “Managing Invasive Species” workshop led for KY Master Naturalist student group, Lexington KY, Nov 2, 2018
- “Introduction to Fungi” talk given to WildOnes group, Lexington KY, Nov 1, 2018
- “Introduction to Invasive Species” class led for KY Master Naturalist student group, Lexington KY, Oct 31, 2018
- “Foods of the Forest” demonstration at UK Fresh Food Company Dinning Hall, Lexington KY, Oct 25, 2018
- “Program Development and Delivery Module 2” presentation as a part of the Seeding Success Extension agent onboarding training webinar series developed by Southern Regional Extension Forestry, <https://sref.info/seedingsuccess/module4/> , Oct 23, 2018
- “Program Development and Delivery Module 1” presentation as a part of the Seeding Success Extension agent onboarding training webinar series developed by Southern Regional Extension Forestry, <https://sref.info/seedingsuccess/module4/> , Oct 16, 2018
- “White Oak Threats” presentation at the annual Associated Cooperage Industries of America meeting, Austin TX, Oct 15, 2018



- “Introduction to Invasive Species” workshop led for KY Master Naturalist group, Louisville KY, Oct 11, 2018
- “Revisiting Floracliff’s Old Oaks: A TreeSnap Training and Citizen Science Workshop” led at Floracliff Nature Sanctuary, Lexington KY
- Judging of invasive plant identification competition at Win With Wood youth event, Jackson KY, Oct 2, 2018
- “Invasives of the Future” presentation at the Invasive Plant Species Management Techniques Workshop for Land Managers hosted by KY Chapter of the Wildlife Society, Sept 19, Richmond, KY
- “Citizen Science Apps” workshop at Mountain Ag Day, Clayhole, KY, Sept 18, 2018
- “Citizen Science” workshop led at the annual Kentucky Environmental Educators conference, Berea KY, Sept 7, 2018
- “Introduction to KY Master Naturalist Program” presentation at the annual Kentucky Environmental Educators conference, Berea KY, Sept 7, 2018
- “Forest Health” radio show on From the Woods Kentucky Program, WRFL Lexington KY, August 30, 2018
- Tree health concerns interview by WKYT TV station, Lexington KY, Aug 30, 2018
- “Introduction to Invasive Plants and their Management” talk, Shelby Co. Master Gardeners, Shelbyville KY, July 26, 2018.
- “Tree Detectives” activity, 4H Natural Resource & Environmental Sciences Academy, Lexington, KY, July 24, 2018.
- “TreeSnap Citizen Science Sampling Day” event, Floracliff Nature Preserve, Lexington KY, July 12, 2018
- Organized “Forests of the Future” seminar with 4 invited speakers Fayette Co. Cooperative Extension Office, Lexington KY, July 11, 2018
- “Mushroom Identification” talk and hike, Kenton Co. Cooperative Extension, Ft. Mitchell KY, June 22, 2018.
- “Forest pathology” seminar, Kentucky 4H Forestry Team, Lexington KY, June 19, 2018.
- “We Speak for the Trees” mini-course, 4H Teen Conference, Lexington KY, June 12-13, 2018.
- “Introduction to Forest Health” talk, Kentucky Forest Leadership Program, Jabez KY, June 4, 2018.
- “What to Expect When You Are Expecting EAB” talk, Clemson University, Clemson SC, May 23, 2018.
- Hosted KY Expanding Your Horizons STEM conference for ~160 middle school girls, Lexington KY, April 21, 2018.
- “Woodland mushroom cultivation and identification” workshop, Lyon Co. Cooperative Extension Office, Grand Rivers KY, April 5, 2018.
- “Fungus Among Us” activity at Nerd Squad Park takeover event with elementary and

middle school students, Lexington KY, April 6, 2018.

