

JB VISITATIONS:**February - Texas.**

Participated in the Annual Winter Conference of Turfgrass Producers International in Austin. Generally the sod business was good across a majority of the United States in 1995. Certainly, the big-roll sod transplanting system has become widely accepted. There is a continued interest in specialty grass production and installation.

There is considerable interest in a new dwarf hybrid bermudagrass named Champion Dwarf. For the past year this Institute has been conducting morphological and turf performance studies with Champion Dwarf. It represents a giant leap forward in an improved hybrid bermudagrass for putting greens when compared to Tifdwarf and Tifgreen. Its characteristics include (a) tolerance to extraordinarily close mowing heights in comparison to Tifdwarf, (b) the ability to sustain a high shoot density and allied resistance to moss, algae, and *Poa annua* invasion, (c) substantially reduced rate of vertical leaf growth, and (d) a multi-fold increase in stolon number and growth rate which results in better putting speed, and more rapid establishment and ball mark repair rates, respectively. Champion Dwarf certainly represents a new generation of improved dwarf bermudagrasses.

February - Florida.

Presented several invited lectures, including one on *Poa annua* Update, before the Annual Golf Course Conference and Show sponsored by the Golf Course Superintendents Association of America in Orlando. The Basic Botany and Physiology Seminar presented by Dr. Jeff Krans and JB continues to draw a strong enrollment, and consistently is ranked by the participants in the top five of over 80 seminars topics organized annually by the GCSAA. This is quite startling in view of the fundamental nature of the topic. A strong international contingent from a wide range of countries participated in the conference.

March - British Columbia.

Presented several invited lectures before the CGSA Canadian Turfgrass Conference in Vancouver. This Canadian organization continues to grow. A significant spring-1996 concern for golf course superintendents is the potential for winter injury from both winter desiccation and low temperature stress, depending on the particular east-west location. The same concerns apply to the northern United States, as well as for bermudagrass extending into southern climates.

JB Comments:

A comment that one hears from some turf managers involves criticism of high-sand root zone mixes and that native soils are better. The latter may be as good under low to minimal traffic conditions if a loamy sand to a sandy loam soil is available. However, under high traffic situations, high-sand root zones of the proper particle size distribution are the only alternative to successfully maintaining turfs on a continuing basis.

The difficulty these frustrated individuals are having is most probably a failure to achieve a living soil balance in terms of beneficial soil micro-flora and fauna, especially the fungi, bacteria and other microorganisms that permeate a living soil. The key substrate that supports these organisms is a continuing supply of organic matter which occurs primarily from the grass roots. If one fails to achieve an adequate rooting depth over time, then the lack of a food substrate will not allow the development of a balanced living soil profile ecosystem. The result will be increased use of fertilizer and pesticides. In the case of the latter, the lack of beneficial organisms that are antagonistic against the pathogenic fungi, nematodes, and insects dictates an increased use of pesticides. To repeat, one of the keys in developing a living soil ecosystem involves cultural practices that ensure the development of a deep, dense root system and resultant organic matter food source.