

# Northeastern IPM Center



## Annual Report

2024

## From the Director

The Northeastern Integrated Pest Management Center (the Center) is one of four regional integrated pest management (IPM) centers that cover the country, providing leadership, networking, partnership-building, and funding aimed at expanding the efficacy and practice of IPM.

The Center is based at Cornell University, within Cornell Cooperative Extension Administration, and serves the 12 states of the Northeast and the District of Columbia.

All four centers receive core funding on a four-year cycle through the Crop Protection and Pest Management (CPPM) line of the United States Department of Agriculture's National Institute of Food and Agriculture (USDA-NIFA) budget. Our most recent award began October 2022.

The Center supplements that funding with participation on proposals developed by partners working on IPM issues. In the past eight years, the Center has participated in three USDA-NIFA Specialty Crop Research Initiative awards: one on brown marmorated stink bug (BMSB), one on spotted lanternfly (SLF), and one on corn earworm in sweet corn. The BMSB and SLF proposals were outcomes of working group awards from the Center to key researchers on these issues, helping them leverage the additional funds. We are regularly invited to participate in proposals by our partners and anticipate additional funding in the future.

The CPPM line also funds the Extension Implementation Program (EIP), which supports the state IPM programs, and the Applied Research and Development Program (ARDP), through which researchers can seek funds.

The state IPM program coordinators, based at land-grant universities in the Northeast, are members of a USDA-approved multistate project, NEERA-2104, as is the Center. NEERA-2104 provides an additional structure for networking, collaborating, and reporting on IPM activities in the Northeast. The Center provides logistical support to NEERA-2104 and reports out to the group on its own activities.

The topics and programs highlighted in this report illustrate the impact of the Center on the study and implementation of IPM through our activities in 2024. Funding distributed through our Partnership Grants Program, support through web development and communications networks, and educational events such



**Deborah G. Grantham**, Director,  
Northeastern Integrated Pest  
Management Center

as our *IPM Toolbox* webinar series have resulted in leveraged additional funding, stronger collaborations, and greater visibility for the work being conducted in the Northeast.

The 1-to-15 return-on-investment ratio for completed projects from 2018 to 2024 highlights the efficacy of collaborations, helps partners address current IPM topics in the Northeast and beyond, including impacts on human well-being and health, facilitates dissemination of knowledge, and provides seed funding for project directors to leverage into additional funding.

Pest management in specialty crops is very important in the Northeast with its wide variety of vegetable and fruit crops and small farms. To support these agricultural crops, we fund projects focused on specialty crop issues, including:

1. A 2023 project, *Evaluation of Insect Exclusion Screens on Pests and Biocontrol Agents in Commercial High Tunnels*, Dr. Carlos Quesada, West Virginia University, is investigating the efficacy of exclusion netting, including cost, as a mechanical IPM method for high tunnel and organic farmers.
2. Also awarded in 2023 was a project, *Weed Management Decision Making for Wild Blueberry Growers in Maine*, Dr. Lily Calderwood, University of Maine System, that will develop knowledge and efficient methods for tracking weed occurrence and expansion in wild (low bush) blueberries.

The Northeastern IPM Center has expertise in community IPM and recognizes the great need for IPM in housing and other community spaces and structures. In 2024, we funded *Distribution and Frequency of Anticoagulant Rodenticide Resistance among Commensal Rodents in the Northeastern U.S.*, Dr. Changlu Wang, Rutgers University, to address the issue of rodenticide resistance to improve rodent control methods.

Susannah Krysko, manager/coordinator of the StopPests in Housing Program, conducted on a national level with funding from the U.S. Department of Housing and Urban Development (HUD) since 2007, has teamed up with the New York State IPM Program to focus on developing and delivering IPM education and training to affordable housing managers in New York State. Center employee Susannah Krysko is working directly with the New York State IPM Program to develop a state-specific program. The arrangement allows her to expand her audiences beyond HUD-subsidized housing.

An important partner of all four Regional IPM Centers is the National Plant Diagnostic Network (NPDN, [www.npdn.org](http://www.npdn.org)). The NPDN is a consortium of plant-disease diagnostic labs. Its mission is to support plant health and biosecurity in U.S. agricultural and natural ecosystems by providing expert diagnostic capacity, communication, coordination, and quality pest and disease diagnostic information. Dr. Alicyn Smart, University of Maine, is the Northeast NPDN director, the national NPDN executive director, and serves on the Center's Advisory Council. Please visit [neipmc.org/go/jCNf](http://neipmc.org/go/jCNf) for more information on the NPDN.

The NPDN 2024 annual meeting was held in Portland, Maine, in September 2025. The Regional IPM Centers participated in the conference and I was pleased to be able to attend the conference. It provided me with new insight on the NPDN and IPM issues and was an excellent opportunity to network. In addition, I attended several workshops including a fascinating tour of wild blueberry operations led by Dr. Lily Calderwood. Dr. Calderwood is a recipient of one of our Partnership Grants to develop improved weed management in wild blueberries.



A view of wild blueberry operations in Portland, Maine.

A major effort in 2024 was a by-invitation conference on pest management in a changing environment, with Dr. Martin Draper, Kansas State University emeritus, leading the effort. Held in Washington, DC, in December 2024 and including scientists and practitioners across a range of agricultural pests, the group identified current and emerging issues that are critical to a secure and resilient food supply. A deliverable will be a publication on the discussion and recommendations.

Beginning in 2023 and throughout 2024, the Center has participated in planning the *11th International IPM Symposium* that will take place in March 2025. The program is exciting and the strong registration numbers leading up to the conference are an indication of the interest and need for the opportunities to network and exchange knowledge ([ipmsymposium.org/2025/](http://ipmsymposium.org/2025/)).

