

Sustainable Turf Management - FY22

Status: NIFA REVIEW

Project Director

Jason Lanier

Organization Project Number

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Accession Number

7002035

Start & End Date

10/01/2020

Organization

University of Massachusetts

To Project / Program

"Sustainable Turf Management"

Primary Critical Issue

Commercial Horticulture and Landscape Management

Fiscal Year

2022

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

The mission of UMass Extension's Turf project is to develop, research, gather, and share knowledge on safe, efficient, economically viable and environmentally sound turf management with emphasis on natural resource protection. Our 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. These principles help to promote input reduction, natural resource protection, and management efficiency, which leads to higher quality turf for stakeholders, increased societal and ecological benefits, lower environmental and health impacts, and more successful and profitable businesses.

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.

The latest research-based turf production and management knowledge was communicated to stakeholders via an evolved array of delivery methods shaped and modified by learnings from the COVID-19 pandemic. Current programming is a mix of in-person and online offerings in both synchronous and asynchronous formats, as well as extensive web and electronic resources. These approaches offer significant flexibility, convenience, and cost savings for both our program and our stakeholders and extend our reach to larger and more geographically diverse audiences than ever before. This is especially important for meeting growing and evolving demands for our time and expertise, considering continuing capacity deficits in our program.

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

Lack of trained personnel to perform horticultural work is one of the consistent refrains of the industry segments that we serve, based on needs assessment. Our activities provided critically necessary training for large numbers of workers, which served to grow their skill sets, employability, and value, and helped them to meet requirements for expedient industry certifications and licensure. In turn, private employers were better able to meet the needs of clients and grow their agencies and businesses. State and municipal practitioners were empowered to produce more attractive and functional turf surfaces with lower inputs and impact, and enhance the public good.

Briefly describe how the broader public benefited from your project's activities.

Turf surfaces comprise a significant portion of the landscape in Massachusetts and beyond. These turf areas may be on golf courses or athletic fields, at private residences, at business establishments, in industrial developments, on municipal properties, in parks, on public or private school grounds, and along roadsides and other utility areas. Turf areas are key resources, as they contribute to open space, provide recreation, add value to properties, and help to protect the environment through important functions such as dust and mud control, erosion control, storm water abatement, and greenhouse gas reduction. Managing fine turf sustainably requires focused optimization in management designed to maximize appearance and function while simultaneously minimizing inputs and potential impacts.

For example, based on evaluation data from the 2022 UMass Winter School for Turf Managers certificate program:

- 100% of respondents indicated that their knowledge of Best Management Practices increased (22% somewhat, and 78% significantly)
- 95% of respondents indicated that their knowledge of Integrated Pest Management increased (15% somewhat greater, and 80% significantly)
- 100% of respondents indicated that their knowledge of sustainable management methods increased (30% somewhat, and 70% significantly)
- 95% of respondents indicated that their knowledge of protecting and conserving water and other natural resources increased (35% somewhat, and 60% significantly)

Comments (optional)

Sustainable Turf Management and Production Outputs

- Timely Educational articles for the Massachusetts Turf Industry (2) - 7252 Participants
- UMASS Extension Turf Management Updates - (5) - 3007 Participants
- Invited Presentations/Lectures - (4) - 207 Participants
- New England Sports Turf Managers Association - BMP Working Group (1) - 12 Participants
- Massachusetts Association of Lawn Care Professionals - Academic Liaison (1) - 9 Participants
- New England Regional Turf Foundation - Education Committee (1) - 18 Participants
- 2022 Winter School for Turf Managers- multi-day education program - (1) - 69 Participants
- In-depth consultations and site visits (5) - 5 Participants
- Consultations based on turf samples submitted to UMASS Extension's Plant Diagnostic Lab (69) - 69 Participants
- Consultations based on email, phone, or in-person inquiries - (140) - 140 Participants
- Single day education programs/workshops (Spring Kick-off/Fall Wrap up) (2) - 163 Participants
- Educational messages and announcements to the Turftalk email list (12) - 3339 Participants
- Social Media Posts to Turf Industry (77) - 516 participants
- Visits to UMass Extension's Best Practices for Lawn and Landscape Turf document for FY22.(1) - 1497 Participants
- Visits to UMass Extension's Professional Turf IPM Guide for Massachusetts for FY22: <http://ag.umass.edu/turf/proguide> (1) - 8537 Participants
- UMass Extension Turf Web Site (1) - 134462 Participants