- “Urban tree health and diagnostics” talk to UK TreeCATS program, Lexington KY, March 31, 2018.
- “Asian Longhorned Beetle and Other Invasives to Watch For” talk to Kentucky Woodland Owners Association, March 21, 2018.
- “Ambrosia beetle damage to standing dead ash trees” talk in KY Master Logger TV, Feb. 6, 2018.
- “There’s an App for that: Forest Engagement Through Citizen Science” webinar, KY Forestry Extension Fall Webinar Series, Nov 28, 2017
- “Plant Detectives” workshop at GEMS (Girls in Engineering, Math, and Science) event, Lexington KY, Nov 11, 2017
- Organized “Mulching 101” workshop with Stacy Borden as part of urban forest-focused workshop series, Nov 11, 2017
- “Mushrooms and More From Your Woodland” webinar, KY Forestry Extension Fall Webinar Series, Nov 2, 2017
- Judged invasive plant identification component of Win With Wood competition, Quicksand KY, Oct 3, 2017
- “Mushrooms and More From Your Woodland” presentation, Central Kentucky Woodland Owners Short Course, Sept 23, 2017
- “Kentucky Forest Health Update” Presentation to KY Highway Maintenance Workers meeting, Quicksand, KY, Sept 21, 2017
- “Invasive Plant Species and the Emerald Ash Borer” presentation at Your Backyard Woods session on KY Wood Expo, Sept 16
- “Citizen Science for your Woodland” presentation at Master Woodland Stewards Program, Sept 8, 2017
- “Mushrooms and more from your woodlands” talk, Woodland Owners Short Course Western Kentucky, August 26, 2017
- “Mushrooms and more from your woodlands” talk, Woodland Owners Short Course Eastern Kentucky, August 12, 2017
- “Introduction to Biotechnology” at UK Ag Biotech Day for high school students, July 22, 2017
- “Biotech, Forest Restoration and Conservation” interview with Talking Biotech Podcast, June 3, 2017
- Hosted KY Expanding Your Horizons STEM conference for ~120 middle school girls, April 29, 2017
- Organized “Landscaping with native plants and managing invasives” with John Michler and Joyce Bender as part of urban forest-focused workshop series, April 22, 2017
- “Urban Tree Health” UK Urban Forest Ambassador training, April 1 2017

- “Forest Health Update” at Ohio River Valley Woodland and Wildlife Workshop, March 25, 2017
- “Fantastic Fungi” at Ohio River Valley Woodland and Wildlife Workshop, March 25, 2017
- Organized “Tree Pruning 101 with Stacy Borden as part of urban forest-focused workshop series, March 11, 2017
- Organized “Winter Tree ID” with Doug McLaren as part of urban forest-focused workshop series, Feb 4, 2017
- "An Introduction to Invasive Plants and Pests” talk, Keep Frankfort Forested lecture series, Nov 5, 2016
- “Kentucky Forest Health Update 2016” Webinar through UK Forestry Extension fall series, Nov 1, 2016 <https://www.youtube.com/watch?v=99H0BpGynx4>
- “Ash Tree Identification” Program at Raven Run Emerald Ash Borer awareness event, Oct 8, 2016
- UK Forestry Department Demonstration Booth at Mountain Agriculture Day, Quicksand KY, Oct 1, 2016
- Co-designed and facilitated “Neighborhood Tree Health” workshops, outreach sessions to eight Fayette County homeowners associations to increase awareness of urban tree health problems and care reaching ~100 people, summer 2016.
- “Tree Detectives” Program at Youth Mountain Agriculture Day, Robinson Forest, Sept 29, 2016
- “Tree Detectives” Program at Outdoor Adventure Camp, McConnell Springs, Lexington KY, June 27 and July 18.
- “Tree Detectives” Program at Governor’s Minority Student College Preparation Program, UK, June 27- 28, 2016
- “Tree Detectives” Program at 4H Teen Conference, June 14-15, 2016
- “Introduction to Fungi” Presentation at Kentucky Forestry Leadership Camp, June 7, 2016
- “Tree Detectives” Program at 4H camp in Jabez KY, May 21, 2016
- “Tree Detectives” Program at Tech Savvy at Kentucky State University, May 21, 2016
- “Backyard Bark Beetles” Program at Russell Cave Elementary, April 22, 2016
- “Fantastic Fungi” Presentation at Ohio River Valley Woodlands and Wildlife Workshop, Madison Indiana, April 2, 2016
- “Are Your Woodlands Healthy?” webinar, Forestry Extension Fall Webinar Series, Nov 12, 2015, <https://www.youtube.com/watch?v=SCKXLABUiL0>
- "An Introduction to Invasive Plants and Pests” talk, Keep Frankfort Forested lecture

