USGA GREEN SECTION RECORD JANUARY/FEBRUARY 1982

TURF TWISTERS

A MILLIMHO OR TWO

Question: What in the world is a "millimho" and how is soil salinity measured? (California)

Answer: Soil salinity is usually determined by measuring the electrical conductivity of the soil solution. A soil sample is saturated with distilled water which mixes with the salt in the sample. The salt solution is then extracted and tested for its capacity to conduct an electric current. The saltier the soil, the greater its conductivity. In the past, conductivity has been expressed as "millimhos per centimeter." Now, if you think that's bad, try "deci-siemens per meter." That's the new metric unit for electrical conductivity! How much salt is represented by a conductivity of 1 deci-siemens (or 1 millimho)? It represents about two level teaspoons of table salt dissolved in five gallons of water.

ON THE GREENEST GREENS

Question: We have Seaside bentgrass greens that are 20 years old. They are really not the greenest greens our members have ever seen. In planning for the coming growing season, can we successfully overseed with another bent that might improve our color over the next few years? (New Mexico)

Answer: Although the Green Section has long preached that super "green" putting surfaces do not necessarily equal "good" putting surfaces, surely some degree of greenness is desirable. Dealing with the soils of New Mexico, you might first want to try two or three ounces of ferrous iron sulfate in five gallons of water per 1,000 square feet. Do not water in because this must be a leaf feeding. Weekly iron applications (or more often if conditions warrant) will frequently improve color during the growing season. Magnesium sulfate applications, applied in a similar manner, may also be worth investigation. In addition, check irrigation practices. Iron and magnesium deficiencies are often associated with overly wet soils. Overseeding with Penncross or Penneagle bentgrass should improve the quality of your Seaside greens. However, this writer would not expect a startling or even significant color improvement from overseeding. The problem seems more one of nutrition — iron, magnesium, or perhaps even nitrogen. Don't "overgreen" them!

MAY CAUSE A REACTION

Question: I have recently heard that a vigorous turf cover over the root system of a tree or shrub may affect the latter's growth. Is this true or false? (Idaho)

Answer: There seems to be some truth to it. Research indicates the suppression of woody plants by leachates of roots from perennial ryegrass, red fescue and Kentucky bluegrass do involve chemical inhibitors. Turfgrass competition for nitrogen may also be a factor in shrub or tree development. Competition for moisture, however, did not appear to be involved. These inter-reactions are called allelopathy.