



Northeastern Region

by JAMES T. SNOW, Director,
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AFTER SEVERAL YEARS of only localized pockets of weather extremes, 1987 saw the entire region experience extremes of one type or another. For the first time in quite a while, much of New England and upstate New York was blanketed with heavy snow cover and a subsequent accumulation of ice. As might be expected, many golf courses suffered extensive damage to their predominately *Poa annua* putting green turf. April turned out to be one of the coldest and wettest on record, delaying recovery from the winter injury, testing the skills of the superintendents and the patience of the golfers.

Extreme heat was the common denominator throughout the Northeast. Many superintendents from mid New England to Buffalo and Ontario, Canada,

saw pythium blight for the first time. Weeks of temperatures above 90 degrees, combined with heavy thunderstorms in downstate New York and New Jersey, caused many greens to be wiped out, which hadn't been seen for many years over so wide an area. Not surprisingly, the affected greens were almost without exception poorly constructed and located in pockets of large trees.

Rainfall was extreme but variable. Parts of New England received just 0.7 inches from mid-May to mid-September, while rainfall in portions of New Jersey totaled more than 35 inches from July through mid-September. The hot weather accentuated the rainfall extremes, showing drainage or irrigation system deficiencies in the respective areas and causing more than the usual amount of turf injury along the way.

Lessons Learned (Again) in 1987:

- There is no sure way to prevent ice damage when weather conditions are bad. Let your golfers know this before winter arrives, not after the damage is done.

- Do something about known drainage and irrigation deficiencies *now*, before the golfers begin blaming you for the resulting loss of turf.

- Heat + Wetness + Poor Construction + Trees = Dead Grass.

- Don't experiment with new chemicals on 25 acres of prime fairway turf or two acres of prime putting green turf.

- Raising the cutting height on greens from 1/8" to 9/64" or 5/32" can save grass and jobs.



Great Lakes Region

by JAMES M. LATHAM, Director

WATER WAS the big story here throughout most of this growing season. Floods in Chicago and Minneapolis made the headlines, but the lack of winter snow-cover followed by a dry spring and summer were more important. From mid-year into September, heat and high humidity made life tenuous for all golf turf. Pests of all kinds took advantage of this situation, and became budget busters.

Irrigation systems designed only to supplement natural rainfall were incapable of providing uniform water distribution on many courses. Those on dense soils were especially at risk. Thatchy turf was equally difficult. Many superintendents were forced into hand

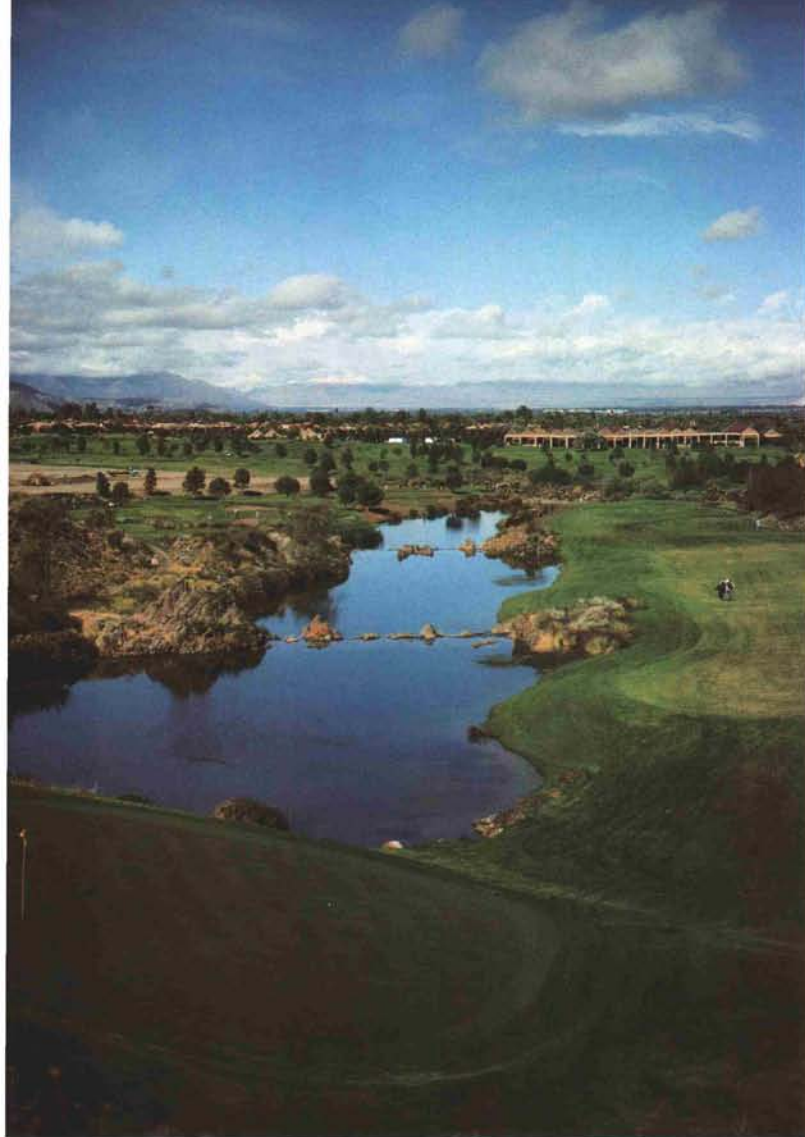
watering — not syringing — fairway turf to equalize distribution, because golf balls plugged into mid-fairway turf while the edges and intermediate roughs were dry.

Stressed-out greens, particularly those being mowed to ground level, were set upon by algae, moss, summer patch, and other problems of weakened turf. Two greens in Milwaukee were diagnosed as being infested with *Xanthomonas campestris* — bacterial decline — but contained no Toronto or Nimisila bent. *Pythium* was everywhere.

It was an educational year for everyone, and stress management was learned the hard way. High potash levels helped a great deal, so nitrogen to potash ratios now favor 1:1, or even 1:2. Nitrogen

starvation is getting a second look because of the non-recovery of ball marks and spike pulls on greens. Light and frequent topdressing with sandy materials performed well, but layering caused big trouble. Careful irrigation and better cultivation practices contributed to a major reduction of black layer. An adequate soil air supply does great things.

The year was absolutely wonderful for golfers, who had fewer rainouts than anyone can remember. The superintendent's year was the worst in recent times, because most golfers don't understand the causes of turf deterioration. And green speed is so addictive that few players agree with one superintendent's comment, "Slow green is always better than fast brown."



(Left) Let's hope fair weather clouds are in the picture for 1988.

(Below) A thick layer of old thatch atop dense, compacted soil set the Poa annua turf up for a kill on this area where the green and fairway sprinklers overlap. From the Great Lakes Region.

(Bottom) Winter injury was widespread in portions of the North-eastern Region.

