In 2-3 sentences, briefly describe the issue or problem that your project addresses.

UMass Extension’s Landscape, Nursery & Urban Forestry project works to support professional practitioners and land managers with research-based information on the best horticultural practices and technology for ornamental plant production, installation, and care. This work is conducted and delivered within a strong framework of sustainability, IPM, and Best Management Practices; most readily in the areas of water conservation and protection, nutrient management, soil health and pollinator protection. Key issues of note presently addressed include management of woody and herbaceous plants in ornamental landscapes; identification and management of insect, disease, and weed pests; management of invasive plants and insects; best management practices when using pesticides to reduce potential impacts to pollinators and other non-target organisms; and prevention of vector-borne diseases.

Briefly describe in non-technical terms how your major activities helped you achieve, or make significant progress toward, the goals and objectives described in your non-technical summary.

Working with some of the largest and fastest growing commercial agricultural segments in Massachusetts continually challenges the Landscape, Nursery, and Urban Forestry Program to address the industry’s immediate problems and to anticipate future educational requirements. Education on pertinent topics in FY22 was delivered to stakeholders through a wide variety of web resources, social media, timely publications, in-person and online training programs (20+ single and multi-day events), and diagnostic services. Current activities are informed by ongoing research, real-time communications with practitioners and academic and regulatory cooperators, and an extensive in-field scouting network. We maintain partnerships with Massachusetts professional associations, local, state, and federal government agencies, and UMass faculty to tackle the most pressing issues facing the industry. Our program collaborates on grants and interdepartmental service agreements with the MA Department of Agricultural Resources and the MA Department of Conservation and Recreation, and also works closely with members of Cape Cod Cooperative Extension and Plymouth County Extension.

Briefly describe how your target audience benefited from your project’s activities.

Our work is of continual and great significance to landscapers, arborists, land managers, nursery owners, and other Green Industry professionals in Massachusetts, New England, and the greater USA and Canada. Factors such as pests or climate, or uniformed or irresponsible decision making and management, carry real potential for economic, ecological, environmental, and human health impacts. Thus, quality training opportunities are necessary for safe, effective and efficient landscape management, and also foster individual career development and the growth and health of relevant industry segments. Our activities provided critically necessary training for large numbers of workers and managers, which served to improve their skill sets, employability, and value, and helped them to meet requirements for expedient industry certifications and licensure.

For example, for the March 29, 2022 Spring Kickoff for Landscapers:

- 73% of survey respondents indicated that their knowledge increased as a result of attending the program.
briefly describe how the broader public benefited from your project's activities.

broadly, research-based best management practices for landscape development and care help to support healthy, high quality plant material, vibrant businesses and markets, recreation and leisure, beautified spaces and enhanced value of properties, while simultaneously promoting efficiency, input reduction, lower resource use, and sustainable and ecologically sound managed spaces. the landscape and nursery industry segments contribute an estimated $2 billion in sales to the massachusetts economy, and employ over 12,000 individuals at approximately 5,000 companies. more specifically, in addition to the vast professionally-oriented resources that many consumers utilize for assistance in their landscaping efforts, umass extension's landscape, nursery, and urban forestry program coordinates a vibrant home gardener “help line” with assistance from dedicated master gardener volunteers (851 consultations in fy22) and authors and publishes a perennially popular garden calendar that over 8000 individuals avail themselves of each year (8470 in fy22).

comments (optional)

- umass extension's 2022 garden calendar - (1) - 8470 participants
- development or revision of educational fact sheets (2) - 4348 participants
- umass extension's landscape message (21) - 41712 participants
- hort notes newsletter (10) - 36322 participants
- 2022 invasive plant certification program (3) - 103 participants
- 2022 invasive insect webinar series - online series over 3 days (1) 424 participants
- 2021 invasive insect certification program- 6 day educational certification program held in oct 2021 (1) - 56 participants
- 2022 invasive plant certification program - (1) - 103 participants
- 2022 jumping worm symposium day 2 - (1) - 717 participants
- 2022 jumping worm symposium day 1 - (1) - 605 participants
- consultations based on home garden inquiries (umass greeninfo) - 851 participants
- invited presentations - (18) - 1126 participants
- in-depth consultations and site visits - all weeded management based - (5) - 7 participants
- consultations based on insect and weed id samples submitted to umass extension's plant diagnostic lab - (96)
- consultations based on email, phone, or in-person inquiries (843) - 843 participants
- 2022 community tree conference (1) - 143 participants
- ipm scouting walkabout - (1) - 41 participants
- 2021 fall wrap-up for landscapers - landscape topics - (1) - 128 participants
- 2022 spring kickoff for landscapers - landscape topics - (1)- 74 participants
- eastern white pine management workshop - (1) - 98 participants
- e-mail announcements to home gardener list - (8) - 18539 participants
- e-mail announcements to professional green industry list - (36) - 13225 participants
- umass extension's professional management guide for diseases of trees and shrubs - (1) - 510 participants
- facebook posts for the green industries - (66) - 3279 participants
- umass extension landscape, nursery & urban forestry website - (1) - 512206 participants