# Integrated pest management Integrated pest management



June 2021: Volume 18, Issue 1



#### June 2021 Volume 18, Issue 1

#### Inside

- Spotted Lanternfly Updates — 3
- Northeastern IPM Center Announces Recipients of 2021 Partnership Grants — 4
- Call for Submissions and Photos 4
- Center Virtual Conference Presents Overview of Current IPM Projects — 5
- NIPMCC Releases Whitepapers Backing IPM Support, Investment — 5
- Tracy Leskey Named Scientist of the Year for Brown Marmorated Stink Bug Research — 6

Contact Us 607-255-8815 northeastipm@cornell.edu

# Northeastern IPM Center Names Maggie Lewis, Kathy Murray Recipients of 2020 Award

Award recognizes accomplishments in IPM by students, professionals

he Northeastern Integrated Pest Management (IPM) Center has announced the two recipients of its 2020 *Outstanding Achievements in Integrated Pest Management Award*: Kathy Murray, IPM program coordinator for the Maine Department of Agriculture, Conservation, and Forestry (DACF); and Maggie Lewis, PhD candidate in the University of Maryland, College Park, Department of Entomology.

The annual award, launched in 2019, recognizes individuals

or organizations whose work on IPM in the Northeast deserves special recognition, with a goal of honoring one professional (or organization) and one student each year. Nominations come from peers whose work relates to IPM in various capacities. Each winner receives \$500 and agrees to provide a story and/or host a webinar for the Center.

The Center presented the awards virtually this year, largely due to the COVID-19 pandemic.

"We were pleased to receive such an enthusiastic response to our call for nominations," said Deborah G. Grantham, Center director. "The glowing testimonials make it clear that Kathy Murray and Margaret Lewis have both distinguished themselves and earned widespread recognition for their work on critical pest-management issues—Murray as an experienced professional, and Lewis as a graduate student just starting her career."



Kathy Murray using giant cockroaches to engage youth and families in learning about integrated pest management. Photo provided by Kathy Murray.

#### About This Year's Winners

#### Professional Honoree: Kathy Murray

Over the course of her twenty-plus-year career, Kathy Murray has earned recognition for her work on many specific pests. She has developed improved methods for managing filth flies and beetles in livestock operations and performed mosquito monitoring with Maine's vector-borne disease working group to reduce outbreaks of West Nile virus and eastern equine encephalitis.

But she is perhaps best known for her work in school IPM. Since 2002, when Maine's Board of Pesticides Control instituted rules that required schools to practice IPM, Murray has developed and provided extensive guidance and training materials to help

See "Award" on Page 2

#### Award Continued from Cover Page

school personnel effectively understand and incorporate IPM into their broad range of operations.

Outside the region, Murray has also worked on national materials, managed grants, and been published by the EPA.

"I have had the great fortune to find work I love and the support of mentors and colleagues," said Murray. "I am truly honored and humbled to receive this recognition for our efforts to advance IPM to protect people, the environment, and our food and fiber supply."

In her nomination materials, Murray was described as a "tireless teacher and advocate" who "has always gone well beyond the call of duty, always available to lend a hand for any IPM effort."

#### Student Honoree: Maggie Lewis

At the time of her nomination, Maggie Lewis was still a graduate student, working under the



Maggie Lewis speaking about her research on spray coverage in caneberries to an audience of growers, extension agents, and university researchers at the Western Maryland Research and Education Center Horticultural Twilight Meeting and Tour. Photo by Susan Barnes/University of Maryland Extension.

guidance of Kelly Hamby, associate professor and extension specialist in the University of Maryland, College Park, Department of Entomology. She defended her PhD in March and graduated in May.

Lewis's doctoral work has focused on spotted wing drosophila (SWD), a significant pest of soft-skinned fruit crops that, at this time, is best controlled through pesticides. Her work has laid the foundation for developing alternative tactics and improving management practices.

Lewis has invested time and energy not just in research, but also in relationship-building with stakeholders including growers, professional societies, and extension personnel, seeking to get constituents engaged in the process of developing and implementing IPM methods to control SWD.

Though still a student herself, Lewis has shared her knowledge and enthusiasm for IPM by mentoring undergraduate researchers. She has also been published multiple times, obtained \$81,000 in competitive research grants, and been invited to speak at multiple symposia.

