

UMass Extension Mass. Water Resources Research Center Mass.Agricultural Experiment Station UMass Research and Education Farms

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# **Title: Pesticide Education Program**

## **Project Leader: Natalia Clifton**

### **Project Overview**

Pesticides are vital tools for controlling pests and maintaining an adequate food supply. If used improperly, pesticides can also threaten human health and the natural environment. Inexperienced applicators, accidents, inadequate protection and equipment continue to be areas of concern that increase the potential for negative personal and environmental impacts from pesticide exposure.

The Pesticide Education Project works closely with the Massachusetts Department of Agricultural Resources to educate pesticide users about safe application, state regulation and proper use of pesticides in Massachusetts. The UMass Extension Pesticide Education team is also part of a New England Pest Management Network that collaborates to gather information on pest management and pesticide use for important crops and sites throughout New England and to identify pest management needs and inform state regulations. This project helps agricultural and green industry businesses stay competitive and relevant through education on new pests and new pest management strategies, environmental issues that affect their industry, and continued notice of updates to local and federal laws and regulations.

### Activity Summary - 2014

- Pesticide Applicator State Exam Preparatory Workshops (20)
- Pesticide Recertification Training (20)
- Pesticide Exam Study Manual Revisions (1)

### Total educational contacts

	Adult
	Contacts
In Person	1000
Indirect Contacts (Print, Web, etc)	7000



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### **Narrative Summary and Impact**

The UMass Extension Pesticide Education in cooperation with the Massachusetts Department of Agricultural Resources is responsible for providing initial and continuing education to Massachusetts licensed and certified pesticide applicators. Approximately 3600 pesticide exam study manuals were distributed by the UMass Extension Bookstore to approximately 1300 individuals preparing for the state administered pesticide exams. The Pesticide Education program conducted twenty two-day workshops to help individuals prepared for the Massachusetts state pesticide license exams. Approximately 23% of the individuals who take the state pesticide applicator license exam participate in the optional workshop. The workshop covers a variety of topics including, pest identification, pesticide types and formulations, toxicity of pesticides, first aid for pesticide poisoning, pesticide label comprehension, personal protective equipment, environmental fate of pesticides, integrated pest management, and state and federal laws and regulations. Individuals use this workshop as a supplement to self-study and they also have an opportunity to ask questions. A practice exam is also provided to individuals to take home and use as a pesticide exam study tool. The program used exam results provided by the Massachusetts Department of Agricultural Resources to determine the exam passing rate for our pesticide exam training workshop participants. Individuals who took the workshop continue to pass at a higher rate than those who did not take the workshop. Seventy-four percent of the individuals who took the workshop passed the exam compared to a passing rate of 62% for nonparticipants. This represents a 17% difference in the passing rate between the two groups.

The program also offered 14 pesticide recertification training workshops to individuals that have pesticide licenses and certifications. Topics covered in the series included: Massachusetts Pesticide Laws and Regulations, Pesticides and Environmental Fate, Pesticide Applicator Safety: Personal Protective Equipment, Pesticide Exposure Studies, Pesticides and Impacts on Wildlife, Impacts of Pest Management on Pollinators, and Special Topics for Pesticide Applicators. There were a total of 1,600 individuals who participated in the workshops. All participants were given an opportunity to evaluate the workshops. Of the 1052 individuals who completed evaluations, 65% indicated that they increased their knowledge, "very much" and 58% indicated that they would "very much" use the information/techniques that they learned.