The team is close knit and our roles are highly complementary, with Jerrie Haines as program/extension aide, Jana Hexter as grants manager, Kevin Judd as web administrator, Susannah Krysko as coordinator/manager of the StopPests Program, David Lane as evaluator, and Mike Webb as communicator.

Immediate partners include the northeastern state IPM program coordinators, our Advisory Council, USDA-NIFA, the other Regional IPM Centers, Northeast SARE, other state and federal agencies, and private-sector experts and practitioners. The work could not be accomplished without these partners, but the Center plays a critical role in bringing together many collaborators to build effective and strong networks.

Please contact us ([www.northeastipm.org/about-us/contact/](http://www.northeastipm.org/about-us/contact/)) for more information or if you would like to know how to be involved.

Deborah G. Grantham  
Director, Northeastern Integrated Pest Management Center

## Results and Impacts

### Partnership Grants and Leveraged Funding

Projects funded through the IPM Partnership Grants Program frequently serve as catalysts for larger-scale research and implementation efforts. Project directors and their teams often build on their Center-funded projects to successfully compete for larger grants, amplifying the impact of the initial investment and driving further innovation in integrated pest management (IPM).

Through this leveraged-funding approach, considering the Center's last complete funding cycle 2018–2022



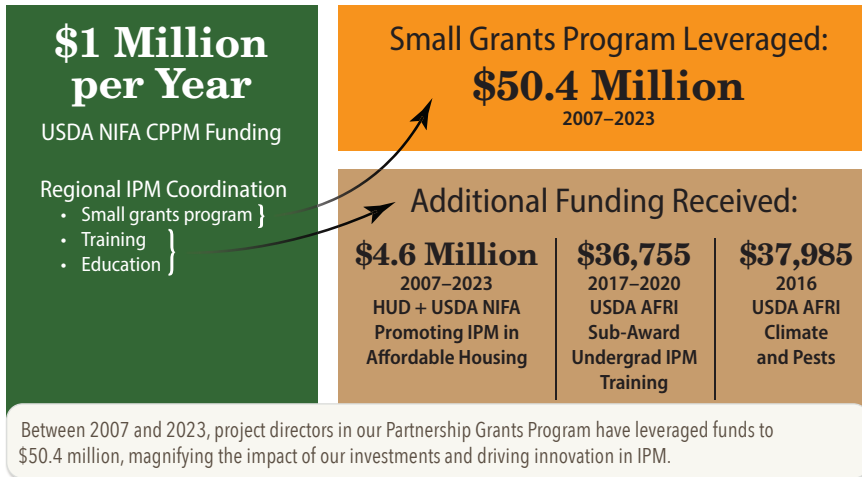
plus the data available so far for completed projects in 2023 and 2024, Partnership Grant recipients have used \$1,104,079 in Center funding to leverage over \$15,889,546 in additional funding for the project directors, their partners, and their institutions. This represents an approximate 1-to-15 rate of return. This 2018–2024 aggregate data is current as of March 2025. These numbers are subject to change as final reports continue to be submitted. In some years, the return on investment has been particularly striking: 1-to-25 in 2018 and 1-to-23 in 2021.

### Case Studies in Leveraged Funding

The power of leveraged funding is vividly illustrated by IPM projects that started as Center-funded initiatives and successfully secured significant additional funding. “Early Season Soil Applications of Entomopathogenic Nematodes in High Tunnel IPM” (University of New Hampshire, 2021 – funded \$49,798; leveraged \$3,704,495) demonstrates this impact. \$3.7 million of additional funding was acquired due to the data and results from this Northeastern IPM Center-funded project. In other words, for every \$1 received from the Center, \$74 were awarded to the project director for an additional USDA grant, “Optimizing Pest Management in High Tunnels to Increase the Resiliency of Local Food Systems.”

This project also highlighted the economic advantages and grower willingness to adopt biological controls. While typically about 25% of growers use biological controls in high tunnel systems, 57% of those affected by cutworms indicated plans to adopt entomopathogenic nematodes (EPNs) after learning about their potential effectiveness. One tomato farmer in the study lost more than 50% of their transplants to cutworms, amounting to an estimated \$22,500 loss over two weeks of production. With a maximum cost of \$100 per tunnel, a preemptive EPN application could provide a low-cost investment with significant profitability gains, underscoring the need for further economic cost-benefit analyses.

## Northeastern IPM Center Leveraged Funding **\$55.1 Million**



Another example is “A Systems Approach to Developing IPM for Cattle Producers in the Northeast; Social, Environmental, and Economic Analyses” (University of Vermont, 2022 – funded \$53,741; leveraged \$2,397,596). This project secured additional funding from USDA-NIFA’s Organic Agriculture Research and Extension Initiative for a grant titled “Enhancing the Viability of Grass-Fed Dairy Production in the U.S. through Comprehensive Research and Extension.”

Similarly, a project focused on the invasive spotted lanternfly illustrates the power of this approach. What began as Center-funded working group (2018 – funded \$9,995) later secured large-scale Specialty Crop Research Initiative funding from USDA-NIFA (\$7,300,000) to advance their work, demonstrating the Center’s role in incubating critical research that attracts major federal investment for food security.

### Common Measures

The Center played a leading role in developing common reporting measures adopted across all four Regional IPM Centers to enhance evaluation efforts for USDA-NIFA’s Crop Protection and Pest Management (CPPM) program. These measures were integrated into the new Regional IPM Centers’ grant-management system, launched in 2021.

We have begun receiving final project reports that allow us to start measuring aggregated outcomes for the Regional Coordination Program (RCP), which funds the IPM Centers. These common measures can also be used to compare and aggregate results across the Applied Research and Development Program (ARDP) and Extension Implementation Program (EIP).

One key example of the implementation of common measures is the data gathered from project reports submitted between September 1, 2023, and March 1, 2025, in our new Grants Management System. These reports provide real-time insights into project reach, funding secured, and knowledge dissemination, as demonstrated in the Outreach and Outputs section below.

