

Sustainable Turf Management FY23

Status: NIFA REVIEW

Project Director

Jason Lanier

Organization Project Number

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

2023

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, climate change mitigation, and pollinator protection. These principles help to promote input reduction, natural resource preservation, and management efficiency, which leads to higher quality turf for stakeholders, increased societal and ecological benefits, lower potential for environment 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 2023 UMass Winter School for Turf Managers certificate program:

- 95% of respondents indicated that their knowledge of Best Management Practices increased (28% somewhat, and 75% significantly)
- 93% of respondents indicated that their knowledge of Integrated Pest Management increased (24% somewhat greater, and 67% significantly)
- 98% of respondents indicated that their knowledge of sustainable management methods increased (24% somewhat, and 72% significantly)
- 96% of respondents indicated that their knowledge of protecting and conserving water and other natural resources increased (28% somewhat, and 66% significantly)

Comments (optional)

Web and social media communications

- Turftalk Email Subscription List:
 - **3464 subscribers**
- ag.umass.edu/turf web site:
 - **41,992 active users**
- Turf Management Updates (Blog and Announcements):
 - **16 posts**
 - **1469 active users**
- Instagram posts
 - **21 posts**
 - **261 followers**
- Facebook posts
 - **38 posts**
 - **435 followers**

One-to-one consultations

- Consultations based on direct inquiries (phone calls, e-mails, in-person): **221**
- Consultations based on samples submitted to UMass Extension's Plant Diagnostic Lab: **43**
 - Turf general: **25**
 - Weed ID: **18**
- In-depth consultations and site visits: **11**

Single day education programs/workshops

- UMass Alumni & Friends Breakfast at NE Regional Turf Conference (March 8, 2023 – Providence, RI) – **92 attendees**
- Spring Kick-Off for Landscape & Lawn Care (Turf Topics March 30, 2023 – online): **66 attendees**
- UMass Turf Research Field Day (July 19, 2023 – South Deerfield, MA): **298 attendees**

Multi-day education programs/short courses

- UMass Extension's Green School (October 25 – December 15, 2022, online): **34 turf students**
- UMass Winter School for Turf Managers (January 3 – March 2, 2023, online): **70 students**
- Winter Lawn Care Training Series (February 3 – February 24, 2023, online): **49 students**

Development and revision of written resources

- Fact sheets written or revised: **2**
 - • **UMass Turf Program History: 100 Years of Turfgrass Science & Management** (<https://ag.umass.edu/turf/about/umass-turf-program-history-100-years-of-turfgrass-science-management>): **85 unique readers** in FY23
 - • **Does Selecting the Best Turfgrass Varieties Really Matter?** (<https://ag.umass.edu/turf/fact-sheets/does-selecting-best-turfgrass-varieties-really-matter>): **188 unique readers** in FY23
 - **Articles: 3**
 - • **Q&A - Clover in Lawns, Soil Compaction** (<https://ag.umass.edu/landscape/newsletters/hort-notes/hort-notes-2023-vol-344>): **2645 unique readers** in FY23
 - • **Q&A – Mowing, Slow Release Nitrogen** (<https://ag.umass.edu/landscape/newsletters/hort-notes/hort-notes-2023->

[vol-347](#)): 2303 unique readers in FY23

- Snow Molds, New England Sports Field Management Association Blade (https://theturfzone.com/publication_issue/new-england-blade-winter-2022/?ascat=&sub=issue&issue_id=7227&rti=true&rel=6)

Invited presentations/lectures

- Guest lectures within UMass: 1
 - UMass Turf Program Turf Bowl Class (December 5, 2022): **17 students**
- Invited presentations for outside organizations: 5
 - Reducing Pest Pressure and Pesticide Use with Sound Turfgrass Selection (MALCP Winter Conference – January 9, 2023 – online, recorded): **145 attendees**
 - IPM and BMPs for Turf Management (February 3, 2023 – online): **50 attendees**
 - Soil Health & Management (February 17, 2023 – online): **50 attendees**
 - Renovation vs. Reconstruction (CGKA Annual Conference – February 23, 2023, Plantsfield, CT): **485 attendees**
 - Lawn Care Fundamentals (Barnstable County Master Gardeners Association – March 14, 2023, online): **29 attendees**

Educational program facilitation on the behalf of outside organizations

- Education committee service for outside organizations: 2
 - New England Regional Turf Foundation Education Committee (Jason Lanier in FY23)
 - Massachusetts Association of Lawn Care Professionals Education Committee (Jason Lanier in FY23)

Liaison, leadership, and networking with industry and the public at large

- Association board service: 1
 - Massachusetts Association of Lawn Care Professionals Board of Directors (Jason Lanier in FY23)
- Working groups: 3
 - New England Sports Turf Managers Association BMP Working Group (Jason Lanier in FY23)
 - Muddy Brook Sub-Watershed Committee (Jason Lanier in FY23)

New England Regional Center of Vector-Borne Diseases (NEWVEC) Advisory Committee (Jason Lanier in FY23)