"I have been really fortunate to work alongside and learn from a great group of people, and to find a career that I love," said Lewis. "I was initially drawn to the field of entomology because of the applied-pest-management aspect, and I look forward to continuing

# to work with stakeholders to advance new and more sustainable IPM programs."

Lewis's nominations expressed confidence that she is "well positioned to advance the field of IPM" and is "passionate about IPM research and education."

"The glowing testimonials make it clear that Kathy Murray and Margaret Lewis have both distinguished themselves and earned widespread recognition for their work on critical pest-management issues." – Deborah G. Grantham, director, Northeastern IPM Center

#### Read More

For more information about the *Outstanding Achievements in IPM Award* including details about who is eligible to nominate candidates or receive the award and the types of accomplishments considered worthy of recognition—see this year's call for nominations at neipmc.org/go/RERJ.

Look for the 2021 call for nominations to be released in spring or summer 2021.

# **Spotted Lanternfly Updates**

By Nancy Cusumano

Ithough efforts to develop management techniques to control the invasive spotted lanternfly (SLF) are well underway—including current work funded by a USDA Specialty Crop Research Initiative grant awarded in 2019—as expected, the pest's presence and influence have continued to spread.

Since fall of 2020, there have been a number of finds—not always indicating established populations, but generally illustrating the pest's penchant for spreading, particularly with inadvertent human assistance.

#### **Recent Timeline**

#### October 2020

Last October, two dead SLF individuals were found in Massachusetts and egg masses were found in Maine. Both had been transported in on plant material that originated in Pennsylvania. The egg masses were empty and presumably had hatched in Pennsylvania, not in Maine.

Live populations were discovered in New Canaan and Greenwich, Connecticut, and in Jefferson County, Ohio, along the Ohio River and adjacent to the known western Pennsylvania population in Beaver County.

The SLF map maintained by the New York State IPM Program was updated to reflect infestations in these Connecticut and Ohio counties, in addition to Washington County in Maryland.

#### November 2020

In November, a population was discovered in Ithaca, NY, by an entomology undergraduate student. Adults and egg masses were discovered around the parking area of a student apartment complex. Once 2021 arrived, a springtime removal of trees in the vicinity was conducted to stop any undiscovered egg masses from hatching.

Dead adults were found in Michigan, but there remain no known live populations. The dead adults arrived on freight or trucks from infested areas.

In New York, large infestations were found in Orangeburg, Port Jervis, and Staten Island.

The map was updated to include Tompkins, Orange, and Rockland Counties, as well as Staten Island, Brooklyn, and Queens in the New York metropolitan area. Also added was Mineral County in West Virginia.

Also this month, Brian Walsh, a Penn State Extension horticulture educator in Berks County, PA, presented a webinar—*Spotted Lanternfly: Impacts and Strategies for Ornamental Plants*—a useful overview of this pest and its implications. Visit www.hriresearch.org/thrive-web-series to view this and other webinars in the Horticultural Research Institute *tHRIve* web series.

#### January 2021

Berkley County, in western Maryland, was added to the map. There also were dead individuals discovered in three North Carolina counties.



#### February 2021

In February, Virginia expanded its quarantine area by two more counties, Warren and Clarke.

Several New Jersey counties were added to the map, reflecting that most of the state is now infested.

#### March 2021

Pennsylvania added eight more counties to its quarantine, painting a swath westward across the whole state. The counties added were Cambria, Cameron, Franklin, Lackawanna, Montour, Pike, Wayne, and Westmoreland. These counties are not completely infested but have some municipalities with known infestations.

The 2021 Spotted Lanternfly Summit was held virtually over the course of three full days, featuring presentations on new research, extension, and communications efforts and outreach to stakeholders and industry.

Visit StopSLF.org to watch the summit presentations. Also available to view is the recording of *Spotted Lanternfly 101*, a presentation and Q&A session held the week before the summit and intended to provide attendees with foundational SLF knowledge key to deriving maximum benefit from the summit.

#### Resources

**Stop SLF** (www.stopslf.org)—The USDA SCRI-funded project to research and develop control methods for spotted lanternfly, maintained by the Northeastern IPM Center.

