

TurfComms

Vol. 11, 11



Apr. 16, '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.

PGA VS. GCSAA CONF. AND SHOW: I was talking in March to someone who has just entered the overall golf course management profession. This individual (in upper management) went to both conferences this winter and clearly felt that the GCSAA Conf. and Show was the superior managed conference; and from which he returned with the most useful information.

USGA REGIONAL CONF., DALLAS, TX: Scott Johnson, supt. of Colonial C.C. - home of a PGA Tour stop, talked on preparing that course for their yearly event. I thought it was interesting that he made several applications of **Primo** to greens in the Spring prior to this May event. The use of Primo on bentgrass and Poa annua greens appears to becoming an accepted practice among some of the better maintained golf courses. I was also impress that he verticut bent/Poa greens in full sun on a regular basis in the Spring but only brushed his shady greens. He said he could get his flood plain course back to normal after the event in two weeks if it didn't rain. No time given if it did rain.

Dr. Robert Carrow, turf researcher from Georgia, gave what I thought was the most informative talk. His talk centered around **organic matter dynamics in bentgrass greens**. Perhaps I thought it was the most informative because he clarified and emphasised many things I had felt about bentgrass greens management.

He first pointed out that his emphasis was going to be on what happens to the macropores and

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thus oxygen movement into the soil. He noted that when there was more than 4 % organic matter by weight in the soil there was a danger of macropores being lost because they became plugged with organic matter. He also noted that amounts between 7 and 18% were common in poorly maintained greens. The structure of this organic matter is very important to oxygen movement in the soil. Carrow noted that oxygen levels in the soil of bentgrass greens were often very low in the Spring because the surface soil was full of roots. This will also result in low infiltration rates.

The organic matter (O.M.) in the surface zone of sand base greens becomes a problem under two field situations he went on to say. (Ed. I'll add a third.) Situation -1. O.M. structure is altered by traffic traffic/ compaction. This will often result in death of roots. Then the structured O.M. becomes gel-like, and anaerobic conditions develop. Situation -2. Excessive O.M. accumulation. He pointed out that what was excessive varied depending upon conditions. a) without grass >5% by weight., b) with turf and a healthy root system 5 to 15 % was fine. c) with turf and the recent death of the root system more than 5 % was a problem. d) If the root system has been dead two weeks or more than 5 - 8 % was okay.

Situation -3 (Ed.) An additional problem I have found with organic matter amounts in a "too high range" is the adverse effect of sodium on the organic matter. Sodium seems to hasten the transition to gel-like O.M. and thus anaerobic conditions and the above results.

How does he recommend avoiding the "summer decline" that is the results of too much organic matter? Cultivate (aerify), topdress lightly and frequently, use wetting agents, try the Sub-Air™ suction approach, and increase air movement over the surface. Do you have to do all those things? Hopefully not, a lot depends on your situation. He has found that combinations of these recommendations work better than any single approach. He is sold on the high pressure water injection for summer and so am I.

Dr. Carrow was asked about adding sugars to greens to encourage beneficial microbial growth. He was quick to say no to that idea.

Dennis Martin, Ph.D., OK. State Univ., spoke on water treatment. Two relatively new treatments he discussed in depth were Magnetic Fluid Conditioning (MFC) and Electro-Static Precipitation (ESP). The first, MFC, definitely works well most of the time for preventing scale buildup in boilers and irrigation plumbing down stream from the properly installed ceramic magnets. For the latter, ESP, there appears to be little scientific evidence of it even doing that. **Both, have never been shown to be of any benefit to the turf.**

Richard White, Ph.D. TX turf researcher, talked about their research (**planted end of May 1997**) on the **new dwarf bermudagrasses**. This was discussed briefly on page four of V.10, I.8 of TurfComms. One new comment was that at a 10' Stimpmeter reading they are not as smooth as creeping bentgrass. A heavy/severe vertical mowing is too severe for these new dwarfs. Dr. White suggest you not verticut them right at overseeding and if you do so don't get too vigorous. A season long treatment of frequent light vertical mowing with frequent light topdressing resulted in the best overseeding stand this last Fall.

Mike Sandburg, supt. Lakeside C.C., Houston, reported that the erection of bat and purple martin houses has resulted in the reduction of mosquitoes at his Club to acceptable levels. (Ed. according to the literature bats are better mosquito hunters than the purple martins.) Don't expect instant results with either, and having been bitten by a mosquito in Houston in December I wonder what an acceptable level is considered to be by Lakeside C.C. members. Neither bats or purple martins are going to be around in December to eat mosquitoes. Also with both it may take a decade or more to get the population of either up to levels that will decimate healthy mosquito populations.

