

PURPOSE: To offer contributions from the proverbial well of knowledge with hope of helping others add to that well and their own. Hopefully in so doing more of the art of turf maintenance will become transformed into the science of turf maintenance.

THE SECRETS OF CHAMPIONSHIP GREENS REVEALED; what wasn't printed and then some.

Just before he left to assist the PGA I called Billy Buchanan and asked him for the secrets of maintaining championship greens. He said "Doug, you are not going to believe it, but the secrets for championship greens aren't all that secret. Many superintendents maintain their greens this way all the time."

Well I acted real innocent and said, "Billy, if that is the case maybe you could tell these secrets to me before you leave?" He said, "I would love to." Here is what he told me.

"You throw all the fertilizer spreaders away and buy a large spoon. Once a week during the growing season you stand downwind about 10 yards off the edge of each green and throw a spoonful of fertilizer up in the air. Use a little left to right motion to help spread it and keep the spoon about head high. The ideal wind is one blowing about 15 miles per hour." Billy said "in West Texas you may have to hold the spoon lower because the wind probably doesn't ever blow that gently."

He went on to say that after about 2 years of feeding the grass this way you will note that the grass never lies down when anybody comes within 10 yards of it. It stands tall hoping to catch at least one particle of fertilizer that gets thrown its way each week. Thus grain problems are solved. As the grass is not growing, daily mowing just trues the surface like a light rolling. These superintendents have no messy wet clippings to deal with. They just empty the baskets every few greens.

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Well you may not believe the tale above, but the next time you hear of a superintendent spoon feeding his greens check it out. He will probably be applying no more than one quarter pound of nitrogen per thousand square feet. He may be putting one pound of urea (45-0-0) in his spray tank each week and covering 30 to 40,000 square feet with that tank full. That amounts to less than 1 ounce of nitrogen per thousand square feet. "a sniff". He might well use potassium nitrate (saltpeter) or ferrous ammonium sulfate instead of the urea. A program this light he probably calls his summer feeding program. Many managers of championship bentgrass greens do not feed greens at all from late June to early September.

You can read the rest of the story in the Nov.-Dec., '84, USGA RECORD. Don't tell me you are not a subscriber! Send a check for \$6 to USGA, Far Hills, NJ 07931 and ask to be added to their list of subscribers. It is well worth it.

There are a few points I would like to elaborate on concerning the above topic of championship greens. Two pounds of nitrogen per year per thousand square feet seemed to be adequate for that part of the country north of a line drawn from Denver thru Omaha to N Y City. The four pound line appears to be down to Tulsa while six pounds is for those poor superintendents trying to grow creeping bentgrass at the southern limits. Billy Buchanan would be quick to say 4 or 5 is the maximum needed anywhere.

POTASSIUM is definitely a key element. The article mentions using as much or more potassium than nitrogen. This is indeed important. Get soil test levels in the HIGH range and keep them there. What are high potassium levels? Some soil test results are stated for potassium, calcium, magnesium and sodium as percent of the cation (or base) exchange capacity. When looking at soil test expressed in that manner I call anything from 4 to 7% as high.

I have seen greens with soil test results ranging from 0.1 to 10% of the base exchange capacity as potassium. I have come to the conclusion that until you get 3% you do not have sufficient potassium to maintain good, healthy bentgrass greens. Those having high sodium levels need to keep the combined potassium and sodium percentage below 15%.

Dr. Richard Schmidt of Virginia claims high potassium levels encourage Poa annua. At medium to high nitrogen levels I'm sure it is a factor. High potassium levels also encourages clover.

MANAGING SALINE, SODIC OR SALINE-SODIC SOILS FOR TURFGRASSES

I just finished reading this excellent article in California Turfgrass Culture, Vol 34, No 2,3, 1984. It is written by M. Ali Harivandi. It is interesting to note Alkaligrass and Seashore paspalum are listed as the two most salt tolerant grasses. It has been stated by many that we are

moving into a period when there is going to be a need for more salt tolerant grasses in turf use. Yet very little turf research is being conducted on these two grasses.

