



Nutrients on the Hit-List, Phosphorus and Nitrogen: What You Need to Know About the Fate in Our Environment

with

Brian Horgan, Ph.D

Wednesday, January 20, 2010

8:30 am – 4:30 pm

Calgary, AB

[Click Here to Register Online](#)

Overview:

Individual states in the US and provinces in Canada are regulating the use of pesticides and fertilizers applied to turfgrass. These regulations have been signed into law to limit pollution of surface water bodies. Inferred in these regulations is the application of a fertilizer properly applied to turfgrass is polluting the environment. The primary macronutrients phosphorus and nitrogen are often the target since they are the limiting factor in algae growth in lakes and rivers. Absent from these regulations is a whole host of new research that will be discussed in detail during this seminar.

Not only will we discuss the fate of P and N applied to turfgrass, we will discuss ways to mitigate off-site movement of nutrients. At the conclusion of this seminar:

1. Participants will understand the fate of Nitrogen in our environment with special attention to new data on N leaching and de-nitrification
2. Participants will be introduced to a new soil test that is being evaluated to develop an N credit program for turfgrass N management that will reduce nitrate leaching potential.
3. Participants will understand the chemistry and fate of Phosphorus in our environment paying close attention to recently passed laws restricting the use of P fertilizers applied to turf and the impacts this will have on turf management.
4. Participants will be introduced to strategies to mitigate N and P movement off-site and will be able to develop better fertility programs.

Brian Horgan, Ph.D.

Dr. Horgan is an Associate Professor and Extension Turfgrass Specialist at the University of Minnesota. His interests revolve around nutrient fate and turfgrass water conservation. Specifically, he is interested in improving our nitrogen and phosphorus fertilizer recommendations, gaining a better understanding of the fate of phosphorus in our environment, and utilizing organic nitrogen fractions in the soil to create an N-credit program. He has spent the last 5 years researching turfgrass water conservation strategies utilizing new technologies, ET predictors and proper plant selection. Dr. Horgan has given turf related presentation in China, Europe, Canada, the United Kingdom and across the United States.

Approval Information: This seminar is eligible for 7 CEC for both the CGSA Master Superintendent and Accredited Golf Superintendents programs. Application has been made to GCSAA for their education points.



To register for **Nutrients on the Hit List** please complete this form and send to CGSA with payment or register online at www.golfsupers.com.

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Seminar Fees: (all seminar fees are subject to GST, GST/HST # R100765106)

Member:	\$195	\$9.75	\$204.75
2nd person:	\$150	\$7.50	\$157.50
Student:	\$100	\$5.00	\$105.00
Non-Member:	\$295	\$14.75	\$309.75
Non-Member Student:	\$200	\$10.00	\$210.00

Provincial Association members are charged the member rate.

Payment by: Cheque Visa/MasterCard/American Express

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The Fine Print:

Payment must accompany registration. Registration Fees include reference materials, lunch & refreshment breaks.

Cancellations received in writing 14 days prior to the date of the seminar will be refunded less a \$60.00 administration fee.

Refunds will not be issued after 14 days prior to the seminar. (Documented emergencies will be considered for refund less the administration fee of \$60.00).

CGSA reserves the right to cancel this seminar at its sole discretion – in such a case, its only obligation will be to refund any registration payments received for attendance at the seminar.