

Northeastern IPM Center Strategic Plan

(Revised in 2017, 2024, and 2025.)

MISSION

The Northeastern IPM Center fosters the development and adoption of integrated pest management, a science-based approach to dealing with pests that result in economic, environmental, and human health benefits. We engage stakeholders in agricultural, urban, and rural settings to work with us in identifying and addressing regional priorities in research, education, and outreach. The Center is committed to engaging all stakeholders in the adoption of IPM. We encourage all individuals, institutions, businesses, organizations, and communities to contribute to development and adoption of IPM practices.

VISION

We are committed to improving quality of life: healthy people, safe and robust food systems, functioning ecosystems, and strong communities through integrated pest management.

GOALS & OBJECTIVES

Goal 1. Engage stakeholders to show benefit of IPM research, education, and outreach.

- 1.A. Develop and pursue IPM priorities critical to supporting properly functioning social, economic, and environmental systems in the Northeastern region.
- 1.B. Evaluate the effectiveness of the Center in providing information that is accessed and used by stakeholders.
- 1.C. Communicate IPM in relation to pressing social, economic, and environmental challenges.

Goal 2. Secure funding to build/broaden IPM programs in the Northeastern region.

- 2.A. Promote Center grant-making opportunities through Signature Programs relevant to companies, industries, organizations, agencies, and individuals.
- 2.B. Develop relationships with organizations that share a common interest in IPM and Signature Programs.
- 2.C. Provide an active role for partner organizations in symposia, webinars, and workshops.

Goal 3. Train the next generation of IPM scholars, practitioners, and stakeholders.

- 3.A. Establish relationships with academia, agencies, and industry to develop educational programs for students, professionals, and practitioners.
- 3.B. Facilitate networking and house resources that enable early career IPM personnel to better serve their clientele.
- 3.C. Continue to provide Toolbox Webinars, Research Updates, newsletters and websites, and the International IPM Symposium that provide current knowledge to the IPM community.

Goal 4. Maintain vision of the NEIPMC to maximize impact.

- 4.A. Hire committed and motivated personnel with strengths that contribute to the mission of the Center.
- 4.B. Develop stakeholder advisory groups that engage and challenge NEIPMC leadership.
- 4.C. Require working groups to update the Center on current and upcoming issues related to IPM.
- 4.D. Collaborate with other Regional IPM Centers on key projects.

DETAILS ON MEASURABLE OBJECTIVES

Goal 1. Engage stakeholders to show benefit of IPM research, education, and outreach.

- A. Develop and pursue IPM priorities critical to supporting properly functioning social, economic, and environmental systems in the Northeastern region.

Strategy	Who	When	Steps/Comments
1) Discuss issues of importance in NE, set priorities, plan how to address issues	Director and staff, NEERA-2104, Advisory Council	Ongoing	Hold workshops, webinars, conferences, form/fund working groups
2) Develop/manage Signature Programs that encompass Center work and address issues locally, regionally, and nationally	Director and staff, NEERA-2104, Advisory Council	Ongoing	1) Community IPM, 2) IPM and Organic Systems, 3) Resilient Pest Management Systems, 4) Pollinators, 5) Next Generation Education, and 6) Advanced Production Systems

- B. Evaluate the effectiveness of the Center in providing information that is accessed and used by stakeholders.

Strategy	Who	When	Steps/Comments
1) Develop a standard set of evaluation criteria across all disciplines for all projects	Evaluation Specialist	Ongoing	Categorize projects into Signature Programs
2) Create process for measuring change in perception and action for all projects (e.g., adoption of IPM)	Evaluation Specialist	Ongoing	Develop method for measuring process
3) Determine methods to gather economic and sociological inputs from Center grants	Evaluation Specialist	Ongoing	Categorize grants into Signature Programs; association analysis
4) Perform social network analysis before and after formation of a working group (e.g., deeper connections, gaps in connections)	Evaluation Specialist	Ongoing	Data impacts on target audience; describe analysis on website
5) Determine how others in IPM are measuring and reporting impacts	Evaluation Specialist	Ongoing	Review literature and network w/ colleagues
6) Identify audiences needing IPM expertise	Evaluation Specialist	Ongoing	Survey participants at conferences relating to each Signature Program
7) Serve as repository of information on IPM	Web Manager & Communication Specialist	Ongoing	Maintain databases; track usage; stay up on emerging trends

- C. Communicate IPM in relation to pressing social, economic, and environmental challenges.

