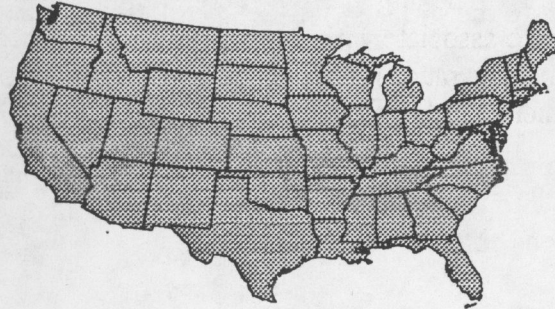


# TurfComms



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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.

(GCSAA Conf. continued) Then Tim Taylor talked about spending \$875,000 to sod former perennial ryegrass fairways to zoysia. Other general comments picked up in that session were that minors, calcium and potassium extend green color in both zoysia and bermudagrass in the Fall. Also Image does a nice safe job of removing cool season grasses from zoysia.

Then it was on to the bentgrass session called Southern Living. Here is where my notes are too old but we'll give it a try. Dr. Peacock noted that maintaining levels of N, P, K and minor elements helps survival. He also pointed out that the Alliette-Fore combination adds Aluminum, Phosphorus, Manganese, Zinc and Copper. He obtained the same quality using phosphoric acid and Fore as he got with Alliette and Fore. He noted that phosphorus levels contribute more to bentgrass health in the summer time than other nutrients. **Time to start spraying on soluble phosphorus.**

Dr. Gil Landry, Univ. of GA reported on Seeded Bermudagrass Performance. To sum it up "The seeded bermudas in this study performed similar to Arizona common." Tropica & Cheyenne were the only ones with better density than common. Forget about winter hardiness - it is not there. Unless you want to go to Guymon, then you can get some SDS resistance reports Landry; but it is a coarse pasture selection with poor divot recovery. He ended with a comment that increasing nitrogen did not increase density with these new seeded cultivars. (Ed. you'll have to use Primo)

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Dr. Rick Brandenburg from North Carolina gave an interesting talk on **Mole Cricket** control. He didn't make it sound easy. He did indicate that Turcam looked promising injected in that rate is reduce and still get same degree of control. He warned people not to base the amount of kill obtained from a control agent by number of dead mole crickets on the surface because some insecticides bring the cricket to the surface to die while others kill them underground. He noted that Merit appears to be a good mole cricket control but needs to be put out during egg laying. He also said that Ciba-Geigy's new fipronil insecticide looks great, giving season long control.

He also pointed out that mole crickets will avoid pesticides and sharp sands. They prefer moist conditions and will go deep into the ground, a foot or more, during dry conditions (Ed. - or migrate over to your irrigated turf?).

I finished up with the USGA Session. Between what went on there and a few conversations I have had with others about the Green Section Staff I wonder why they have become so defensive? Is that just my imagination, apparently not. Is this due to a change in hiring practices from the Al Radko days when an agronomic background was the prime factor that got you hired to what followed; hiring of superintendents who were leaders in the field and excellent PR people?

It was interesting to hear David Fay, USGA Exec. Dir., say that the majority of clubs were now public facilities. He also seemed to feel nine hole course will become more popular and common. Well with land becoming less available perhaps he is correct. I feel that combined with a good practice facility there is a market for both the beginners nine or a difficult nine for the better golfer looking for some quick practice.

It was also interesting to hear him urging caution on adapting new cultivars. Don't make the decision to use it just based on a few years of testing he said. That I can firmly agree on. Well, you can read most of this in the May/June, USGA Record. **But, see below for comment.**

**USGA RECORD May/June 1996 issue "The Magic of Sulfur"**. There are a couple of things in this article that do indeed make sulfur appear to be magical. All due respect to the USGA Green Section there is no way sulfur added to the water can change the amount of sodium in the water as the article would lead you to believe. Now it can lower the adjusted SAR of the water by lowering the bicarbonate content. I also doubt very much that it can lower the Boron content as the article implies. I do encourage you to read this article as this describes an alternate and probably more economical way to acidify irrigation water. **But, ignore the before and after columns in the Table on pg. 7, and the comments about reducing sodium and SAR in the second column of print on this page for this is not going to happen to the irrigation water.**

Acidification of your water will make it possible where you have drainage and calcium present to more easily flush out accumulating sodium from your soil.

**SULFUR:** There were two articles in Sulphur in Agriculture, Vol. 19, 1995, that I received recently. Both were about use of sulfur in high pH soils which are typical to Western US. One was a comparison of wettable 1000 grams of sulfur with 50 grams of chelated iron, both injected into the soil beside fruit trees. The wettable sulfur applications had one distinct advantage over the chelated iron. Sulfur applications by temporarily acidifying a portion of the soil also increased phosphorus, zinc and manganese availability as well as iron.

Thus although much more sulfur than chelated iron was needed to overcome chlorotic conditions the sulfur made other nutrients available and did so for a longer period of time, one to two years. Sulfur is usually very inexpensive. While the above ratio is 20 sulfur to do the job of one chelated iron; wettable sulfur cost 1/27 of chelated iron. At least that is what I found using one of the price lists I had on hand. If I went to a granular sulfur it cost only 1/35th the price of chelated iron per unit. Now if one wishes to compare sulfate of iron (iron sulfate) to sulfur the ratio of cost is much closer. Sulfur is only 1/10th the cost per unit of iron sulfate. Iron sulfate is acidifying also, although not to the extent sulfur is.