I'll close my review of this meeting by noting that I flunked the **Rules of Golf** examination. I liked the approach to teaching them. The 'instructor' Mark Passey first handed out an eighteen question true or false rules quiz. I would say the quiz was well crafted; I have to, after all I only got a 50%. He then went over these 18 commonly (?) mis-known ideas on the rules pointing out the correct answer and why. Well done! And to think 16 years ago I attended and passed a USGA Rules Course.

SPURGES: You may have read or been told by an instructor at some time that the milky juice from plants in this family can be poisonous and can burn or irritate the skin. I have found that the milky juice can indeed irritate the skin but never realized how life threatening this could be until I read an article in the April issue of **Tree Care Industry**. If you live and work in the Deep South, particularly California and Arizona be aware that the Pencil Plant is in that family, in fact in the *Euphorbia* genus. There is a story in **Tree Care Industry** telling of one man's awful experience when cutting one of these down.

He went at it with a chain saw and before he finished temporarily lost his eye sight. He did not have to be hospitalized but it sounded if he should have been. His skin was burned from head to foot because as he washed the material out of his hair it ran down his body irritating all the way. His eye sight came back but he was forced to wear dark glasses for a couple of weeks, his sinuses cleared up in a couple of days and so did the skin of his lower body.

So the next time you walk into a large patch of spurge, snow-on-the-mountain or other euphorbias with a nylon string trimmer be sure the goggles are on and maybe better a face mask.

REPORT CARD FOR GREENS: Jim Moore, USGA's Director of Construction Education, has been working on this for a number of years now. He has now published a refined version in the **USGA Green Section Record**, March/April 1998. Don't bother to tell me you don't get a subscription to this #1 magazine for the golf course maintenance industry

This report card approach to green evaluation is something a consultant (agronomist) does automatically when looking at a problem green. Jim has taken it to a new level by putting the important criteria on paper and suggesting how to best evaluate each one. The criteria (factors) he considers important are Light, Air movement, Entrance and exit points, Size of green, Cupping area, Surface drainage, Internal drainage, Irrigation control/coverage, Purity of turf stand, Amount of play, Water quality. He has also listed Other factors that may need to be considered.

On some of the factors he is very specific what rates an A, B, C, D, or F grade. On others he is less precise. For instance: if for **Amount of play** the number of rounds is between 20 and 30 thousand per year that factor gets a **B**. Whereas, a **B** for **Water quality** is a vague "good water quality". I also feel that the values for grades given for **Light** could be improved upon. He has made a simple evaluation based upon number of hours. The time of day is also important in my thinking. Bentgrass greens from the Transition zone south are much better off with four hours of morning sun than they are with four hours of afternoon sun. And the reverse is true for bermudagrass greens. In the heat of a 100° day bentgrass plants do not benefit from sunlight or the other hand in the cool of the morning a bermudagrass plant is not working very efficiently; simple plant physiology.

He suggests that the **Report Card** be used to "identify where work is needed to improve greens." Like evaluating your child's report card you can see quickly where additional effort is needed, but more refining is possible and this approach is needed to present data with understandable value to managers and greens chairmen who want quantitative data not subjective.

Good Work Jim; keep at it.

PUTTING A VALUE ON NATURE'S "FREE" SERVICES: This is the title of one of the most interesting articles I have read in **World Watch** recently. It is in the Jan./Feb. '98 issue. The theme is that the world's economists neglect the value of these "free" services when they calculate GNP (Gross National Product). This is not a new theme with this magazine but, this particular article is well done. The article aptly points out that economists often give positive values to construction projects that destroy more of the nature value than the new project creates.

What are these nature values? Pollination, Soil, Clean water, Raw Materials, Erosion control, Biological control of pests, Recreation, and Waste recycling.

The ultimate results of converting natural areas to row crops and suburbia is illness, and starvation; but in the short run the results is a gradual reduction in the quality of life. Unless your measures of the quality of life are only those material things you can purchase on the open market. I can remember when in the 50s a big ado was made of the world population hitting 2 billion. It will soon hit 6 billion and pop. growth in the most populated portions of the world are barely slowing down

ZINC DEFENSE: My sister-in-law (works in a pharmacy) left some of these new (last year's) lozenges for colds. They are great! I've used them twice this winter to suppress colds down to minor irritations. The only after effects I've noted is that I have a sharper sense of taste. My taste buds appear to be better able to distinguish various flavors both good and bad.

Time to sign up for a **Turf Advisory Visit** from the Editor. \$700 for a 1/2 day if it is reasonably close to my coast to coast travel routes and done in conjunction with other visits. First trip starts in mid-May and heads due north. Special rates for metropolitan Dallas.

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