series, Nov 7, 2015

- “Forest Health Research and Education Center: An Interdisciplinary Approach to Address Current and Emerging Threats to Forest Health” poster presentation, Society of American Foresters Annual Meeting, Nov 4, 2015
- “White Oak Threats” talk, Associated Cooperages Industries of America (ACIA) annual meeting, Oct 12, 2015
- "How to take tree measurements” presentations and assessments at 4H field days in the Land Between the Lakes (Sept 15) and Carter Caves (Sept 16), 2015
- Video presentation “Welcome to Kentucky’s Forests,” KY Woodland Expo, Sept 19, 2015
- “Signs of Woodland Health Issues” talk, KY Woodland Expo, One Acre at a Time Program, Sept 19, 2015
- “Managing Woodlands to Deal with Key Invasive Plants in Eastern Kentucky” talk, Woodland Owners Short Course Eastern Kentucky, Sept 26, 2015
- “An Introduction to Invasive Plants and Pests in Eastern Kentucky” talk, Woodland Owners Short Course Eastern Kentucky, Sept 26, 2015
- “Managing Woodlands to Deal with Key Invasive Plants in Central Kentucky” talk, Woodland Owners Short Course Central Kentucky, August 15, 2015
- “An Introduction to Invasive Plants and Pests in Central Kentucky” talk, Woodland Owners Short Course Central Kentucky, August 15, 2015
- Invited speaker for Emerald Ash Borer segment, local TV news noon show, WKYT channel 27, July 6, 2015
- Invited speaker for firewood safety segment, local TV news morning show, WTVQ channel 36, June 25, 2015
- “Threats on Our Doorstep: Emerging pathogens and pests” talk, Ohio Valley Lumber Drying Association meeting, April 16, 2015
- "White Oak Threats" talk, White Oak Sustainability Meeting, March 25, 2015
- Designed and taught “Mushrooms and fungi”, Cornell University Cooperative Extension, Sep 2014. Workshop a component of “Master Naturalist” training.
- Designed and implemented “Plant Detectives!”, Cornell University Spring 2014. Program to increase interest in STEM fields among middle school girls. Cornell University.
- “Serendipity and Science: 30 Minutes with Dr. Sharon Long.” *Scientific American* guest blog, April 2012. <http://blogs.scientificamerican.com/guest-blog/2012/04/12/serendipity-and-science-30-minutes-with-dr-sharon-long/>
- Designed and taught “Fantastic Fungi: Mushrooms and More!”, Cornell University Spring 2011. Mini-course for 1st grade students.

- Citizen-science organizer, UC Berkeley Cooperative Extension, Spring 2009. Educated the public about Sudden Oak Death and coordinated “Sudden Oak Death Sampling Blitz.”
- Workshop organizer, UC Berkeley Cooperative Extension, 2008-2009. Coordinated monthly Sudden Oak Death treatment workshops for general public and arborists.

#### ACADEMIC SERVICE

- **UK Arboretum Education Committee**, 2018- present
- **UK Society of Postdoctoral Scholars**, University of Kentucky, Executive Committee member/Chair. August 2015 – present
- **Biotechnology Strategic Initiative Committee member**, University of Kentucky College of Agriculture, Food and Environment, August 2015 – present
- **Plant Pathology and Plant-Microbe Biology Department Curriculum Committee**. January 2010 – January 2012
- **Graduate Student Association**, Department of Plant Pathology and Plant-Microbe Biology. President, Fall 2011 – 2012
- **Graduate Student Association**, Colloquium Committee Chair, Department of Plant Pathology and Plant-Microbe Biology. Fall 2013

#### PROFESSIONAL SOCIETIES and WORKING GROUPS

- Society of American Foresters
- American Phytopathological Society
- University of Kentucky Urban Forest Initiative