

Protecting America's Farms and Families:

A Strategic Plan for the Public Integrated Pest Management Enterprise 2025-29

Pests cost America hundreds of billions of dollars every year. Invasive and native insects and diseases damage and kill crops, hurting farmers and consumers. Ticks and mosquitoes spread diseases that sicken families. Weeds degrade natural landscapes and fuel wildfires. Pests are not an annoyance; they are significant agricultural, environmental and human health threats that must be managed. And they can be, successfully, through a science called Integrated Pest Management.

Integrated Pest Management, or IPM, creates smarter, safer and more sustainable solutions to our ever-evolving pest problems. As an “all-the-above” approach to controlling insects, plant diseases, weeds and other damaging pests, IPM leverages biology to combat pests rather than relying solely on chemical pesticides. IPM emphasizes an ecosystem-level approach that combines biological, cultural, physical and chemical tools to control pests in an efficient, economical and environmentally responsible way.

What is the Public IPM Enterprise?

The Public IPM Enterprise are the researchers, extension educators and others who develop and deliver IPM solutions to the American public. They work at universities, research labs and extension centers, in several scientific disciplines and across hundreds of institutions. The effort includes 53 state and territory IPM programs and four Regional IPM Centers, primarily supported by the USDA's National Institute of Food and Agriculture through the Crop Protection and Pest Management program.

The Public IPM Enterprise Strategic Plan is our collective effort to unite these diverse public programs and focus our efforts on a unifying vision: “A nation where everyone can access the integrated pest management information, tools and services they need to protect their health, home and livelihood.”

We began our strategic planning effort by documenting the existing IPM infrastructure in each state and territory, followed by a SWOT analysis of American IPM. From these data, six core commitments were identified, outlining specific actions to build on our strengths, address weaknesses and seize opportunities through new partnerships and innovations. While significant progress can be made without additional funding, realizing the vision of universally accessible IPM services will require further investment from public or private partners. The Strategic Plan for the Public IPM Enterprise outlines specific needs, tasks and priorities that can be addressed as those investments are made, and has evaluation metrics for each to measure and guide progress.

Here are summaries of the six core commitments of the Public IPM Enterprise:

Provide Research and Education to Protect People from Pests and Pesticides

Pest threats continuously change. Farmers grow new crops, invasive pests arrive on American shores and spread unchecked, insects and diseases attack new areas as

weather or land-use patterns change, or they develop resistance to previously effective pesticides. To keep up with these threats, continued investment in IPM research and education is essential to ensure food security. This work creates or validates lower-risk products and approaches, updates best management practices for established IPM programs and documents the economic and environmental benefits of IPM.

Deliver Timely and Relevant Information to Agencies and Stakeholders

Agencies responsible for regulatory decisions related to pesticides, farm safety and environmental quality rely on accurate and timely information, but American agriculture is not one-size-fits-all. Providing well-documented and current pest and pesticide-use data from around the nation informs effective regulatory decisions and public policy. Reliable data also helps industry develop new products and research initiatives.

Enhance Engagement and Collaboration

The Public IPM Enterprise is one of several publicly funded initiatives protecting American agriculture and communities. Strengthening collaboration across these programs enhances our collective efforts and better serves the public. This includes improving coordination within the Crop Protection and Pest Management program, enhancing inter-agency communication and developing stronger partnerships with state agencies and industry stakeholders.

Leverage and Share Resources

To strengthen IPM effectiveness, it is vital to expand, organize and promote publicly available integrated pest-management resources. This ensures researchers, extension agents and pest managers can easily access valuable IPM tools and educational materials to make informed decisions.

Increase IPM Awareness

Awareness of IPM principles is essential for people to adopt IPM practices. Clear and effective communication ensures that policymakers, farmers, educators, allied agencies and the pest-managing public understand the benefits and applications of IPM.

Expand IPM Beyond the Traditional Pest-Focused Disciplines

The continued success of IPM depends on a multidisciplinary approach that extends beyond the traditional pest sciences. Advancements in IPM will require contributions from engineers, AI specialists, automation experts and others. Involving professionals from these fields, as well as economists, sociologists and communicators, will improve IPM effectiveness, efficiency and adoption.

Through these core commitments, the Public IPM Enterprise will safeguard the American people, and our environment, economy and agriculture, by promoting more sustainable pest management across our nation's diverse landscapes. Expanding collaboration, innovation and interdisciplinary engagement will build a more resilient and sustainable IPM system that can adapt to evolving challenges and ensure a healthier future for all Americans.