TurfComms

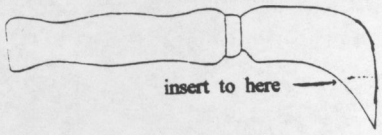
Vol. 11, I. 4 **Sept. 25, '98**

PURPOSE: To pass on what we learn willingly and happily to others in the profession so as to improve turf conditions around the country.

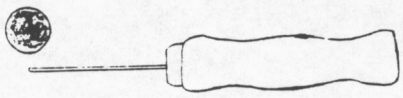
HOT: I'm glad those days are over when you see all the dragonflies and blackbirds in small flocks on the shady side of most trees on the golf course. I didn't expect to get cool in July and August by heading into West Texas, NM and Calif. but Beale AFB out did itself with the first day's welcome - 106°. It was warmer still the second day. Here in Greater Dallas the days over 100° didn't beat the 1980 record but the summer of 1998 made 2nd place for the year with the most days in triple digits. Even now in mid-September many days have pushed up into the upper 90s but at least most of us obtained a nice slow soaking rain when the remnants of a Hurricane Frances pushed inwards off the Gulf and broke up.

SOIL SAMPLING GREENS: If doing this yourself with a soil probe here is a device I have found handy to close holes, a lot of them, without getting blisters on your fingers. I use a linoleum knife, sticking the point in the ground first on one side and then the other twisting the back of the blade toward the hole. I have found that inserting the knife so that the back edge of the blade is approximately 1/3 inch from the edge of the hole and even or just a little beyond the middle of the hole works the best. Condition of the turf and soil mix can have some effect.

Linoleum Knife



Properly inserted beside sample hole



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FAIRWAYS - Replacing *Poa annua* with Kentucky: Can it be done? I concluded many years ago that the answer was no, at least not without the added cost of fumigation. The *Poa annua* at 3/4 inch or under height of cut is too competitive with Kentucky bluegrass seedlings. Heck, if moisture conditions are too high *Poa annua* seedlings will choke out perennial ryegrass seedlings. Do any of our newer tools offer a valid chance of succeeding? Perhaps, but not very clear cut.

A phone conversation with a Northern Tier superintendent stimulated the above paragraph; and a call to another consultant who has worked a long while in that area convinced me to finish it.

Let me be quick to say that under similar conditions on clean (*Poa annua* free) soil I have no trouble recommending a seeding for a new golf course with a blend of the new Kentucky bluegrass cultivars for fairways. Although I think bentgrass may be a better selection for the demands of the game in most of this area. Bentgrass fairways may be a little more expensive to maintain but not too bad if the maintenance is proper. Snow molds and excessive traffic would be the biggest concerns.

TREES vs. TURF: I've written about it before but here I go again. Research shows if you want to get young trees off to a good start mulch them rather than allow turf to grow up to them. A recent study on the desert willow reported in HortTechnolgy V.8(4) pg. 588. "Mulched trees ...had greater height and shoot and root dry weights than trees in turf." The turf in this case was two inch bermudagrass.

One of the mulches was chipped tires (**crumb rubber**). The particle size was in the 0.7 to 1.0 cm. range (a 1/4 to <1.2 inch). Values over two years for tree shoot dry weight, height, root dry weight and length were equal or better under the crumb rubber vs. those found under gravel or wood-chip mulch.

LEONARDITE: Sold under various trade names this naturally occurring humate material that occurs at or near coal deposits has over the last 5 to 10 years been widely sold to the fine turf industry. I object to its use on USGA style greens because of the silt and clay I'm reasonably sure is being added. For a positive outlook on humic acid substances read the recent article by R.E. Schmidt. pg. 65 of the July 1998 Golf Course Management.

Another study done to evaluate its potential as a growth enhancer for turnip and mustard greens did not find any differences in plant growth. There were however significant increases in available soil potassium and iron levels where Leonardite was added. The iron apparently came from the Leonardite; while the potassium came from the soil minerals. Rates were 0, 1, 2.5, and 9+ pounds per thousand square feet banded 2 inches under the center of the seed row. HortTechnology, 1998, V.8(4) pg. 564-7.

TEXAS TURF FIELD DAY: This took place this year at the plots in College Station on Sept. 16th. It was a warm drizzly New England day with very soggy turf. Probably the most interesting research was the irrigation frequency study on creeping bentgrass at putting green height. 1, 2 and 4 day irrigation cycles with no syringing. It was extremely hot and dry at College Station this summer, with a good breeze. Ideal summer conditions for growing creeping bentgrass if you supply the water carefully.

BENTGRASS (at TX F.D.): The data proved Engelke was correct; John Jordan did the research. Watering every fourth day produced the healthiest bentgrass, with a 5 times larger root mass than those plots watered daily. Dr. Engelke stressed that this is the way to take advantage of these new cultivars. He also noted 1) you would need to do some sort of aerification to insure water penetration under a once every four days regime and 2) once you lost the root system you are then going to be forced into a more frequent irrigation regime. An every fourth day irrigation cycle may also be a good tool for those with salty water that needs periodic flushing.