### Outreach and Outputs, 2024

The Partnership Grants Program has significantly expanded the reach and impact of IPM research and extension efforts. By funding innovative projects, we have engaged thousands of stakeholders, generated valuable educational materials, and facilitated knowledge-sharing across various platforms.

- **Total Number of People Reached:** 12,315
- **Total Funding Secured:** \$2,934,185

### Products by Type

- Workshops: 4
- Extension or Other Presentations: 3
- Videos: 3
- Podcasts: 1
- Other Products: 11
- Webinars: 3
- Conference Presentations: 3
- Tours: 2
- **Total: 30**

### Publications by Type

- Extension Publications: 2
- Other Publications: 4
- Thesis/Dissertation: 1
- Journal Articles: 1
- **Total: 8**

These outputs demonstrate the program’s role in advancing IPM education, fostering community engagement, and equipping growers and researchers with actionable insights to improve pest management strategies.

### Impact Statements

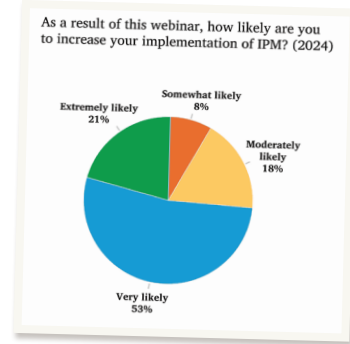
The Center continues to develop and update impact statements to illustrate the real-world benefits of our funded projects. These impact statements are publicly available at [neipmc.org/go/impacts](https://neipmc.org/go/impacts).

A template is also available on the website to help extension educators and researchers document and communicate their IPM project impacts effectively.



## IPM Toolbox Webinar Polling

The impact of the *IPM Toolbox* webinar series is evaluated through participant polling. In 2024, responses to the post-webinar poll question, “As a result of this webinar, how likely are you to increase your implementation of IPM?” were particularly promising, with a substantial majority of respondents indicating they were “extremely likely” (21%) or “very likely” (53%) to do so.



## IPM News and Events Roundup

Our weekly *IPM News and Events Roundup* continues to serve as a valuable resource for professionals across the Northeast and beyond. Recipients frequently praise the newsletter for its comprehensive information and the diverse opportunities it highlights for researchers, extension professionals, and agricultural stakeholders.

“I think you are doing an excellent job with the *IPM News and Events Roundup*. I suspect it is a lot of work to put it together each week, yet I always find it to be interesting, diverse, and thoroughly informative. It is the one list-serve digest-type email I get that I actually read from top to bottom. Keep up the great work—it is much appreciated!”

— Richard G. Smith,  
University of New Hampshire

## IPM Adoption Survey

A nationwide IPM adoption survey conducted by the Center in 2021 has continued to inform new projects and deliverables. The survey results, categorized into IPM adoption drivers and barriers, IPM education and training, IPM impacts, and regional center contributions, have led to several key developments:

- A poster, *IPM Adoption Perspectives from the Regions: Barriers and Recommendations*, presented at the *10th International IPM Symposium*.
- A research article, “IPM Adoption and Impacts in the United States,” published in the *Journal of IPM* in 2023.
- Building on this work from 2023, we refined our 2024 RFA to prioritize projects incorporating economic analyses, adding extra points for proposals that demonstrate the cost-benefit advantages of IPM adoption.
- A standardized reporting questionnaire, developed as a result of the previous IPM adoption survey, systematically tracks IPM adoption, impacts, and activities from state IPM coordinators at regional annual meetings (e.g., NEERA-2104, SERA-03, NCERA-222, WERA-1017).

## Additional Efforts

- We continue to collaborate with evaluation experts to analyze USDA National Agricultural Statistics Service (NASS) Chemical Use Survey data and other relevant datasets to assess the impact of IPM adoption on agricultural sustainability and productivity.
- Responses to our publications and communications continue to be tracked to gauge engagement and influence.
- Partnership Grant proposals are assessed not only for their scientific merit but also for their potential impact in changing knowledge, attitudes, skills, and aspirations, as well as their inclusion of economic analyses demonstrating the cost-effectiveness of IPM.
- We actively mine Partnership Grant final reports for new tools, approaches, and methodologies that enhance IPM implementation and effectiveness.

These collective efforts underscore the importance and impact of continued federal funding for USDA-NIFA-supported IPM initiatives, demonstrating a strong return on investment and tangible benefits for agriculture, public health, and environmental sustainability.

## Regional IPM Reporting Survey Development

The IPM Extension and Research Activities (-ERA) reporting survey systematically tracks IPM adoption, impacts, and activities at state, regional, and national levels. Each region of the country has a corresponding IPM -ERA network (NEERA-2104, SERA-03, NCERA-222, and WERA-1017). Conducted by the Regional IPM Centers, this standardized reporting process enhances evaluation efforts, informs strategic decision-making, and supports comparative analysis across regions. Developed as a result of the previous IPM adoption survey, it also facilitates reporting for each region’s chair in the NIMSS reporting system by generating a report with live, real-time data dashboards, as well as impact statements that comprehensively document IPM adoption and outcomes. By providing consistent data, it helps assess IPM implementation trends, identify challenges, and guide future research and extension priorities.

## Advancing IPM Evaluation and Comparative Analysis

A key step in strengthening IPM impact assessment was the drafting of “Comparing IPM Approaches: European Union vs. United States” for submission to the *Journal of IPM*. This comparative analysis allowed us to learn lessons from both continents and explore new metrics for evaluating IPM more effectively, such as Eco-Efficiency.

Building on these insights, we developed the “IPM Evaluation Training Series for Extension,” a comprehensive nine-course series launching in 2025. This training series explores the fundamentals of IPM evaluation, including methodologies for calculating Total Applied Toxicity and Eco-Efficiency, alongside cost-benefit analyses for IPM adoption.