I have seen Alkaligrass produce a fair putting green turf in North Dakota, Colorado and New Mexico. It is very slow growing, stemmy in the spring and appears to be aggressive only at high salt levels. I would also assume it has a high light requirement. At one of the locations it was observed it is persisting where creeping bentgrass is regularly lost to desiccation. This North Dakota golf course now overseeds tees and greens to a mixture of alkaligrass and seaside bentgrass.

FROM THE FILES - ANIMAL REPELLANTS

HAIR Yes, human hair hung in trees appears to be able to keep deer and antelope from damaging them. It last for several months. Mexican hair was recommended to me as being the best. I assume, that what works best is hair with the greatest amount of human smell to it. So get your haircut after you been without a shampoo for a week. By the way that same hair in old nylon stockings every 8 to 10 feet around the vegetable garden will help keep the rabbits away. Don't believe me do you. Try it!

Okay, how many of you are old enough or were poor enough to remember back to the Saturday night bath and shampoo. I can remember getting one whether I needed it or not every Saturday night. But, I sure never had more than one a week in the winter. I remember some awful long New England winters; and one house the wind blew in one side and out the other.

Sulphur around the base also works to keep the animals away for a while. There are of course some commercial repellants. I've heard some of these are quite effective in discouraging Christmas tree removal. Apparently they are relatively odor free to humans outside on the tree but stink to high heaven when brought into the warm house on the "free" Christmas tree. At least after one removal the small evergreens stop disappearing. It is amazing how fast word like that can spread.

Had trouble with birds in the maintenance building? Carroll Kiser, superintendent at Midland C. C., TX, reports very good luck with a whirling red and green decoration light mounted on the ceiling in the middle of the building. He turns it on only when he has a problem.

What about the plastic swans to keep geese off the ponds and hopefully off the golf course? I've got several slides with the geese swimming awful close to those swans. Real swans work much better and several courses I was on last season are using that approach. The plastic ones will help if you combine them with noise makers and a concentrated effort to chase the birds away. An aggressive dog also is effective.

- ARTIFICIAL TURF

There were two articles on this subject in the Dallas Morning News in 1984. The first was an Associated Press release which looked like some manufacturer's rep. had written it. "...a natural grass field costs almost 20 times more to maintain than one the same size covered with its product" a quote from a synthetic grass producer. The rest of the article reads much the same. Cost \$45,000 a year to maintain the grass but only \$2,500 to maintain the synthetic field! I find that last figure just a little hard to believe. Anybody have another figure? It was interesting to note less than 1% of the synthetic was going into athletic fields.

The second article was written by Sam Blair a staff writer of the News and was player oriented. Quoting Kent Waldrep, Doug Rader, Charlie Waters, Buddy Bell and others it gave both pro and con. Southern Methodist University just put in a new AstroTurf field. Plano High School has had one for 5 or more years.

EDITORIAL COMMENT

It has been said that whoever sets pen to paper writes of himself, whether knowingly or not. I will not attempt here as editor to hide my thoughts or feelings on any turf related subject. My approach to the discussion of turfgrass science will be as free of emotion as possible. I hope that you and I can continue to grow in our knowledge of turfgrass science till the end of our days.

I read recently that word processors may be making some executives less efficient. There are times as I sit "pounding" away on my Apple IIe that I may not be making the most efficient use of my time. This has been a lot of fun but also a lot of work.

I purchased this device in late May of 1983. The prime purpose was to encourage my son in his then chosen career in computers. But, I was hoping in time to use its word processing capabilities. The winter of 83-84 I spent considerable time learning how to use it. Since Oct 20, 1984 I have tripled the amount of time I spent on the computer the winter before.

I also have obtained a mailing list program. This will be used to print your labels. I do not find myself using the computer with anything other than those two programs. My high school typing class has been a help. I still have much to learn just to fully use the word processing capabilities. Applewriter is the software I am using.

My son - he is now a business major. He has been helpful in assisting me interpret computerese. He to uses the computer to type his homework papers but, he spends much more time using it to play various games.

If you have questions about anything you have read here ask!

END