Quality-wise of the cultivars present, Crenshaw and L-93 did the best while Penncross, Mariner and Seaside were the poorest.

In another study on bentgrass blends and disease resistance Dr. Colbaugh reported that mixing cultivars with different disease resistance and susceptibilities helped reduce the severity of disease. He also noted that fans by removing dew early in the morning could help suppress dollarspot.

DWARF BERMUDAGRASSES (at TX F.D.): The research here so far is indicating a need for light frequent vertical mowing, light frequent topdressing and moderate nitrogen levels. I severely question any nitrogen levels arrived at under College Station conditions with water pH running as high as 9.3. Anyone that has tried to grow bermudagrass at high pHs (above 7.5) knows that it takes a lot more nitrogen than at lower pHs. They didn't really put a value on moderate nitrogen levels but implied it was between 6 and 14 lb./M. So far Champion and MiniVerde have been the biggest thatch producers, with Floradwarf and TifEagle distinctly less, and Tifdwarf least of all. Quality ranking puts MiniVerde #1, TifEagle #2, Miss. Supreme #3 at 3/16 inch height of cut. At 1/8 inch height of cut Champion is number one with some of the new Tif 94 series. Diamond zoysia planted with these rated last. The high pH (very high sodium) water causes Diamond to be very yellowish.

The Tif 94 series must be mowed at 1/8 inch to look good while Tifdwarf kept at this height slowly fades away. They felt fertilizer needed to be higher in the super dwarfs to get the same quality.

ZOYSIAS (at TX F.D.): Engelke admitted that Crowne could become invasive and that it was susceptible to brown patch when fertilized just before or during warm humid conditions. He is quite proud of how Cavalier is doing at fairway height of cut in Dallas Research Station tests.

CONFRONT (at TX F.D.): They report good control (94% 4 weeks after second trt.) of Virginia Buttonweed using Confront at 1.5 pints/A repeated at four week intervals for two applications. Note though the phytotoxicity is a little high 2 wks. after the 2nd trt. at 4.3 on a 1

to 9 scale where 9 is dead. It goes back up to 1 at four weeks. Those ratings were in Texturf 10. Confront is also good on chaffweed another difficult to control broadleaf.

NEMATODES: We have two new tools available to fight nematodes in bent and bermuda greens. Ditera and Snicocin. Ditera is a biological nematicide from Abbott Lab. Call Abbott at 1-800-323-9597 for more information in your area. In greater Texas Jonathan Bevil is their Commercial Dev. Intern. He can be reached at Rt. 4, Box 2224, McAllen, Texas 78504, Voicecom: (800) 385-2474, Fax (956) 686-5009

Ditera is *Myrothecium verrucaria.* the way I understand it a strain of this microorganism is multiplied by a fermentation process to produce the dried product Ditera. It is effective against several nematodes including the Sting nematode (*Belonolaimus longicaudatus*). According to their literature you may have trouble where soil organic matter content is high. I have also heard it is expensive.

"Sincocin is a liquid concentrate derived from plant extracts and fatty acids". It is sold diluted (1 in 200) in water. The rate for the active ingredient per acre is 2 ounces. It does not kill nematodes directly but reduces feeding. The exciting thing at this point is both are apparently nonphytotoxic to the turf. For more on Sincocin read Golf Course Management, July '98 pg. 68-70. Or contact Derek Little, 3601 Garden Brook, Dallas, TX 75234, Fax (972) 406-1125.

CRAZY TEXANS: *The Dallas Morning News* 9/16/98 has an Associated Press release about Rep. Bob Junell, D-San Angelo's proposal to eradicate all the brush along the North Concho River. Why? so the 90,000 residents of San Angelo, TX can have more water.

The hell with the environment on the 950,000 acre watershed; he proposes removing 130 million mesquite and 100 million cedar trees. A $86,000 study has shown this will increase flow in the river 28,000 acre feet per year. But, one thing of many not discussed is the yearly cost to keep the brush under control. The proposed cost to do the initial removal is $17 million, which means it will probably cost 3 times that or $51 million. But, if only $17 million he can raise that money easily by selling water rights to the increase water at $610 per acre foot/year. I don't know why he should come to the State looking for the money.

What is really scary is the fact in 40 years his replacement will be trying to cover the water shed in asphalt so they can capture all the rain. This will be so the now 1 million residents of San Angelo can obtain more water. Maybe 90,000 people shouldn't be living in dry San Angelo? But then look at Palm Springs and Los Angeles, CA, or Tucson, and Phoenix, AZ. We are running out of water!

You realize this means you should cut all the trees down on your golf course or parks in the City of _____ (you fill in the blank) so more water will be available to the folks in the watershed. Are you ready for the 21st Century?

End