#### Penn State Extension: Spotted Lanternfly (extension.psu.edu/spotted-

lanternfly)—Penn State was the lead institution on the 2018 Northeastern IPM Center-funded working group that laid the groundwork for the USDA SCRI grant, and the grant's project director, Julie Urban, is an associate research professor at Penn State.

# Northeastern IPM Center Announces Recipients of 2021 Partnership Grants

#### Annual grant program supports IPM research and extension in the Northeast

 he Northeastern Integrated Pest Management (IPM) Center has announced the recipients of its 2021 Partnership Grants.

Each year, through a competitive request-for-applications (RFA) process, the Center's IPM Partnership Grants Program distributes roughly \$200,000 in funding to projects that further the mission of the Center, address or identify IPM priorities for the Northeast, and benefit the region at large.

Each funded project falls under one of three categories: **applied research**, **communications**, and **working groups**.

This Year's Funded Projects

#### **Applied Research**

Early season soil applications of entomopathogenic nematodes in high-tunnel IPM (Anna Wallingford, University of New Hampshire)

Evaluation of a grower-friendly attract-and-kill system for the brown marmorated stink bug, *Halyomorpha halys* (Jaime Pinero, University of Massachusetts)

#### Communications

Promoting IPM practices for improved perennial forage management on owned and rented land in the Northeast (Kristin Williams, University of Vermont)

#### Working Groups

Municipal rodent IPM (Matt Frye, Cornell University)

Next-generation support for Northeast tree fruit IPM (Terence Bradshaw, University of Vermont)

#### About the Program

Learn more about the IPM Partnership Grants Program by visiting neipmc.org/go/bfgs.

For those interested in seeking funding through the program, the Center will release an RFA for the 2021 round of grants sometime this fall.



# Call for Submissions and Photos

Do you have IPM-related news or an IPM story to tell? We value the perspectives of growers, implementers, policymakers, and others on the front lines of pest management, and we welcome guest submissions for future newsletter editions.

Whether you'd like to write something new for us or submit something you've already had published elsewhere given reprint permission from that publication—we want to hear from you!

Do you have high-quality photos of pests, pest damage, pest-management methods, or people demonstrating IPM practices? Your images could help us tell the story—and promote awareness—of current and emerging pest- and pest-management issues.

If we use your photos, they could appear in any of our channels or collateral, including newsletters, brochures, websites, and social media, and you'll be credited as the photographer.

Please visit neipmc.org/go/ ncfs for more information.



Image credits – stink bug nymphs: Gary Bernon, USDA APHIS, Bugwood. org; pears: Keith Weller, USDA Agricultural Research Service, Bugwood.org; mouse: Ed Freytag, City of New Orleans, Bugwood.org; blacklegged tick: Scott Bauer, USDA Agricultural Research Service, Bugwood.org; tarping: Sonja Birthisel, University of Maine.

# **Center Virtual Conference Presents Overview of Current IPM Projects**

n March 31, 2021, the Northeastern IPM Center hosted the latest installment of the Northeast IPM Research Update Conference. The purpose of the conference was to increase collaboration and awareness of current IPM-related research and extension in the Northeast, using an accessible, engaging format. The conference delivered brief overviews of project highlights through five-minute prerecorded presentations followed by live Q&A with the presenters.

Featured projects included those funded by the Center's Partnership Grants Program, the Northeast Sustainable Agriculture Research and Education (NE SARE) Program, and USDA-NIFA's Applied Research and Development Program (ARDP) and Extension Implementation Program (EIP).

#### Presenters

- Sam Anderson, Urban Agriculture Specialist, Cornell Cooperative Extension
- Terence Bradshaw, Research Assistant Professor, University of Vermont

- Amara Dunn, Biocontrol Specialist, New York State IPM Program
- John Inguagiato, Associate Professor, University of Connecticut
- Daphne Munroe, Associate Professor, Rutgers University
- David Owens, Extension Specialist, University of Delaware
- Mahfuz Rahman, Associate Professor & Extension Specialist, West Virginia University
- Joseph Roberts, Assistant Professor & Extension Specialist, Clemson University (discussing work performed during previous assistant professorship at University of Maryland)
- Kim Skyrm, State Apiarist, Massachusetts Department of Agricultural Resources
- Lisa Tewksbury, Research Associate, University of Rhode Island
- Changlu Wang, Extension Specialist, Rutgers University
- Veronica Yurchak, Graduate Student, University of Maryland

#### Read More

To view the conference agenda or watch the recording, visit neipmc.org/go/tSES.

