USGA GREEN SECTION RECORD JULY/AUGUST 1981

TURF TWISTERS

IT'S A CHINCH

Question: We experienced more turf loss from chinch bugs during the dry summer of 1980 than in any previous year. Is there any cool-season grass that is resistant to this insect? (New Jersey)

Answer: Research hasn't fully determined where the chinch bugs draw the cool-season line. From personal observation, however, we have never seen tall fescue damaged by chinch bugs, even though every other cool-season turfgrass in its wake was totally destroyed. Whether this means tall fescue is resistant to chinch bug injury, we can't say for sure . . . maybe they just don't bother with it so long as there are other, more palatable grasses to feed upon.

TO APPLY IRON

Question: Iron has long been an important nutrient applied to turfgrasses. Who was first to recognize the importance of iron to plant life? (North Dakota)

Answer: We're not certain it's the first, but to cite our earliest reference, scientist Salm-Hortmar in 1849 showed that "plants which grow in soils or media destitute of iron are very pale in color and that addition of iron salts (sulfate or chloride of iron) speedily gave them a healthy green color."

E. Gris in 1843 was the first to trace the reason for these effects ... he found that in the absence of iron, the protoplasm of the leaf cells remained a colorless yellow mass, destitute of visible organization. When iron is added, grains of chlorophyll begin at once to appear and pass through the various stages of normal development. Thus, in the absence of iron, there can be no proper growth. (From *How Plants Grow*, by Samuel W. Johnson.)

DURING SUMMER DORMANCY

Question: We have often heard that bentgrass putting greens enter a dormant stage in summer. What does the term "summer dormancy" mean? (Washington)

Answer: Nature designed cool-season turfgrasses to better survive the hot, dry periods of summer by going through a dormant stage. During its dormant stage, reduced growth occurs. This is one of Nature's safeguards, so forcing the turf while dormant can weaken it, thereby opening the door for the invasion of *Poa annua* and other weedy grasses. Careful study of annual irrigation and nitrogen applications is advised to help bentgrass putting greens through their summer dormancy period.