The motto is that where costs are foremost: sulfur does the job at less cost and for a longer period of time. Now you won't get the quick response from sulfur, so spray on 2 to 4 ounces of iron sulfate when you apply the 10 to 20 lb. of sulfur/1000. This rate is for high pH, heavy soils.

The second paper discussed the role of sulfur in improving sodic and calcitic soils under arid conditions. Although not painting an entirely clear picture it does bring up many of the problems of growing crops under desert conditions and managing fertility and most importantly salts. Turf can be thought of as a crop and salt management is very important in desert conditions. The soils tend to be salty before irrigation. Water available for irrigation in the desert tends to be higher in salts than in areas where rainfall is higher. Also much more water is required to raise the same amount of crop in the desert because of high evapotranspiration rates. Thus more and more salts are being left behind by more and more irrigation water in the desert. If one is not careful the soil soon is too salty to grow much of anything in.

**Dr. Mike Agnew - Bentgrass decline:** Dr. Agnew gave a talk on this subject to the North TX Golf C. Supt. Assoc. Meeting in June. Read the article by Dr. Carroll in GCSAA's Golf Course Management for more details. He did give bentgrass growers good reasons for buying a soil thermometer and using it: **Roots stop growing at 86°F, Root hairs dieback at 95°F, Roots dieback at 104°F.**

How do you prevent these agronomic damages to your bentgrass? Careful early afternoon syringing, don't mow so low, go to the newer cultivars, keep the soil mix well aerified, move the greens to Canada. Thin turf results in rapid increases in soil temperatures. The big advantage of the new cultivars is they don't thin out at low heights of cut. You've got to the year 2000 to fumigate and replant. No more methyl bromide after that.

One statement that he said but passed over quickly was, "Organic matter in the soil indirectly reduces oxygen levels in the soil." Although you can't completely reduce the organic buildup in putting greens you do have some control. Every 5/8 inch plug you remove from the green decreases the organic matter completely in that spot if you fill the hole only with sand. Part of the reason roots do so well in those holes is the high oxygen content in them. Just like tree roots in drainlines. It's not the water in the drainlines so much as the oxygen that makes the tree roots proliferate. Regular sand topdressing builds up a surface soil whose organic matter content is not too much higher than the original mix. Which by the way is very low compared with that in a mature putting green.

**NEW FUNGICIDE/NEMATICIDE:** While visiting with a superintendent in Georgia he told me of a new material he had success with that you might want to try. The material is Safe-T

Green it is a blend of secondary alcohols reacted with ethylene oxide. The superintendent had used it with Orthene to control nematodes and mole crickets and found the grass recovered much quicker. He also noted that the price per area treated was very good.

For more information call 1(800) 782--9690. It is being produced in Valdosta, GA by a small, new company; and has just obtained a label in the last few months. Safe-T Green is currently labeled for Large Brown Patch, Pythium, Dollar Spot and **nematodes**. From the data I have seen it is not great on nematodes but appears to be beneficial to plants. I would look at it as a supplemental product that would help me obtain a better response from other pesticides you are using. I would not become dependent upon this material as it is very biodegradable. I assume it acts as a rapid contact fungicide and perhaps kills other organism that have a relatively thin outside body wall.

**ZEOLITE:** Went a half day out of my way to visit a golf course that had been using zeolites as a topdressing material for four years. I would like to say I was impressed but, I couldn't see where the same results if not better could have been obtained with a good sand topdressing. Now I can't judge how the greens respond to day to day maintenance and the weather. But the greens were so thatchy almost any coarse material in the aerifier holes would have helped.

**SPORTSGRASS™:** Stopped by the University of Utah to see this combination of artificial and natural turf field. It was only one year old but it looked good and made it through a first year consisting of 12 games when very immature. The 12 games consisted of 8 college and 4 high school. This stop didn't really take me out of my way but, I wish to publicly thank Jay Warnick, the man in charge at that time, for spending a couple of hours on a Saturday morning showing me the field and answering my questions.

**STRAW FOR ALGAE CONTROL IN PONDS:** Bob Moore, former president of Aqua-Gro Corp., says the X-factor that makes this work is a small amount of hydrogen peroxide that is given off in the decomposition process. He also says that the research definitely shows that barley straw works best. Bob has had good luck with it in his ponds. Thank you Bob.

**FUNGICIDE APPLICATIONS:** Words for the wise; remember to get the gallons of water per thousand square feet up. At least three gallons per thousand and best to try for five. If spraying on a contact don't mix it with a systemic. For best and longest control with the systemic spray on and water in. You say you don't have enough time to do it right. What if it allowed you to go longer between spraying? You wouldn't dare anyway? Yeah, I hear you.

**CANADIAN GEESE:** It was very interesting to see the response of geese exposed to border collies trained to help get them off the golf course. At one golf course where they have a flock of 50 or so and no border collie the geese gave a walking golfer almost no respect, just barely getting out of the way. At the next course where there was a flock of 30 and a border collie that had been there one month the geese were moving back toward the water when you were 30 yards away and just headed their way. The dog was no where in sight at the time and I didn't have a vehicle which they had come to associate with the dog. Another course also had just obtained a border collie a month ago and was much impressed. It was too early to fully appreciate the dogs effectiveness but the personnel at both courses are much impressed with what they have seen.

**END**