

Continental Dialogue Poster Session Abstracts and Information

Author(s): Chuck Barger, Keith Douce, Rebekah Wallace, Karan Rawlins. University of Georgia

Poster Title: Tracking Invasive Species across North America: EDDMapS & EDDMapS Smartphone Apps

Name of Presenter on site:

Keith Douce

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Abstract (150 words or less):

EDDMapS' primary goal is to discover the existing range and leading edge of invasive species while documenting vital information about the species and habitat using standardized data collection protocols. EDDMapS allows for data from many organizations and groups to be combined into one database to show a better map of the range of an invasive species. Goals of the current project include: integration of existing regional datasets, increase search options on EDDMapS website, and coordinate with local, state and regional organizations to develop early detection networks. After ten years of development of EDDMapS, it has become clear that these local organizations are key to developing a successful early detection and rapid response network. The University of Georgia Center for Invasive Species and Ecosystem Health has released 15 smartphone apps to support data entry into EDDMapS. EDDMapS has been implemented in 47 states and 4 provinces.

Website for further information on the topic (if applicable):

www.eddmaps.org

Poster Trivia Question:

What is the name of the most popular smartphone app that reports data to EDDMapS and why is it named that?

Poster Title: Don't Move Firewood Campaign

Author(s): Leigh Greenwood

Name of Presenter on site: Leigh Greenwood

Email for Presenter: lgreenwood@tnc.org

Abstract: The Conservancy, in partnership with the Continental Dialogue, launched the national Don't Move Firewood educational and social media campaign in 2008 to address the problem of forest pests spreading to new areas via the movement of infested firewood. To date the Don't Move Firewood campaign and associated documentaries and partnering outreach efforts have reached tens of millions of people with important best practices and outreach messages. The program has also worked to launch targeted state-based campaigns with state and local partners in over 45 states.

Trivia Question:

Poster Title: Compatibility of Insecticides and Biocontrol for Emerald Ash Borer (EAB) in Urban Environments

Name of Presenter on site: John Kaltenbach

Email for Presenter on site: john.kaltenbach@state.co.us

Abstract (150 words or less): Introduced parasitoids of the emerald ash borer (EAB) *Agrilus planipennis* Fairmaire (Coleoptera: Buprestidae) are establishing in many states and parasitism rates are increasing as the density of EAB is declining. However, by the time populations of EAB are discovered, there are millions of EAB against which we are releasing thousands of parasitoids. This project is an evaluation of how insecticide treatments and releases of biocontrol agents interact to control EAB in urban environments. Some of the questions we hope to answer: Will the parasitoids establish and if so how long will it take? Can the parasitoids control EAB and keep ash trees alive? How quickly will the parasitoids move to new locations? Can insecticide treatments be discontinued earlier than planned? This is a multi-year study that includes parasitoid release and monitoring, and ash tree assessments of sentinel trees over time.

Website for further information on the topic (if applicable): none at this time

Poster Trivia Question: How many biocontrol release sites are being evaluated?

Author(s): Gary Lovett, Kathy Fallon Lambert, and Marissa Weiss

Poster Title: Non-Native Forest Insects and Pathogens in the U.S.: Impacts and Policy Options

Name of Presenter on site: Gary Lovett

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Abstract (150 words or less): We are leading a team of ecologists, economists, and policy experts in an initiative to review information on invasions of non-native forest insects and diseases in the US, including their ecological and

economic impacts, pathways of arrival, distribution within the US, and policy options for reducing future invasions. Non-native forest pests can effectively eliminate entire tree species or genera from US forests in the span of decades. The resulting shift in forest structure and species composition alters productivity and nutrient cycling and may degrade wildlife habitat. In urban and suburban areas, loss of trees from streets, yards and parks affects property values, shading, stormwater runoff, and human health. The economic damage from non-native pests is in the billions of dollars per year; the majority of this cost is borne by municipalities and residential property owners. We list policy options for addressing this issue, focusing on preventing the establishment of new pests.

Website for further information on the topic (if applicable): n/a

Poster Trivia Question:

How many new non-native insects become established in the U.S. each year, on average?

Author: USDA APHIS

Poster title: Hungry Pests Public Awareness Campaign

Name of Presenter on site: Abbey Powell

Email: abbey.powell@aphis.usda.gov

Abstract:

The 18 pests targeted by the USDA's Hungry Pests initiative are federally regulated invasive species whose introduction into the U.S. and spread within the country is assisted by the activities of the general public. These pests have the ability to cause significant harm to U.S. agricultural and environmental resources. Learn how to **Leave Hungry Pests Behind**.

Website: www.HungryPests.com

Trivia Question: Name three ways invasive species can be spread by people.

Author: USDA APHIS

Poster title: *Hungry Pests Invade Middle School!* Curriculum

Name of Presenter on site: Abbey Powell

Email: abbey.powell@aphis.usda.gov

Abstract:

The ***Hungry Pests Invade Middle School*** is a national standards-based curriculum focusing on top invasive pest threats. It is designed to provide opportunities for student-led and student-generated work to actively engage middle schoolers with their environment and communities.

Website: www.HungryPests.com/educators

Poster Trivia Question: How much does it cost to get the Hungry Pests curriculum?