### **NIPMCC** Releases Whitepapers Backing IPM Support, Investment

#### New issue papers discuss role of IPM in combating resistance and invasive species, safeguarding food supply, and minimizing economic losses

he National Integrated Pest Management Coordinating Committee (NIPMCC) has released a series of whitepapers explaining how pests threaten the security of the U.S. food supply, how an IPM approach offers the most effective means of managing pests, and why ongoing investment in IPM research and extension is critical to keeping pace with the ever-evolving nature of these threats.

- U.S. Agriculture Is Vulnerable to Weeds, Diseases, Insects and Other Pest Threats: An overview of both the importance and fragility of American agriculture, its economic significance, and its specific vulnerability to pests.
- The Growing Threat of Pests Resistant to Pesticides and Other Management Tactics: An explanation of pest resistance and how it develops, why traditional management methods are vulnerable to resistance, and how IPM undercuts the mechanisms by which resistance develops while offering alternate methods to control already-resistant pests.
- Invasive Pests: A \$120 Billion-a-Year Threat to America's Farms and Lands: A primer on invasive pests and the unique management challenges they pose—and the economic damage they cause—by

5



enjoying free rein in novel environments that lack the natural control agents often present in their native habitats.

#### About the NIPMCC

The National Integrated Pest Management Coordinating Committee (NIPMCC) is a committee of the Experiment Station Committee on Organization and Policy (ESCOP) and the Extension Committee on Organization and Policy (ECOP) within the Association of Public and Land-grant Universities (APLU) governing structure.

It assists in development of reports and strategic plans on pest management issues and pursues activities that facilitate coordination and collaboration nationally among and between IPM research and extension at the land-grant universities, and between the land-grants and federal agencies involved in IPM.

Learn more at escop.info/committee/nipmcc/.

# Tracy Leskey Named Scientist of the Year for **Brown Marmorated Stink Bug Research**

he USDA's Agricultural Research Service (USDA-ARS) has named Tracy Leskey among its Scientist of the Year honorees, citing her work in developing management strategies against the invasive brown marmorated stink bug (BMSB). Leskey is research leader and director at the USDA-ARS Appalachian Fruit Research Station in Kearneysville, WV.

The Northeastern IPM Center has a long history of collaborating with Leskey, who was project director of the BMSB working group originally funded through the Center's Part-

nership Grants Program in 2010. That group laid the groundwork for a much broader BMSB project funded through the USDA's Specialty Crop Research Initiative (SCRI) since 2011. Leskey remains one of six co-directors of that project.

Leskey has also played a key role in the coordinated response to a more recent invasive pest, the spotted lanternfly (SLF). In 2018, the Center funded an SLF working group. The following year, the group



leveraged its initial accomplishments to earn an SCRI grant of its own, with Leskey as one of seven co-directors.

Tracy Leskey has built a distinguished career researching sustainable management strategies against some of the most damaging invasive pests to arrive in the U.S. in recent history. The Northeastern IPM Center congratulates Leskey for this well-deserved recognition.

To learn more about the USDA-ARS awards, including this year's other recipients, see the official announcement at neipmc.org/go/pCDt.

#### Credits

IPM Insights: Deborah G. Grantham, Director; Mike Webb, Editor; Kevin Judd, Designer. Northeastern IPM Center: Nancy Cusumano, Deborah G. Grantham, Jana Hexter, Kevin Judd, David Lane, Susannah Reese, Mike Webb.



The Northeastern IPM Center is supported by the National Institute of Food and Agriculture, Crop Protection and Pest Management, Regional Coordination Program, Grant #2018-70006-28882.

flic.kr/p/fEcLmK (CC BY-SA 2.0). Photo by Lynn Ketchum, Oregon State University, A brown marmorated stink bug teeds on a red pepper plant.

> Ithaca, NY 14853 Cornell University



340 Tower Road