## Outstanding Achievements in IPM Award

The Northeastern IPM Center launched the *Outstanding Achievements in Integrated Pest Management Award* in 2019 and has offered it most years since then.

The award honors those whose work on IPM in the Northeast deserves special recognition. Professionals (or organizations) and students are eligible. Nominations come from colleagues, advisors, supervisors, and others familiar with the nominees' work. External reviewers with expertise in IPM evaluate the nominees.

Each winner receives \$500 and agrees to provide a story and/or a webinar presentation for the Center.

Typically, the Center opens a call for nominations in summer or fall and announces winners the following year.

### Criteria for Nomination

The award seeks nominations of growers, consultants, researchers, educators, managers, and college/university students (undergraduate, master's, and PhD) in the Northeast region who are working in:

- Agricultural IPM (fruit, vegetables, ornamentals, and livestock and field crops)
- Affordable housing
- Homes
- Schools and institutions
- Natural-areas/water-resources IPM
- Invasive species

The award recognizes effort in:

- Developing new IPM tools
- Implementing or evaluating IPM methods in their operations, businesses, or organizations
- Encouraging demonstrations and adoption of IPM
- Promoting IPM and bolstering the adoption of IPM practices
- Educating others about IPM
- Collaborative efforts

Accomplishments might include impressive research results, technical presentations, posters, reviewed publications, extension publications, or exemplary work with stakeholders such as growers or building managers.

### Qualifications to Nominate

Those submitting nominations must be growers, consultants, researchers, educators, or managers working in IPM. A co-nomination with someone who meets those criteria is also permitted. To nominate a student, one must be a member of the research or extension faculty at the student's university. Self-nominations and nominations from students cannot be accepted.

### 2024 Winners

Three winners were chosen for 2024:

- **Dion Lerman**, Environmental Health Programs Specialist, Pennsylvania State IPM Program, Penn State Extension
- **Brian Nault**, Professor and Program Leader, Department of Entomology at Cornell AgriTech, Cornell University
- **Victoria Wallace**, State Extension Educator of Sustainable Landscapes and IPM Team Leader, University of Connecticut

### Additional Information

For more information about the *Outstanding Achievements in IPM Award*—including details on eligibility, criteria, and the nomination process—visit [neipmc.org/go/ApbM](https://neipmc.org/go/ApbM).

*We note with sadness the passing of Dion Lerman in October 2024. He was instrumental in designing and piloting the IPM in Multifamily Housing training materials and partnered with StopPests in Housing since its inception to deliver IPM training across the country. From Washington, DC, to rural Native American tribes in South Dakota, Dion transformed lives and made the spaces we live and work in healthier. He was a valued colleague to many at the Northeastern IPM Center and will be greatly missed.*



Dion Lerman



Brian Nault



Victoria Wallace

## IPM Partnership Grants

Each year, the Northeastern IPM Center distributes funding through its IPM Partnership Grants Program. IPM Partnership Grants projects must foster the development and adoption of IPM, address or identify regional priorities, and benefit the northeastern region at large.

Through a competitive request-for-applications (RFA) process, the program distributes funding to projects that fall under one of three categories: **applied research, communications, and working groups.**

The RFA is announced and opened in the fall of the preceding year and funding begins the following spring.

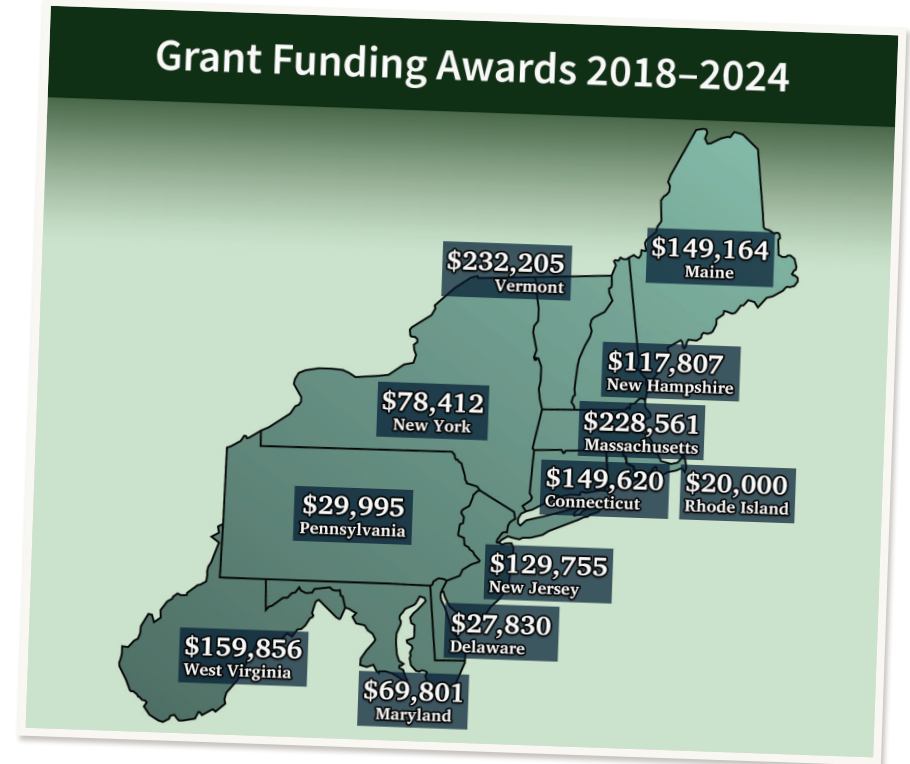
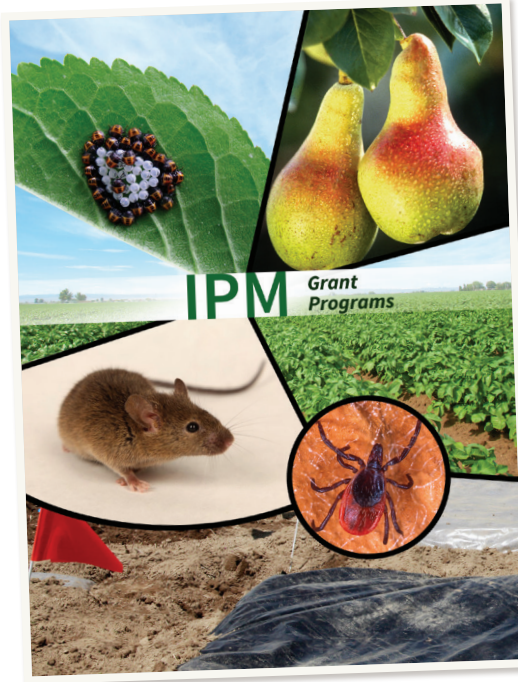
Up to \$160,000 in total was available for 2024, generally with a maximum of \$40,000 per award. There was a 24-month time limit on funded projects.