Strategy	Who	When	Steps/Comments
1) Identify and support a subset of the communications listserv who can promote Center messages	Communication Specialist	Ongoing	Promote more broadly to build support

2) Identify stakeholder needs, opportunities, strengths, networks, and willingness to be a resource	Evaluation specialist, Grants and Partnership Coordinator	Ongoing	Survey advisory members, PDs, and key partners
3) Link media and journalists to relevant Signature Programs	Communication Specialist	Ongoing	Promote <i>IPM Insights</i> and follow up on requests and news
4) Find/connect with others working on IPM to build partnerships	All Staff	Ongoing	Search news, respond to email, travel region, engage all
5) Use print media, listservs, website to inform stakeholders	Communication Specialist, Web Administrator, Program/Extension Aide	Ongoing	<i>IPM Insights</i> , Roundup, initiatives, events, campaigns
6) Use social media to share time sensitive information	Program/Extension Aide	Ongoing	X (Twitter), Facebook, others

Goal 2. Secure funding to build/broaden IPM programs in the Northeastern region

- A. Promote Center grant-making opportunities through Signature Programs relevant to companies, industries, organizations, agencies, and individuals.

Strategy	Who	When	Steps/Comments
1) Maintain funding from USDA-NIFA (\$1 million/yr.)	Director	Ongoing	Report impacts, support partners and ARDP and EIP PDs (listed in acronyms page)
2) Use Partnership Grants Program to increase populations developing and implementing IPM	Director, Grants and Partnership Coordinator	Ongoing	Relate impacts in each Signature Program
3) Apply for grants through other agencies (e.g., HUD, SCRI, DOE, NSF, CDC)	Director	Ongoing	Match RFAs to Signature Programs

- B. Develop relationships with organizations that share a common interest in IPM and Signature Programs.

Strategy	Who	When	Steps/Comments
1) Make organizations, corporations, and businesses aware of the Center	Director, Communication specialist, all staff	Ongoing	Meetings, conferences, presentations, publications

- C. Provide an active role for partner organizations in symposia, webinars, and workshops.

Strategy	Who	When	Steps/Comments
1) Provide incentive for participating in Center sponsored events	Director	Ongoing	Booth, advertising events
2) Invitation to contribute to Center sponsored events	Director	Ongoing	Toolbox Webinars, Research Updates, newsletters and websites, and the International IPM Symposium
3) Provide current knowledge to the IPM community	All Center staff	Ongoing	Toolbox Webinars, Research Updates, newsletters and websites, and the International IPM Symposium

Goal 3. Train the next generation of IPM scholars, practitioners, and stakeholders.

- A. Establish relationships with academia, agencies, and industry to develop educational programs for students, professionals, and practitioners.

Strategy	Who	When	Steps/Comments
1) Support early career IPM personnel via Partnership Grants	Director, grants manager	Ongoing	Clearly identify this in the Partnership Grants RFA
2) Recognize students and other IPM personnel via the annual Outstanding Achievements in IPM award	Director, communications specialist	Annual	Annual call for nominations, review, and award

3) Continue to promote our educational programming and communication opportunities to Northeast IPM personnel	All staff	Ongoing	Announcements, notices, and news in IPM Insights, IPM Weekly News & Roundup, social media outlets, websites, and other outlets as appropriate
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- B. Facilitate networking and house resources that enable early career IPM personnel to better serve their clientele.

Strategy	Who	When	Steps/Comments
1) Facilitate networking and communication	Director, communications specialist	Ongoing	Remain engaged with NEERA-2104, other NE IPM experts and practitioners
2) Archive and advertise regional pest management information relevant to the Northeast	Director, communications specialist, webmaster	Ongoing	Announcements, notices, and news in IPM Insights, IPM Weekly News & Roundup, social media outlets, websites, and other outlets as appropriate; annual Research Update

- C. Continue to provide Toolbox Webinars, Research Updates, newsletters and websites, and the International IPM Symposium that provides current knowledge to the IPM community.

Strategy	Who	When	Steps/Comments
1) Provide Toolbox Webinars, Research Updates, newsletters and websites	All staff	Ongoing	Toolbox Webinars, Research Updates, newsletters and websites
2) Participate in planning and conducting International IPM Symposium	Director, all staff	3-year cycle	Serve on planning committees; provide content at Symposium

Goal 4. Maintain vision of the Center to maximize impact

- A. Hire committed and motivated personnel with strengths that contribute to the mission of the Center.

Strategy	Who	When	Steps/Comments
1) Conduct national searches for key positions	Director, Staff	Ongoing	Follow Cornell University protocol
2) Write concise, clear, and exciting position descriptions for all vacancies	Director, Staff	Ongoing	Speak with Cornell Human Resources

- B. Develop stakeholder advisory groups that engage and challenge NEIPMC leadership.