Author: Jeanne Ring

Poster Title: Colorado Cooperative Agricultural Pest Survey, Forest Pest Survey 2015

Name of Presenter: Jeanne Ring

Abstract:

In 2015 the Colorado Cooperative Agricultural Pest Survey program received funding through a Cooperative Agreement with the United States Department of Agriculture to conduct a Forest Pest Survey. Thirteen target species were selected based on the availability of host material and suitable environmental conditions. Twenty trapping sites were identified across the state, fifteen along the Front Range and five along the Western Slope. Traps were installed in early May and regularly maintained through October. No positive detections of target species were found during the survey period. If funding is available in 2016 to repeat this survey, some trapping locations will change and a new target species will be added, the Velvet Longhorned Beetle, *Trichoferus campestris*. This pest requires black light traps, therefore five additional sites will be added to the survey.

Poster trivia question: What forest type accounts for the most acreage in Colorado?

Author(s): Tamara Sumner, William R. Penuel, Samuel Severance, Raymond Johnson, David Quigley

Poster Title: Inquiry Hub: Ecosystems: Digital curriculum for citizen science from a design research partnership

Name of Presenter on site: Samuel Severance

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Abstract (150 words or less): Inquiry Hub is a *design research partnership* between Denver Public Schools and a multidisciplinary research team that includes experts in science education, curriculum design, and educational technology from the University of Colorado Boulder and the University Corporation for Atmospheric Research. In design research partnerships, educators and researchers collaboratively design, build, and test solutions to persistent problems of practice. Together we are studying how next generation learning technologies can provide all students with opportunities to engage in personally relevant science that reflects the vision of *A Framework for K-12 Science Education*. Currently, Inquiry Hub is co-designing and testing a high school biology ecosystems unit that uses technology to engage students in community-based, citizen science initiatives around maintaining urban

forest ecosystems. Citizen science projects can promote student agency and authenticity and can expand students' sense of identification with science, which is a key aspect of inclusive science instruction.

Website for further information on the topic (if applicable): inquiryhub.dls.ucar.edu

Poster Trivia Question: How do students use the technological tool *EcoSurvey* to learn about their local urban forest ecosystem?

Authors: Piera Y. Siegert, Bryan Nowell, Mark Michaelis, Nathan McShinsky, Nathan W. Siegert

Poster Title: The Invasive Species Cannonball Run: A Case Study of Firewood Movement to the New Hampshire Motor Speedway

Email for presenter on site: Piera Siegert, piera.siegert@agr.nh.gov

Abstract:

Firewood transportation has been identified as a significant vector for dispersing invasive forest insects, such as emerald ash borer (EAB) and Asian longhorned beetle (ALB), greater distances than they could disperse through natural spread. New Hampshire has an out-of-state firewood quarantine generally prohibiting the importation of any tree material intended for use as fuel for fires to reduce the risks to its forest resources through firewood transportation. The New Hampshire Motor Speedway (NHMS) is a popular camping and recreational destination for people from across North America, making it a prime candidate for firewood outreach activities. New Hampshire Forest Rangers in coordination with the NHMS and state and federal agencies conducted firewood quarantine checkpoints at the NHMS in 2013 and 2014. The checkpoints highlighted the distance that recreational firewood is moved and were a model of an effective outreach partnership between private industry and state and federal government.

Poster trivia question: Firewood likes to come to New Hampshire for the big races, especially on cold September nights. From which state(s) did it travel the furthest?

Author(s): Daniel Stern and Annemarie Nagle, Plant Protection Program, American Public Gardens Association

Poster Title: Plant Heroes: Engage Students in Protecting Plant From Serious Pests and Diseases

Name of Presenter on site: Daniel Stern

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Abstract (150 words or less): Preparing today's youth to be the next generation of "First Detectors" is the key to limiting the damage caused by serious plant pests and diseases in the future. The American Public Gardens Association has developed the Plant Heroes program to educate young audiences about the importance of plants and forest health and engage them in protecting the trees in their communities. Plant Heroes uses creative story-telling to illustrate that kids can be a part of the solution; offers a wealth of online interactive learning resources and provides a mechanism for students to start practicing citizen science by identifying and mapping trees in their community. The program also houses a curriculum hub of lesson plans that educators can filter by age, subject, skills and learning standards to integrate the Plant Heroes program into their curriculum as well as downloadable activity books and field guides to enrich the learning experience.

Website for further information on the topic (if applicable): www.plantheroes.org

Poster Trivia Question: Who is the Plant Heroes' "Hero Helper"?

Authors: Bill Toomey, The Nature Conservancy

Email for presenter on site: btoomey@tnc.org

Title: Healthy Trees, Healthy Cities

Abstract: The Nature Conservancy's Healthy Trees, Healthy Cities initiative seeks to protect the health of our nation's trees, forests, and communities by creating a culture of stewardship that engages people in the planting and care of urban trees. : We strive to maintain healthy urban trees through a suite of strategies and actions designed to improve their long-term health and to address the threat that non-native insects and diseases pose to urban forests. Together with local, regional, and national partners, we strive to improve the health, diversity, and sustainability of urban forests and facilitate their regeneration and resiliency.

Trivia Question: What percentage of our nation's trees are in urban landscapes?

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Authors: Andrea Torrice

Title: Trees in Trouble

Abstract: Trees in Trouble a documentary Video and Web resource | produced by award winning filmmaker Andrea Torrice 30 minutes.

Trees in Trouble: saving America's urban forests is a new documentary film that explores the rich history and importance of our community forests, as well as examines some of the new threats they now face from invasive pests. Through stories of everyday people on the frontlines of change, the film demonstrates how community-wide efforts can help save and protect our community forests for future generations. Airing on nationally public television stations spring, 2016. For more info go to: www.treesintrouble.com

Poster trivia question:

What is the estimated number of Ash trees in the United States?