### Projects Funded in 2024

Following is the name of each project funded in 2024 along with its project director and their host institution.

#### Applied Research

- **An Ecosystem Services Framework to Improve Economic and Environmental Outcomes of Cattle Pest Fly IPM** (*Bryony Sands, University of Vermont*)
- **Distribution and Frequency of Anticoagulant Rodenticide Resistance among Commensal Rodents in the Northeastern U.S.** (*Changlu Wang, Rutgers University*)



#### Communications

- **Protecting Endangered Species and Pollinators: Communicating Recent Changes in Pesticide Regulation** (*Niranjana Krishnan, University of Maryland*)

#### Working Groups

- **Continued Next-Generation Support for the Northeast Tree Fruit IPM Working Group** (*Terence Bradshaw, University of Vermont*)

#### Supporting Projects across the Northeast

The Center's remit includes fostering IPM adoption throughout the Northeast, which includes 12 states and the District of Columbia. As such, the Center makes every effort to ensure that the funding it distributes equitably serves the interests of the entire region, and each year, project directors throughout the Northeast are encouraged to apply.



The Northeast Tree Fruit IPM Conference, held in Northampton, Massachusetts, in October 2024 was partially funded by a grant from the Northeastern IPM Center.

### Pest Management Strategic Plans and Production/Management Profiles

The Pest Management Strategic Plans (PMSPs) and Production/Management Profiles (PMPs) Grants Program aims to fund new and updated PMSPs and PMPs.

PMSPs are developed with a regional group of growers and other stakeholders in the Northeast to identify the needs and priorities of a particular commodity, system, or setting requiring pest management. The plans document current pest-management practices and those under research-and-demonstration trial development.

PMPs provide the production or management story, including current pest-management practices, for a particular system—such as production of an agricultural commodity—and look at current research activities directed at finding IPM strategies.

For more information about PMSPs, visit [www.northeastipm.org/ipm-planning/pmsps/](http://www.northeastipm.org/ipm-planning/pmsps/). For more information about crop profiles and PMPs in general, visit [www.northeastipm.org/ipm-planning/crop-profiles/](http://www.northeastipm.org/ipm-planning/crop-profiles/). Both pages include links to searchable databases.

### Additional Information about the Grants Programs

- IPM Partnership Grants Program: [neipmc.org/go/bfgs](http://neipmc.org/go/bfgs)
- PMSP/PMP Grants Program: [neipmc.org/go/pmsp-rfa](http://neipmc.org/go/pmsp-rfa)

## StopPests in Housing Program

The StopPests in Housing Program began in 2007 with support from the U.S. Department of Housing and Urban Development. With changes in funding, StopPests has partnered with the New York State IPM Program to develop a state-specific program for improving pest management in housing in New York State. The work continues to focus on developing and delivering IPM education and training to affordable housing professionals, while expanding its reach to all New Yorkers with pest issues in their homes.

One example of the outreach to new audiences includes partnering with the Finger Lakes Children’s Environmental Health Center to provide a resource for bed bugs for the New York State Prescription for Prevention website. Doctors and healthcare providers can access the site when a patient has an environmental health issue in their home and provide them with an “Rx” to assist the patient in finding safe and effective solutions (see [nyscheck.org/rx/](http://nyscheck.org/rx/)).

Code and health inspectors are another audience we are reaching out to with training and development of resources. Code inspectors are typically good at finding pest issues but may not be as proficient in finding solutions. They have a unique opportunity to communicate with property owners and managers about what good pest control should look like. In 2024, at the National Environmental Health Association’s Annual Education Conference, we teamed up with a Nebraska health inspector to launch a series of “Find It AND Fix It” trainings for the code and health inspector audiences. The presentation resulted in an invitation to present the “Find It AND Fix It: Bed Bugs” webinar for the National Environmental Health Association’s webinar series, reaching over 500 international environmental health professionals. The audience may change but the mission, to provide safe and effective integrated pest management solutions for homes, has not!





## IPM Toolbox Webinar Series

The Northeastern IPM Center's *IPM Toolbox* webinar series invites experts for hour-long conversations to present—and engage the audience in dialogue—about an IPM practice, method, or effort.

The webinars are free and open to the public. Some are geared toward practitioners in a specific agricultural or pest-management field while others may be of interest to anybody.

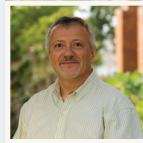
Past webinars are posted on the Center's YouTube channel ([youtube.com/@NortheastIPM](https://youtube.com/@NortheastIPM)). Recordings, along with downloadable presentation slides, are also available on each webinar's individual page.

Topics have run the gamut from pests to pollinators to agricultural practices. They have highlighted timely issues such as spotted lanternfly, ticks, varroa mites, mice, cockroaches, and pest-management methods for emerging agricultural industries.

