

TurfComms

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

BUNKER WOLL™: CORRECTION I gave you the wrong number in the last issue. Actually gave you the first half of their 1-800 # and the end of their fax #. Here are three choices: 1-800-713-0015 or 1-908-470-0711 or fax at 1-908-781-1906 SORRY.

WEB SITE UP: My son has it done. He officially told me this on May 11th. To get there: <http://www.geocities.com/turfcomms/index.html> We will try to keep it up to date and add to it. How about you telling us what you would like to see.

BERMUDAGRASS STUNT MITE: Have I been missing it all these years, guess so. Until just recently I thought this was a relatively minor problem. Now thanks to Ken Small I've seen too much of it on his 419 fairways and also on another client's tees. Perhaps ? due to the relatively mild winters we have had? I even had a petunia survive this last "winter".

This pest in both cases is at its worst on sandy soils. In one cases fairways and the other tees with a sandy mix. The literature notes it is more common on the coarser strains and higher heights of cut. Diazinon, now off the golf course market is usually mentioned as the insecticide of choice. Other labeled pesticides are: Kelthane, Scimitar, Mavrik, Pentac, and Talstar. Biological controls listed are the insect killing fungi *Beauveria bassiana*; sold as Naturalis-O which is the JW-1 strain

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of the fungi; and Botaniguard which is the GHGA strain. I also found an old Arizona recommendation for 10 pounds of very fine sulfur (dust - passing through a 300 or finer mesh screen)/1000 sq. ft.

Dr. Robert Crocker, a Texas A&M research entomologist, in a hurried telephone conversation suggested removal of clippings as a possible approach. He hadn't seen any more or less of these pests to date. Dr. James Reinert did report an increase at the Dallas Experiment Station. **HOW ABOUT YOU?**

Reinert while entomologist at the Univ. of Florida wrote an interesting article on them published in the Nov./Dec. 1982 USGA Record, with good photos. In that article is a table of bermuda-grass cultivars and their susceptibility. 419(Tifway) is labeled susceptible and showing some damage vs. very susceptible cultivars and resistant cultivars. Those in Tifway's intermediate grouping are Midmo, Midway, Royal Cape, U-3, and Uganda. While in the very susceptible group are Bayshore (Gene Tift), Everglades No.1, FB-137 (No Mow), Ormond, St. Lucie, Sunturf, Texturf 1F, Texturf 10, Tiffine, Tifgreen, Tiflawn, Tufcote, and Common. The resistant group has in it Midiron, and Tifdwarf. Brian Maloy in a phone conversation saw resistance in Baby.

Brian Maloy claims that stunt mite damage is common in the spring. Neither he nor Reinert thought that sandy soils or mild winters were related to the amount I was seeing. **What is your experience???**

SOIL CATION BALANCE: Jim Latham sent me an article with his favorable comment having this title. It was written by Dr. Wayne R. Kussow, a soil and turf specialist at U. of Wisc. and appeared in the Wisc. GCSA's newsletter, The Grass Roots or March/April 2000. The article spells out the author's disagreement with the widely used percent base saturation approach to soil fertility. He rightly attributes Dr. Albrecht reporting in 1952 on some soybean research as being the professor who set the standards used by most of the "promoters of the cation balance concept." I'll have to include myself in this group. Kussow does note that Drs. Bear and Toth did some earlier work on this published in 1948.

Kussow gives several pieces of research, mostly more recent, that have shown there is little basis for this approach to making recommendations for nutrient additions to the soil. He feels that "Sand-peat putting green root zone mixes behave like organic soils." and raising the base saturation (non-hydrogen ion saturation) "to 80% results in pH values in excess of 7.0." or thus to undesirable levels. Out here in Dallas and West I seldom see soils below pH 7.0.

He concludes that there is "no substantiating evidence to support the base saturation-cation balance theory and that the amounts of exchangeable Ca, Mg, and K in the soil are what is important. He writes that almost any soil with pH>5.5 contains much more Ca than turfgrass requires and that the same generally holds true for Mg.

He admits there is very little literature to make any decisions in regards to what is best for turfgrasses. He offers the following guidelines: Calcium - minimum guidelines are 250 ppm exchangeable or 625 lb/acre in sand greens. Magnesium - 50 ppm or 125 lb/acre. He notes that for sand based greens with CEC values about 5 meq./100 g. this would put Ca and Mg saturations

at 25 and 8% respectively. He feels that levels several-fold greater than these will not benefit the grass. He gives no value for potassium, so I wrote him a letter inquiring about this. If he is correct and I certainly do not wish to argue with him having seen creeping bentgrass thrive at a whole range of values for these elements then some research is needed to further clarify nutrient needs.

