Table 2: The effect of the soil amendments on the microbialpopulation in the thatch and soil under bluegrass.

	Bacteria		Fungi		Thatch
Material	Thatch	Soil	Thatch	Soil	Depth
()	(propagules per gram soil x 10 ⁶)				(mm)
Control	273 "	Ğ5 '	õ 65	24	15.7
Ammonium Nitrate	263	49	132	42	14.4
S-coated Urea	390	58	87	22	14.9
Milorganite	268	56	87	32	16.0
Ringer Lawn Restore	576	87	160	43	13.3
Ringer Turf Restore	494	66	108	37	13.2
Bovamura	199	42	103	16	14.2
Sandaid	296	86	77	29	13.6
Alginate	221	76	72	19	15.7

similar for all materials providing 0.44 kg of N/100m² with the exception of Milorganite which rated a full point lower.

Plots treated with Ringer Turf Restore or Ringer Lawn Restore had significantly higher microbial populations in the thatch layer. There was a tendency for the application of nitrogen to reduce the thickness of the thatch and for the thatch reduction to be greater where the Ringer materials, or Sandaid, were used. The data would suggest that the enhanced microbial population was effective in reducing thatch in the bluegrass.

Editorial Note: Relative to inorganic nitrogen and conventional cultivation techniques for turf quality and thatch control, the final assessment of these new materials rests with the turf manager who must balance cost with their performance based on \$/kg of N and a reduced need for thatch control.

IN MEMORIAM

The Association was saddened to learn of the death of Scott Richmond, in his 35th year as a result of a snowmobile accident on Saturday, Jan. 30, 1993. Scott was Vice President - Sales for Hutcheson Sand & Mixes of Huntsville. Hutcheson's wish to express their thanks to those who assisted in teaching Scott his skills in preparing mixes for better turf. The Association regrets the loss of a valued member of the turf industry.

Pest Diagnostic Clinic on the Move



The Pest Diagnostic Clinic has moved to the new OMAF Laboratory Services Building on Stone Road in Guelph.

This Clinic offers a diagnostic service to turf managers whose turf may have disease, insect and nutritional problems. If you are not sure what your problem is it is good policy to have a positive identification by this service prior to commencing any treatment. Contact the clinic with regard to protocol for sampling and costs of the service before taking any action. It can save many dollars from incorrect application of chemicals.

Contact: Pest Diagnostic Clinic, Ag. & Food Laboratory Services Centre, P.O. Box 3650, 95 Stone Road W., Zone 2, Guelph, ON. N1H 8J7

(519) 767-6256

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GRASS CLIPPINGS

 Many animal activities (humans included) create harmful gasses such as carbon dioxide, ozone and methane. Grasses, however, absorb carbon dioxide to survive and replace it with oxygen, vital to the respiration of all animals.



- An area of turf, 50 ft. by 50 ft., generates sufficient oxygen in a day to meet the needs of a family of four.
- Grass produces about 200 pounds of dry clippings per 1,000 square feet per year. If allowed to decay on the surface, they will release 10 pounds of nitrogen, 8 pounds of potassium and 0.8 pounds of phosphorus to the growing grass.
- Studies at Penn State found the runoff and leachate obtained two days after man-applied fertilizer and pesticides provided cleaner water than what government agencies require for drinking water.
- 90% of the weight of a grass plant is in its roots, making it a very efficient system for stabilizing soils.



Sports Turf Newslette