### 2024 Webinars

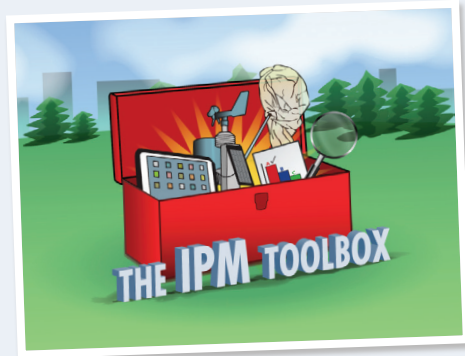
#### The Biology and Management of Common Invasive Plants in the Northeastern U.S. and Southern Canada

- **Date:** February 27, 2024
- **Presenter:** Antonio DiTommaso (*Professor of Weed Science and Chair of the Soil and Crop Sciences Section in the School of Integrative Plant Science, Cornell University*)
- **Learn more or view recording:** [neipmc.org/go/fARB](https://neipmc.org/go/fARB)
- **Registration and viewership statistics:** Registrants: 515 / Live attendees: 285 / Recording views\*: 218



#### The Use of IPM in Beekeeping to Control Parasitic Varroa Mites

- **Date:** March 11, 2024
- **Presenter:** Robyn Underwood (*Penn State Extension Educator in Apiculture*)
- **Learn more or view recording:** [neipmc.org/go/FgpQ](https://neipmc.org/go/FgpQ)



- **Registration and viewership statistics:** Registrants: 311 / Live attendees: 122 / Recording views\*: 541

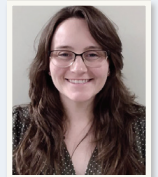
#### Reducing Synthetic Chemical Use to Optimize Pest Management and Crop Production: A Case Study of Onion Thrips in Onion

- **Date:** April 11, 2024
- **Presenter:** Brian Nault (*Professor and Program Leader, Department of Entomology at Cornell AgriTech*)
- **Learn more or view recording:** [neipmc.org/go/wtpg](https://neipmc.org/go/wtpg)
- **Registration and viewership statistics:** Registrants: 46 / Live attendees: 23 / Recording views\*: 175



#### Increasing Access to Practical Biocontrol Information through Digital Resources

- **Date:** October 2, 2024
- **Presenters:**
  - Amara Dunn-Silver (*Biocontrol Specialist, New York State IPM Program*)
  - Hillary Peterson (*IPM Specialist, Maine Department of Agriculture, Conservation, and Forestry*)
- **Learn more or view recording:** [neipmc.org/go/CyHd](https://neipmc.org/go/CyHd)
- **Registration and viewership statistics:** Registrants: 123 / Live attendees: 42 / Recording views\*: 73



#### Bee Breeding and IPM for Better Pollinator Health

- **Date:** November 20, 2024
- **Presenter:** Hongmei Li-Byarlay (*Associate Professor, Central State University*)
- **Learn more or view recording:** [neipmc.org/go/pXcE](https://neipmc.org/go/pXcE)
- **Registration and viewership statistics:** Registrants: 372 / Live attendees: 254 / Recording views\*: 331



#### Additional Information

For more information on the *IPM Toolbox* webinar series—including any upcoming webinars and archives of past presentations—visit [www.northeastipm.org/ipm-in-action/the-ipm-toolbox/](https://www.northeastipm.org/ipm-in-action/the-ipm-toolbox/).

\* Recording views are as of this writing and subject to increase over time.

## Research Update Conference

On December 10, 2024, the Northeastern IPM Center hosted the online Research Update Conference intended to increase collaboration and awareness about current IPM-related research and extension throughout the Northeast in an engaging, interactive way.

The conference featured brief presentations from active IPM-related projects funded by one of several sources:

- The Center’s own grants programs (for more information, see the “Funded Projects” section of this report)
- The Northeast Sustainable Agriculture Research and Education (NE SARE) Program
- USDA-NIFA’s Applied Research and Development Program (ARDP) and Extension Implementation Program (EIP)

Featured speakers submitted five-minute prerecorded presentations in which they discussed one or two highlights from their projects. Live Q&A sessions were interspersed throughout.

The recordings are available for viewing on the Center’s YouTube channel ([youtube.com/@NortheastIPM](https://youtube.com/@NortheastIPM)) and on the conference page at [neipmc.org/go/PHkh](https://neipmc.org/go/PHkh).

Speaker	Project Title	Affiliation	Funding Source
<b>Flor Acevedo</b>	Update on the development of action thresholds for managing spotted lanternfly in vineyards	Pennsylvania State University	ARDP
<b>Cameron Cedeno</b>	Resistance among arugula cultivars to <i>Pseudomonas cannabina</i> pv. <i>alisalensis</i> and <i>Xanthomonas campestris</i>	Pennsylvania State University–University Park	NE SARE
<b>Veronica Yurchak</b>	Creating an ecofriendly pest suppression program in sweet corn	University of Maryland	NE SARE
<b>Leo Kerner</b>	Using red clover to recruit natural enemies to control pests in cantaloupe	University of Maryland	ARDP
<b>Carlos Quesada</b>	Evaluation of insect exclusion screens on pests and biocontrol agents in commercial high tunnels	West Virginia University	Center



Speaker	Project Title	Affiliation	Funding Source
<b>Simon Zebelo</b>	Empowering small-scaled, limited-resource, and other farmers with IPM knowledge	University of Maryland, Eastern Shore	EIP
<b>Charles Colvin</b>	Investigating the insecticidal properties of maize flavonoids against fall armyworm ( <i>Spodoptera frugiperda</i> )	Pennsylvania State University	ARDP
<b>Philip Fanning</b>	Classical biological control for spotted-wing drosophila in the northeastern United States	University of Maine	ARDP
<b>Bryan Panek</b>	Development of specialty corn lines for plant and animal health	Pennsylvania State University	ARDP
<b>Patrice Sison</b>	Identifying grass weed patches in Maine wild blueberry fields using drone aerial images for post-emergent application of herbicides	University of Maine	Center
<b>Quinn Loudy</b>	Flavonoid and benzoxazinoid accumulation in maize: Implications for fall armyworm resistance	Pennsylvania State University	ARDP
<b>Mike Monzon</b>	Early American colonial period (ca. 1680s) funerary archaeoentomology as a tool for observing a local entomofaunal baseline at Historic St. Mary’s City, Maryland, USA	Purdue University & Rutgers Cooperative Extension	NE SARE
<b>Carl Majewski</b>	Promoting IPM practices for improved perennial forage management in the Northeast	University of New Hampshire Extension	Center