Strategy	Who	When	Steps/Comments
1) Carefully select leaders in their fields	Director/ Steering Committee	Ongoing	Rotate membership
2) Recruit non-academic members	Director/ Steering Committee	Ongoing	Growers, consultants, grower/professional organizations
3) Call on AC members for ad hoc task forces	Director	Irregular	Continuous communication

- C. Require working groups to update the Center on current and upcoming issues related to IPM.

Strategy	Who	When	Steps/Comments
1) Participate in meetings	Director/Evaluation Specialist	Ongoing	Engage groups
2) Require a logic model and updates	Director/Evaluation Specialist	Ongoing	Develop awareness of new topics

- D. Collaborate with other Regional IPM Centers on key projects.

Strategy	Who	When	Steps/Comments
1) Participate in all meetings and calls	Director, other staff as appropriate	Ongoing	Present new ideas; provide updates

2) Plan joint conference or symposium with other Center(s)	Director, other staff as appropriate	As needed	Address needs; share priorities
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SIGNATURE PROGRAMS (REVISED 2025)

The efforts of the Center are organized under six Signature Programs and three cross-cutting issues where our leadership and advisory bodies see the greatest need. At present, the areas of focus for the programs are (not in order of priority) 1) Community IPM, 2) IPM and Organic Systems, 3) Resilient Pest Management Systems, 4) Pollinators, 5) Next Generation Education, and 6) Advanced Production Systems. Cross-cutting issues are 1) Emerging Invasive Species, 2) Pesticide Resistance, and 3) Economics.

We are committed to improving quality of life: healthy people, effective food systems, functioning ecosystems, and vibrant communities through integrated pest management. We encourage all individuals, institutions, and organizations from historically underserved communities to contribute to development and adoption of IPM practices.

Community IPM: We foster the adoption of IPM in structures and surrounding landscapes including housing, schools, food service facilities, and commercial and public properties.

IPM and Organic Systems: IPM and organic systems share many of the same goals and challenges, and we support collaboration between these two communities to build a more robust agricultural system.

Resilient Pest Management Systems: Not only do pest distributions and occurrences vary with increases in extreme weather events and gradual rises in average annual temperatures, but also ag technologies and markets can rapidly alter production systems. Therefore, responsive research and development of IPM tools and practices tailored to address emerging needs must be supported. We provide funding for advancing knowledge and IPM solutions specific to these challenges.

Pollinators: Decline of wild and managed pollinators is one of the most critical issues facing our food systems. Habitat destruction, increasing extreme weather events, gradually rising average annual temperatures, and pesticide use are some of the contributing factors. We will continue to give this issue priority and encourage efforts to develop IPM practices protective of and with lower risk to wild and managed pollinators.

Next Generation Education: It is critical to maintaining the IPM knowledge base that there are scientists, educators, and practitioners who understand IPM basics. Our Center facilitates projects that provide real-world experience in early career IPM personnel and allows for partnerships to be built with growers, educators, researchers, and industries.

We recognize early career IPM personnel in IPM in our annual Outstanding Achievements in IPM award. Our Center also archives important pest management resources that help early career IPM personnel be more effective in their careers. We will continue to support early career people striving to be successful in the field of IPM, both as practitioners and in academia.

Advanced Technology for IPM: This signature program continues from an earlier one called “Advanced Production Systems” but is more specific to technologies that can assist in the implementation of IPM. One issue identified by NEERA-2104 is that of farm labor shortages in the NE. One way of assisting with this problem while improving adoption of IPM is through technologies including weather tools such as NEWA (Network for Environment and Weather Applications), remote sensing technologies with demonstrations of efficacy in NE settings and scales, agricultural applications of AI, and learning models. We will encourage demonstration and adaptation of technologies for use in NE agricultural systems.

Cross-Cutting Issues

These issues cut across all aspects of IPM and food security and are integral to each signature program. We describe cross-cutting issues separately here to provide the emphasis and visibility necessary to make progress.

Emerging Invasive Species (IS): Many pests of concern are IS that have become established, but emerging or newly identified IS are of great concern because major damage may occur before management can be developed or there may be a window for developing management practices before there is major damage. We support new collaborations, research, and education to address these pests.

Pesticide Resistance: Resistance to pesticides is increasing and is impacting the range of options available to pest managers in all situations, including housing and school buildings. Efforts to identify alternative pesticides and alternative or new IPM practices, such as biological pesticides or cultural methods, are critical to long-term effective pest management. Steps in an IPM practice, such as monitoring for presence and using degree-day models to predict emergence, can help tune the use of pesticides to the need in a specific setting.

Economics: Two surveys conducted by the Center and priority-setting discussions by NEERA-2104 all indicate that economics, specifically the cost/benefit ratio and the need for good cost analyses, is central to IPM adoption.