Necessities In The Nineties

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Looking back on the 1990 golf growing season, there was no major, all-emcompassing event or condition that makes it memorable. There was no central focus like *The Drought of '88* which affected the entire Great Lakes Region. It was not, however, one of those vintage years when things were generally pleasant. But when the quality of bunker sand shares equal interest with the quality of the grass during some Turf Advisory Service visits, golfers must not be very unhappy. There were intense local problems — severe winterkill of *Poa annua* from Fargo to Stevens Point with an epicenter (again) in the Twin Cities; prolonged rains and high temperatures which caused turf losses (quality or quantity) in northern Illinois; heavy white grub invasions from Indiana to Iowa; and a few floods (like the 23 inches of rain falling in the Quad City area during the month of June).

The bone-chilling cold early last December did much less damage here than was expected. There were major losses of warm season grasses from Missouri to Texas. That cold spell, incidentally, killed some golf turf all the way to Houston. How would you like to *see* about 70 acres of dead grass on your course?

The Wisconsin Golf Turf Symposium turned 25 this year, just a kid as compared with some conferences, but one which sets some sort of milepost in the field. Each is devoted to a single topic, which is usually a mirror of the interests of the day or at least the near future. Looking at some of the topics covered, some rather pointed questions can be asked. For example, Symposium Number One (1966) dealt with winter injury. Number Two covered the physical nature of soils — with much emphasis on green building and Number Three took on *Poa annua*, as did the 11th and 18th. Even though speakers at those Symposia are acknowledged leaders in their fields and attendees are certainly capable of learning, these subjects remain major problems. It indicates the complexities of dealing with the environment of this high quality, special purpose turf and the costs involved in creating a favorable environment for the root systems of defoliated bentgrass.

Why were there so many greens built in 1990 which are either doomed to failure or will at least be a severe threat to the tenure of future golf course superintendents? Perhaps it parallels some of our bureaucracies. The construction division (of either a municipality *or* industry) is pressed by management to design and build something for the lowest possible cost. When plans and specs are presented, the numbers look good — to everyone but the operating division who see their costs mushrooming just to keep the new stuff running and who must go back to management every year for funds to repair or replace the installation. *They* are the people who must justify their budgets, while the designers are off on some other money-saving tangent involving untested ideas devised by their own rationalizations or egos.

Sound familiar? But boy, does that new structure or machine get media attention and cover photos. All the while the operations people are already wondering how they can prepare a budget just to keep the monster running and, of course, without pointing out the lack of foresight of those in management who approved the project in the first place. "Keep construction costs down! We'll handle operations and maintenance when the times comes." Sure! I drive a lot of miles on Interstate 43 (Green Bay/Milwaukee/Beloit). It is probably the roughest stretch of new highway ever built. The slabs of concrete had not cracked before they were running Super-Zambonis over some sections to "groove the pavement for safety." Hell, they were trying to smooth it. Who OK'd that work and who inspected it? Probably shock-absorber salesmen.

The point here is, who OK's plans and specs for golf courses? Why do owners who, after being told of construction deficiencies go ahead and accept the job? Then they reject a rehab budget on the grounds that it's a new course and shouldn't need it or that play cannot be discouraged because cash flow is needed (usually in the clubhouse or pro shop).

It is more difficult to deal with the *Poa annua* thing. But winterkill of *Poa annua* is real, even though "out of sight — out of mind" (no seedheads) never fit a subject better. Ask the Minnesotans who have seen it two (2!) years in a row. The kicker in '89 and '90 was the extremely poor spring weather which severely retarded seed germination of both bentgrass *and* poa. Anything green was acceptable, even though it meant starting the same vicious cycle again. The fact that bentgrass loss was negligible or nonexistent should deliver a strong message.

Prevention? The thin fabric covers were of little or no help in the Twin Cities. If there is snowmelt followed by a deep freeze, they offer no thermal protection and may even enhance the day/night temperature spread. The very thick mats have done well, perhaps because they prevent mid-to-late winter thawing. These observations by superintendents in the area certainly make sense to me. Maybe that's the reason old timers topdressed heavily in late fall or put brush on the greens to hold snow cover. The basic idea may have been to protect against desiccation, but it provided insulation as well. (Or maybe there was less *Poa annua* to worry about in those days when the normal close mowing was a quarter-inch.) The insulation theory is valid, since the primary winterkill of Perennial Ryegrass fairways in Milwaukee (1986) was in areas receiving full sun, not the narrow, shaded fairways where mid/late snowmelt was minimal.

The problem today lies in the difficulty of making bentgrass more competitive during the growing season. This isn't difficult in fairways where the bent stolons have about a half-inch of growing room. But vertical space is hard to come by on a green where the cutting edge of a bed-knife is only one-eighth-inch above a firm surface. Mike Bavier at Inverness in Chicago commented on the vertical threshold in bentgrass

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spread between fairways and greens a few years ago. Just what that threshold is is still not known. It may be purely academic, because we are unlikely to see high-cut, slow greens again.

We need a feasible program to not only weaken or eliminate *Poa annua* but to make the bentgrass more competitive. To weaken poa without improving the bent just makes the turf chronically weak, usually in the most important areas on greens where the holes are cut or the walk on/walk-off traffic is concentrated. I am concerned by the implication that growth retardants selectively affect *only* poa and that they will open the door to automatic bent encroachment into the poa-infested surfaces of closely mown putting greens. That idea is no more valid than a groomer being substituted for a verticut. We *just wish* it were true. It seems to me that interseeding into weakened poa must be a part of the procedure, with appropriate after-care. Or perhaps just seeding at every topdressing?

This takes us, again, back to the basics of what makes plants grow — but we have to make that read *defoliated plants*. Among the requirements are well developed root systems, an adequate amount of sunlight (for the remaining leaves or parts thereof), adequate fertility and moisture, adequate soil oxygen and protection against pests. It's getting harder to survive on a diet of magic potions, but even harder to perform some of the necessary cultural programs without interfering with an increased number of golfers every day. Working smarter and talking more convincingly have never been more important than they are today and that may call for assessing the programs of fellow superintendents who are dealing with similar problems, questioning "experts" and just "visiting around." The nineties will not be a good time to paint oneself into a corner by failing to look at the whole picture.