



Dear New England Superintendent,

We are recruiting New England golf course superintendents to participate in a Minimum Level of Sustainable Nutrition (MLSN) research project conducted by the Turfgrass Science Program at the University of Connecticut and funded by the GCSAA and New England Regional Turfgrass Foundation.

Background of Research:

The MLSN is a new soil test interpretation and fertilizer recommendation approach proposed by Micah Woods (Asian Turfgrass Center) and Larry Stowell (PACE Turf, LLC). This procedure identifies the minimum concentration of a soil nutrient that supports "good" turf growth, desirable turf quality, and performance. We think it is important to provide MLSN guidelines in relation to New England soils.

What We Request From You:

- Select localized areas within different greens, tees, and fairways that present "good" quality turf. See the rating scale on the next page for guidance on identifying "good" quality turf. We want samples from playing surfaces that perform "good" under typical conditions of use and maintenance. Samples should not come from problem areas or areas that are obviously different from typical conditions of the golf course.
- Limit sampling to a maximum of 10 different areas per golf course. Target 3 putting greens, 3 tees, and 4 fairways. Our goal is to receive samples from many courses across all of the six New England states.
- Understand that results from these samples will not be readily available to guide your fertilization. Use a
 different set of samples and your current soil testing and fertilization practices for these purposes. After all
 data have been analyzed in this project, you will receive our projected MLSN critical levels and you can
 compare your specific results to the New England MLSN values.
- Follow soil-sampling instructions on next page and submit soil samples to UConn MLSN Project. Mailing instructions on the next page.

We appreciate your participation and look forward to working with you on providing more sustainable soil test information and recommendations.

Sincerely,

Karl Guillard

Kal Gelly

Professor of Agronomy & University Teaching Fellow University of Connecticut Department of Plant Science and Landscape Architecture karl.guillard@uconn.edu

Minimum Level of Sustainable Nutrition for New England Golf Courses Project

Collecting Soil Samples:

- Collect samples before you fertilize. With granular formulations, wait 3 or more weeks before collecting samples.
- Target 3 putting greens, 3 tees, and 4 fairways. Select localized areas within different greens, tees, and fairways that present "good" quality turf. Visualize turf quality using the National Turfgrass Evaluation Program's rating system scale of 1 to 9, with 9 = best turf quality and 6 representing the minimum level of acceptable quality (http://www.ntep.org/reports/ratings.htm).
- Select areas that would fall within your quality ratings of 6–8 for sampling. We want samples from playing surfaces that perform "good" under typical conditions of use and maintenance, and not samples from the "best" (rating = 9) or less than acceptable quality (< 6) areas. Also, samples should not come from problem areas or areas that are obviously different from typical conditions of the golf course.
- Identify an area of good turf approximately 5 to 10 feet in diameter. Record your quality rating for that area.
- Collect enough soil to fill a volume of 2 cups (1 pint). Sample to a depth of 5 inches. Remove and discard the top 1-inch of the soil core and obvious aboveground plant parts.
- Mix well in a clean bucket or pail not used for fertilizer to break apart large aggregates then place in a labeled bag.
 - Label the samples using the following format: Course name | Green, Tee, or Fairway | Number.
 For example: UConn Green #1
 - Maintain a copy of your coding and sample locations.
 - Please air-dry soil before mailing or delivering to UConn by placing the soil samples separately on clean paper bags or pieces of newspaper to minimize contamination. Avoid drying areas where fertilizer is stored or handled.

Complete the Submission Form:

• Either download the submission form (https://turfgrass.cahnr.uconn.edu/mlsn), contact us via email for the submission form (Excel file), or use the attached sheet. Complete the sample submission form and include a hardcopy with the soil samples in the shipping package. Also, email your Excel file to Karl Guillard (karl.guillard@uconn.edu).

Mailing or Delivery Instructions:

Mail to:

The UConn Soil Nutrient Analysis Laboratory 6 Sherman Place, Unit 5102, Storrs, CT 06269-5102

ATTN: Karl Guillard, MLSN

Drop off:

The UConn Soil Nutrient Analysis Laboratory 6 Sherman Place, Unit 5102, Storrs, CT 06269-5102

Directions: http://www.soiltest.uconn.edu/direction.php

Place samples in the collection box outside of the lab by the main entrance.

Clearly mark the samples ATTN: Karl Guillard, MLSN

Project Investigator Contact Information:

Karl Guillard	karl.guillard@uconn.edu	860-486-6309
Wayne Roper	wayne.roper@uconn.edu	860-486-3199
John Inguagiato	john.inguagiato@uconn.edu	860 486-0162
Steven Rackliffe	steven.rackliffe@uconn.edu	860 486-1944
Jason Henderson	Jason.henderson@uconn.edu	860 486-0189

UConn Minimum Level of Sustainable Nutrition (MLSN) for New England Golf Courses Project Submission Form:

Golf course name:	
Golf course address:	
Superintendent name:	
Phone Number:	
Email:	

UCONN – Data entry sheet for Minimum Level of Sustainable Nutrition (MLSN) for New England Golf Courses Project

Sample ID	Green , Tee, or Fairway	Predominate Grass Species	Quality Rating (1 to 9; 9 = best)	Sample Date	Soil Type or Soil Series if Known	Soil Sample GPS Coordinates if Possible	Clippings typically removed or returned?	Number of golf rounds per year	Total amount of N-P ₂ O ₅ - K ₂ O and other nutrients applied per 1,000ft ² per year