In response to my letter concerning potassium levels Dr. Kussow wrote back, "The answer to the question of what should the levels of K be in putting greens involves balancing what is needed with what is possible and practical. Because cation exchange sites on organic matter display a strong preference for divalent cations, the potassium retention capacity of sand-based greens with an organic amendment is typically in the range of 240 to 250 lb exchangeable K/acre (i.e., around 100 ppm). Beyond this level, K mobility increases sharply and leaching losses escalate accordingly. This, then, is the practical side of things. From the turfgrass perspective, I have always found creeping bentgrass tissue K levels to be adequate to high whenever soil exchangeable K is equal to or greater than 60 ppm, which equates to about 0.15 meq/100 g if you wish to go that route."..... "I find that a good rule to follow for sand greens is 1 lb. K₂O for every pound of N applied."

VOTING: Vote Smart reports that your three presidential candidates given here in alphabetical order (Buchanan, Bush, and Gore) refused to provide Vote Smart with their stands on the essential issues even though requested 21 separate times. Does this mean they don't have stands on the essential issues? Or are afraid to offend some segment of the voters? I suggest if one of these three is your candidate of choice you demand that if he wants your vote he needs to commit himself.

For more on this nonpolitical and nonprofit group logon at <http://www.vote-smart.org>. Be an informed voter not a party voter, but by all means be a voter.

MOLE CRICKETS: Perhaps researcher Leslie Allee has discovered a new way to control mole crickets with a biological. Yes, this is serious! Mole crickets, it was reported at the ESA Conf. and written up in IPM Practitioner, avoid areas treated with *Beauveria bassiana* and *Metarhizium anisopliae*. These are two fungi used in insect control (see Bermudagrass stunt mites above).

PILLAR OF SAND: Can the irrigation miracle last? by Sandra Postel: This is a WorldWatch Book published at the end of 1999. It attempts to answer the question in the end of the title. World Watch organization takes a somewhat pessimistic view of the world and this points out the world wide depletion of ground water at a time when the increased population creates an increasing need for food. Irrigated land greatly increases food production world wide but, can this continue if ground water is running low?

The book very adequately points out the broad problem in its many details. The solutions are also covered. Two areas where lots of progress have been made in obtaining increased yields from each drop of precious water are Israel - mainly vegetable and fruit production with drip. The second is Northwest Texas where low pressure big circle irrigation with drop nozzles has greatly reduced water waste on cotton and other field crops. Another solution is charging farmers a price for the often government funded large irrigation projects that is much closer to the actual cost of the water. Prices paid are often less than 10% of the cost of providing the water. In Arizona the

Central Arizona Project charges farmers 1% of the cost of dam construction and channeling of the water to the farmers fields.

GCSAA's 2000 GOLF LEADERSHIP SURVEY: I am guilty of criticizing these yearly surveys gathered at the Conference, and I continue to be critical. First, I don't feel the superintendents taking the survey are average. The expenses involved of going eliminate a lot of superintendents. The 2000 survey tended to eliminate non-computer users. I find it very hard to believe that the average superintendent has access to the internet. Yet 94% of those taking the survey claimed to have this; this latter statistic I don't doubt. Take a non-computer user and point him to a computer with a survey to be filled out on it and he'll head the other way. Or many would if they could.

Therefore the survey may be correct as labeled - A Leadership Survey - because those superintendents leading the industry are computer users. Now let us look at it from that point of view. 1. Most of these leaders do not foresee purchasing much in the way of maintenance equipment or supplies over the internet five years from now. 2. Drought is very much on their minds - 50% listed this as the single environmental or weather-related condition to fear as having a negative impact on their course. And 45% were concerned that negative public perceptions of water usage was a big threat to maintaining playable conditions. They should be concerned as 22% are irrigating a much larger area than 10 years ago, and another 33% a somewhat larger area.

That they are irrigating more area is certainly not the superintendent's fault. Golfers want to see green, and they currently have the green to pay for it these days at the better clubs where are leaders are located.

SURVIVING & THRIVING IN TODAY'S LANDSCAPE INDUSTRY: a presentation by Roger Braswell and Rex Gore: These two ex-lawncare businessman have gone into the business of selling Dingos and other equipment and supplies to landscapers as Power House Equipment. I got an invite and went to their talk with the above title. Seeing that a fair percentage of superintendents are in the landscaping business or will go into it when they leave the golf course business I thought a few of their biased comments might be in order.

They felt small crews were the most efficient with a two man crew the most profitable in the long run. Now they are selling equipment so beware but they thought equipping a crew with extra small equipment (nylon string trimmers, etc.) and the best equipment for the job was a much better investment of your business dollar than adding more labor. They gave some nice figures to convince you. Or at least they convinced me of the long term benefit. In this day of man power shortages they also noted that moral was better in a well equipped crew and down time less.

Of course the final pitch was for you to buy Dingos. This piece of equipment reminds me of a larger version of the old Gravelys with all their add-ons. Are the Gravelys still around?

END

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