

(Endophyte-Enhanced Turf continued)

and more resistant to infection by other fungi which cause turf diseases. Fine fescue varieties which contain endophytes appear to grow better in shade than do identical varieties. Stands of endophyte-enhanced turf appear to maintain density better (and have fewer weeds), probably because they are less prone to damage by insect feeding, disease and heat and drought stresses.

#### Is There a Down-Side to Endophytes?

Endophytes can cause problems for animals which may feed on infected grass plants. For example, cattle may get "fescue summer syndrome" (fescue toxicosis), sheep may get "ryegrass staggers" (not to be confused with the behavior of some golfers on hot afternoons!) and mares may suffer from agalactia (suppressed milk development). Domesticated animals do not seem to distinguish between grass which contains endophyte and that which does not. On the other hand, wild animals (like deer) are possibly able to discriminate in their feeding so as to avoid endophyte-containing turf. Endophyte contamination in pastures is a major problem for beef and sheep producers in some parts of the country.

In summary, the use of endophyte-enhanced turf varieties is yet another way for turf managers to practice integrated pest management. And while doing so, they may just be producing turf areas that are also more disease and stress resistant. Maybe it will even keep the geese and elk away!

Credit: Hole Notes, May '93

## GCSAA offers time management correspondence course

LAWRENCE, Kan. — Not enough hours in the day to do everything you need to do, plus everything you want to do? A new correspondence course offered by the Golf Course Superintendents Association of America (GCSAA) was designed especially to help overcome this "time-less" problem.

The "Time-Management" correspondence course was written by one of GCSAA's most popular seminar instructors, Bree Hayes, PhD., president of the Hayes Group. She says the course was designed to be comprehensive, practical and challenging — "a real journey of self-exploration."

During the course, the student will analyze personal time expenditures, assess time "wasters" and "thieves," and learn how to set goals, delegate work and stop procrastinating. The course materials also include "essential" time management tips.

GCSAA also has correspondence courses available on the topics of media relations, underground storage tank management and hazard communication. GCSAA and its entire curriculum of seminars and correspondence courses are nationally accredited by the Accrediting Council on Continuing Education and Training, which is recognized by the U.S. Secretary of Education.

Successful completion of the "Time Management" correspondence course earns 0.7 CEU toward GCSAA certification or renewal. The course costs \$50. To order by credit card, contact the GCSAA education department at telephone 913/832-4444, FAX 913/832-4433. Mail written orders to GCSAA Education Department, 1421 Research Park Drive, Lawrence, KS 66049-3859.

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