



**TURFAX™**



of the  
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**TURFAX™ — The International Newsletter about Current Developments in Turfgrass**

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The goal of this 6 issue per year newsletter is to provide international turf specialists with a network for current information about turf. It is FAXed to all Institute Affiliates that use the ISTI technical assistance services on an annual basis. FAXing is more costly, but ensures quick delivery to those outside the United States.

For non-affiliates, a TURFAX™ subscription is available by annual payment of U.S. \$60.00. Payment may be made by sending a check to the address below. Foreign orders please send a check or money order on a U.S. bank

Many of you have enquired about obtaining back issues of the Turfax™. We have decided to offer the back issues for the previous two year period (starting January-February, 1993) at the price of U.S. \$5.00 per issue mailed to you. Those wishing to purchase back issues to complete their files should address their enquiries to Harriet Beard.

**LOW TEMPERATURE KILL VARIATIONS**

Low temperature kill involves the death of any turfgrass that occurs as a result of interior tissue ice formation at temperatures below 0°C (32°F). The last two years have seen extensive kill by this mechanism, first on the closely mowed perennial ryegrasses (*Lolium perenne*) in the intermediate cool-humid region and more recently this past year on bermudagrasses (*Cynodon* spp) in the cooler portion of the warm-humid region. Note that this type of kill should not be confused with chilling injury or low temperature discoloration that occurs at temperatures of 12 to 18°C (54-60°F).

Confusion has arisen in making comparisons among cultivars of warm-season grasses in terms of their hardiness to low temperature kill. The hardiness comparisons normally given relate to low temperature stress that occurs during the winter period and are certainly valid among cultivars such as bermudagrass (*Cynodon* spp) and St. Augustinegrass (*Stenotaphrum secundatum*).

However, the confusion arises when low stress temperatures occur after spring greenup has been initiated. In this case, the cultivars most susceptible to low temperature kill would be those that initiate spring greenup the earliest. The warm-season turfgrass

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cultivars that remain dormant the longest in the spring would exhibit the least susceptibility to low temperature kill. In other words, the relative ranking of susceptibility to low temperature kill among turfgrass cultivars is different during the normal dormant winter period in comparison to the spring greenup period. During spring greenup the low temperature hardening mechanism ceases to be operative and the comparison among cultivars depends strictly on whether new spring shoot growth which is highly susceptible to low temperature kill has been initiated or whether the shoots of a cultivar remain brown and dormant.

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#### **JB VISITATIONS:**

##### **Bradenton, Florida - February**

Presented a keynote address on "Future US Sports Turf Perspectives" before the Annual Winter Conference of the Sports Turf Managers Association (STMA). The organization has unfortunately struggled over the years to become an active national force. From personal experience, be assured it is not easy to accomplish. It appears they are starting to gain additional momentum. We should all support this organization and its future development.

##### **Orlando, Florida - February**

Presented a keynote address entitled "The Future of Sod in 2020" before the Annual Winter Conference of Turfgrass Producers International. There are significant marketing and technical changes occurring within the sod industry. It will be interesting to see how these evolve over the next years.

##### **San Francisco, California - February**

Presented a 2-day seminar on Basic Turfgrass Botany and Physiology. The GCSAA International Conference and Show continues to grow with over 17,500 in attendance this

year. For the past 20 years I have heard attendees and exhibitors question whether people and companies can justify the cost of the many national, regional, and state turfgrass conferences that continue to develop around the country. Am now hearing the same thing from countries in other parts of the world. The interesting thing is that most of these turfgrass conferences continue to grow in attendance and quality, assuming there is sound leadership behind the effort. This would suggest additional needs and desire on the part of attending turfgrass practitioners.

##### **Sioux Falls, South Dakota - March**

Presented three lectures before this young turfgrass conference. The hospitality was great in spite of the 17°F (-8°C) temperatures.

##### **Kuala Lumpur, Malaysia - March**

Assisting a Golf Course Association and the government to develop a five-week turfgrass educational program which should start in February or March of 1996.

##### **Singapore - March**

Conducted visitations on the issue of grass cultivar identification in terms of Tifdwarf versus Tifgreen versus some off-type. It is certainly a difficult issue of world-wide concern.

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#### **UPCOMING JB VISITATIONS:**

Provided for Institute Affiliates who might wish to request a visitation when I'm nearby.

- May 3 to 5 - Orlando, Florida.
- May 14 to 20 - Buenos Aires, Argentina.
- June 1 to 9 - Italy, Europe.
- June 11 to 17 - Oregon and North Carolina.