# IPM Insights Newsletter

*IPM Insights* is the Northeastern IPM Center's flagship publication, featuring news from and about the Center. It includes updates on research and timely issues, success stories from funded projects, news about prominent figures in the world of IPM, useful resources, and funding opportunities, among other topics.

*Insights* is the product of a team effort involving writing, editing, content curation and amplification, and design and layout.

Formerly a print-first publication that was also cross-posted to the Center's website, for the last few years, *Insights* has been published only in two electronic formats: as individual web pages for separate articles, and as a single downloadable PDF for an entire issue. However, the Center retains the ability to order small print runs upon request.

## 2024 Highlights

### Center News and Funding Opportunities

- New projects funded through the Center's IPM Partnership Grants Program and RFA for projects seeking funding in the following year
- New *IPM Toolbox* webinars
- Call for nominations for the *Outstanding Achievements in IPM Award* and announcement of winners from previous round

### Pests and Management Practices

- Management of bats, which are generally beneficial but widely misunderstood, with the potential to be nuisance pests and inadvertently create human-health risks
- Management in residential settings of brown marmorated stink bugs, widely known as damaging agricultural pests, but also nuisance pests in people's homes
- How to recognize signs of bed bugs while traveling and avoid bringing them home

### People and Partner Organizations

- Announcements and news about the *11th International IPM Symposium*, to be held in March 2025 in San Diego, California
- The National Plant Diagnostic Network's 7th National Meeting

**Bats**  
Continued from Cover Page

from predators and stable temperatures. They also prefer roosting near open bodies of water.

Bats can enter buildings, especially near parks, through openings as small as one-half inch in diameter. Bats may roost in or under attics, soffits, louvers, chimneys, porches, siding, eaves, roof tiles or shingles, and shutters. In stadiums and parking garages, bats sometimes roost in expansion joints between concrete beams.

A solitary bat—often a lost youngster—will occasionally fly into a building through an open door or window. When this happens, the bat's primary goal is to escape safely back outside.

If bats inhabit your home or an undesirable location, it is important to use proper exclusion methods to remove them. It is illegal for anyone, including animal control officers and exterminators, to kill bats. Terminal traps and poisonous bait traps should never be used.

Excluding bats from a building, it is important to provide a nearby shelter, such as a bat house, for the bats to inhabit. All exclusions or exclusions should take place prior to mid-April or after mid-September, as the time as between its hatching season and, in many states, it is illegal to disturb nesting bats.

It is illegal for anyone, including animal control officers and exterminators, to kill bats. In many states, it is illegal to disturb nesting bats.

Think You Might Have Bats? Don't Panic.

The solutions to remove bats from your belly or other locations are simple. Bats are rarely aggressive, even if they're being chased.

But be warned, they may bite in self-defense if handled. As with any wild animal, bats should never be touched with bare hands.

Fall Can Be a Batty Time for Schools

Autumn is the time when many North American bat species are beginning their trek back to Mexico and Central America. Because schools may be along the migratory route of bats...

the school, scooping up the bats, and releasing them outdoors. They would catch as many as they could before the start of the school day.

The Need for an IPM Approach

Then, the school district began implementing an integrated pest management (IPM) program. Facility managers researched how and why bats were entering the building.

As with many pests in schools, exclusion was part of the IPM process that needed to be implemented. An 80-foot lift was used to access and seal openings where bats were entering, such as areas around external pipes. These openings may be around windows, in soffits, or where wires or pipes enter the building.

For the next three years, there was a significant decrease in bats entering the school. Eventually, only one or two bats would find their way into the building when a window was accidentally left open. The good news for the bats was that the school district had the foresight to place bat houses on the school's roof to give the bats a place to rest, undisturbed, on their long journey south.

As part of the remediation effort, the school district also had to deal with the bat guano (droppings) deposited in the ceiling space above the classrooms. There are human health hazards associated with exposure to bat guano, such as histoplasmosis, a serious respiratory disease. Another reason for guano removal

is to avoid attracting secondary pests such as cockroaches or flies. A professional hazardous waste company was hired to remove the guano from the school.

After the school district began implementing an IPM program, there was a significant decrease in bats entering the school.

In another part of the country, a Louisiana school found hundreds of bats adjacent to their gymnasium. The bats had found a perfect roost in a void between the gutter and the building that was inaccessible to potential predators. The health department closed the gym because of the risk to students from exposure to bats and their guano.

- Overview of IPM programming in Connecticut from Victoria Wallace, Connecticut state IPM coordinator and a 2024 winner of the Center's *Outstanding Achievements in IPM Award*
- CABI: Partners in IPM through a shared priority of food security, and a source of extensive online resources

### For More Information

To view current and past issues of *IPM Insights* in web and PDF formats, visit [neipmc.org/go/ipm-insights](http://neipmc.org/go/ipm-insights).

## Communication

In addition to the *IPM Insights* newsletter discussed elsewhere in this report, the Northeastern IPM Center utilizes a number of communication channels and platforms to distribute and share news and resources about integrated pest management and related topics—in the Northeast and beyond.

