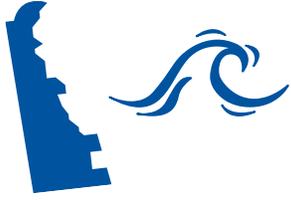


NUTRIENT MANAGEMENT CERTIFICATION FOR URBAN HORTICULTURE



UNIVERSITY OF DELAWARE
**COOPERATIVE
EXTENSION**

ISSUE



Many of Delaware's waters are impaired by excess amounts of nutrients like nitrogen (N) and phosphorus (P) from ...



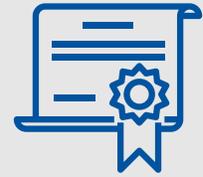
AGRICULTURAL &



URBAN SOURCES

from the use of fertilizers on lawns and landscapes

To mitigate this issue,



URBAN HORTICULTURE PROFESSIONALS

who fertilize more than 10 acres of land or apply nutrients for a fee **must become nutrient certified** as mandated in the DE Nutrient Management Act.

RESPONSE

UD Extension offered initial nutrient management certification training to urban horticulture professionals.



UNIVERSITY OF DELAWARE
**COOPERATIVE
EXTENSION**

with oversight by
the DE Nutrient Management
Commission &
the DE Department of Agriculture



NUTRIENT MANAGEMENT CERTIFICATION TRAINING



initial certification sessions



one examination session

IMPACTS



21

urban horticulture professionals attended the initial certification sessions

83%

increased their knowledge of DE's nutrient management issues and certification requirements

31%

was the average increase of knowledge gained on these issues and requirements, via these sessions

100%

learned how to better interpret a soil test report

55%

indicated that they would change how they manage turfgrass

92%

indicated they would change the ornamental plants they recommend/plant for clients or their business



Based on the results of the examination,

7

individuals became certified as Commercial Nutrient Handlers.

Separately,

8

individuals became newly certified as Private Nutrient Handlers.

ISSUE

Many of Delaware's waters are impaired by excess amounts of nitrogen (N) and phosphorus (P), nutrients that come from non-point sources in agricultural and urban areas. From urban sources, these nutrients often stem from the use of fertilizers on lawns and landscapes.

To mitigate this issue, urban horticulture professionals who fertilize more than 10 acres of land (i.e., private nutrient handlers) or apply nutrients for a fee (i.e., commercial nutrient handlers) must become nutrient certified as mandated in the 1999 Delaware Nutrient Management Act. In addition, the Delaware Nursery and Landscape Association requires Livable Lawns certified businesses to employ a certified nutrient handler.

RESPONSE

University of Delaware Cooperative Extension offers initial nutrient management certification training to urban horticulture professionals as required by law. State-wide training sessions are led by UD Cooperative Extension, with oversight by the Delaware Nutrient Management Commission and the Delaware Department of Agriculture. In 2019, UD Cooperative Extension offered initial certification sessions and one examination session specifically for the urban horticulture audience.

IMPACT

In 2019, twenty-one urban horticulture professionals attended the initial certification sessions for horticulture. Based on their certification pre- and post-examination, 15 of 18 tested and surveyed participants (83%) increased their knowledge of Delaware's nutrient management issues and certification requirements. The average knowledge increase was 31% for those attending both sessions I and II.

Evaluations were also conducted after each individual session. Here, respondents indicated they were responsible for nutrient management decisions on more than 1,257 acres of lawns and landscapes. Those surveyed also indicated they had gained skills as a result of attending the sessions. For example, 11 respondents (100%) indicating that they learned how to better interpret a soil test report. Willingness to adopt new or change existing management practices after attending the certification session was also measured using this survey: 6 respondents (55%) indicated that they would change how they manage turfgrass and 11 respondents (92%) indicated they would change the ornamental plants they recommend/plant for clients or their business.

Ten individuals registered to take the Commercial Nutrient Handler examination, of which 7 (70%) passed and were certified as Commercial Nutrient Handlers with the Delaware Department of Agriculture. Eight additional individuals were newly certified as Private Nutrient Handlers.

RECOGNITION

Funding to support the Delaware Nutrient Management Certification program is provided by the Delaware Nutrient Management Commission.