### Websites

[NortheastIPM.org](http://NortheastIPM.org) – Our main website for promoting and funding IPM in the Northeast

[StopPests.org](http://StopPests.org) – Training materials, pest solutions, and advice for implementing IPM in multifamily housing

[StopBMSB.org](http://StopBMSB.org) – Biology, ecology, and management of brown marmorated stink bug in specialty crops

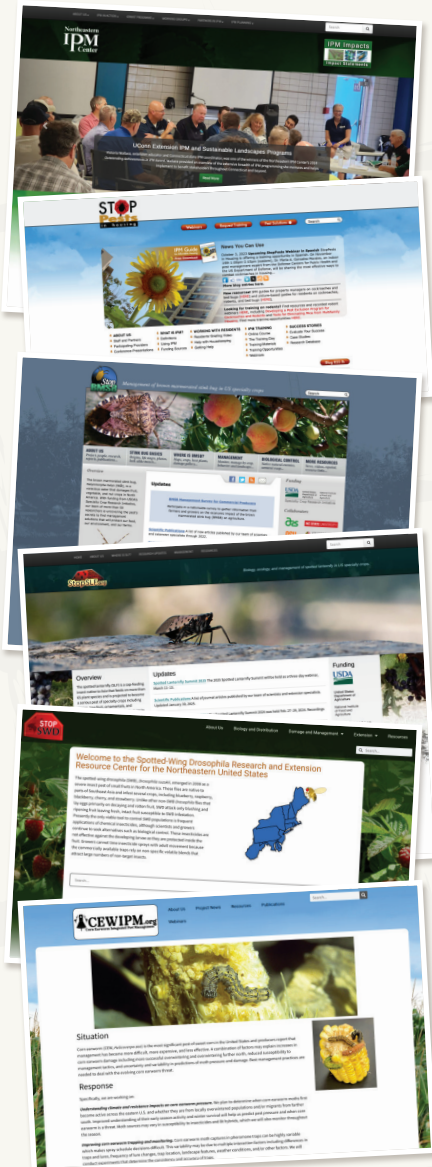
[StopSLF.org](http://StopSLF.org) – Biology, ecology, and management of spotted lanternfly in specialty crops

[StopSWD.org](http://StopSWD.org) – Biology, ecology, and management of spotted wing drosophila in specialty crops

[CEWIPM.org](http://CEWIPM.org) – Corn earworm integrated pest management in sweet corn

### IPM News and Events Roundup

The *IPM News and Events Roundup* is a weekly e-mail newsletter sent to the Center's primary communications e-list. The *Roundup* generally does not contain any content of its own, but rather is a compilation of links with summaries to outside sources about IPM-related news, research, resources, webinars,



Website	Visitors, 2024
NortheastIPM.org	55,838
StopPests.org	20,750
StopBMSB.org	43,732
StopSLF.org	14,818
StopSWD.org	332
CEWIPM.org	222 (Aug–Dec 2024)

meetings, events, job opportunities, and more.

The *Roundup* is a mostly plaintext e-mail newsletter that was launched in January 2019. Along with the Center's *IPM Insights* newsletter, the *Roundup* is part of a two-pronged periodical publication strategy, with the *Roundup* filling a different niche through its up-to-the-minute weekly schedule, compilation-based structure, and simplified layout.

Past issues are archived on the Center's website at [neipmc.org/go/HbdR](http://neipmc.org/go/HbdR).

### Communications E-list

The Center maintains a primary e-mail communications list. As of this writing, the list has 3,299 subscribers.

The list is for Center announcements—not discussion—and traffic is intentionally kept to a minimum. In addition to the weekly *Roundup*, the list is used to distribute occasional messages about Center news and events.

Anybody may request to be subscribed to the comm list by e-mailing [northeastipm@cornell.edu](mailto:northeastipm@cornell.edu).

### Social Media

The Center is active on social media platforms including Facebook, X, and YouTube.

Facebook and X feature posts about Center news and shares of IPM-related content from media outlets and partner organizations. YouTube is an extensive repository for recordings of webinars, conferences, and meetings presented or hosted by the Center.

- **Facebook:** [www.facebook.com/NEIPMCenter/](http://www.facebook.com/NEIPMCenter/)
- **X:** [x.com/NortheastIPM](https://x.com/NortheastIPM)
- **YouTube:** [youtube.com/@NortheastIPM](https://youtube.com/@NortheastIPM)

## Advisory Council and Steering Committee

The **Advisory Council** provides a broad vision to guide the Northeastern IPM Center. Members represent a wide range of stakeholders, linking the Center to stakeholder needs and priorities for pest management programs. Advisory Council members are also an important avenue for Center outreach to their constituencies and beyond. The **Steering Committee** is the Center's policy-setting body, providing direction for timely and effective Center management.

Name	Affiliation	State
Rakesh Chandran	West Virginia University	WV
James Dill	University of Maine	ME
Carol Glenister	IPM Laboratories	NY
Deborah Grantham*	Cornell University	NY
George Hamilton	Rutgers, The State University of New Jersey	NJ
Glen Koehler*	University of Maine	ME
Bob Mann	National Assoc. of Landscape Professionals	DC
Carrie Mansue	Rutgers Cooperative Extension	NJ
Vijay Nandula*	USDA-NIFA National Program Leader	KS
Alicyn Smart	Northeast Plant Diagnostic Network, University of Maine	ME
Margaret Smith*	Cornell University	NY
Andrea Szylyvian*	EPA Region 1, Pesticide Program	MA
Lisa Tewksbury	University of Rhode Island	RI
Julie Urban	The Pennsylvania State University	PA
Amber Vinchesi-Vahl	University of New Hampshire	NH
Simon Zebelo	University of Maryland Eastern Shore / IR-4	MD
*Steering Committee member		



The Northeastern IPM Center is supported by the National Institute of Food and Agriculture, U.S. Department of Agriculture, under award number 2022-70006-38004. The Northeastern IPM Center is one of four Regional IPM Centers.