

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.

FROM THE FILES: Bentgrass for fairways :

I was all prepared to write a long article on this subject. Then I picked up the February issue of Golf Course Management and found Warren Bidwell, the Penncross-Penneagle man, had beaten me out. If you are interested in this subject read his article. A couple other articles one might read to review this subject matter: "Bentgrass fairways ... why not?" by P.M. O'Brien, in the Jul/Aug, 1981, Record; and "They are mowing fairways with triplex mowers and picking up the clippings, too!" by S.J. Zontek. in the Jan/Feb 1983, Record.

From these articles and what little I have seen of bentgrass fairways I have reached the following conclusions. Some of which are a little tentative.

1. To be successful with creeping bentgrass fairways the following procedures should be worked into the maintenance program. Reduce nitrogen levels to no more than 1/2 lb. per 1000 sq. ft. per growing season month. Preferably even less if previously you have been on a high nitrogen program. Definitely less if you are not going to remove clippings. Remove clippings especially during the summer months where disease is a problem. Mow with light weight triplex or perhaps five gang units. Cut at 1/2 inch (plus or minus a sixteenth. Try to keep the golf carts off. Have uniform irrigation coverage over the fairway area. Maintain no more than a 35 yard wide fairway unless on very sloping land. Maintain a lot of intermediate rough (Ky blue) at 1 and 1/4 inches. By keeping the bentgrass areas small, you reduce mowing and fungicide costs.

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Douglas T. Hawes, Ph D
Certified Professional Agronomist
Specializing in Golf Course
Maintenance Consulting

2408 Roundrock Trail
Plano, Texas 75075
(214) 867-0176

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2. Bentgrass fairways have their most valid use just north of where Meyer zoysia provides the best possible fairways. Or put another way - that part of the northern U. S. where Kentucky bluegrass is a dismal failure for fairways cut at 3/4 of an inch or less. That is most of the northern U. S. It should be noted here that I am biased positively on zoysia and negatively on Kentucky bluegrass for fairways.

3. Creeping bentgrass fairways can work quite nicely. However, the superintendent must have the tools to work and he must be knowledgeable in bentgrass management.

Why will bentgrass fairways work where Kentucky bluegrass failed? Turn to Madison's "Practical Turfgrass Management" or Beard's "Turfgrass: Science and Culture" and see which turf species are best adapted to a low mowing height. Then if you have to maintain closely mowed fairways do as Madison suggests, "choose the management, then select a grass that will respond to that kind of care."

Sure you are have trouble with creeping bentgrass greens during hot, humid summer months. But you are mowing them almost daily at less than 1/4 inch. At 1/2 inch creeping bentgrass is 10 times more vigorous. The soil underneath fairways mowed with lighter equipment is going to be less compacted therefore the turf on top will be healthier. Clipping removal, low nitrogen levels and careful water management will reduce disease problems. But, diseases will remain a problem.

I have yet to see a bentgrass fairway go thru a real hot humid summer. Snow mold scares me. Be sure to keep soil potassium levels high for more disease resistance.

You don't think your club will go for the \$9 to 15,000 increased cost of mowing? Let alone the fungicide bill? After having played off a close clipped bentgrass fairway you may find they are very willing to pay for the improvement. Again, this is something the better golfers are going to insist on. For years they have been screaming about bluegrass fairways cut too high. Now they are finding out that high cut fairways are not necessary. Watch out! The move to bentgrass fairways is beginning to steamroll.

ON THE NEGATIVE SIDE: Madison in the above text notes results of an experiment conducted in England where clipping removal after several seasons resulted in : harder turf, the turf dried out sooner, the turf was browner in the winter, and moss was present. On the positive side for the same experiment - considerably less *Poa annua*. The latter I have seen and others are beginning to report.

Vargas, J. M. Jr. in his "Management of Turfgrass Diseases" paints a rather negative picture for bentgrass fairways. He claims you will have to keep the diseases under control or you are going to end up with "creeping" annual bluegrass fairways. Again I am going to point out that creeping bentgrass is a very vigorous grass at a 1/2 inch mowing height. Disease is not as serious a problem at that height compared to 1/4 inch or less. But, disease does spread awful fast in a dense succulent stand.

A NEW TOOL TO HELP YOU : The plant growth regulators (PGRs) Cutless and Embark appear to be able to assist in giving bentgrass the upper hand over Poa annua. Some superintendents have already used successfully 6 and 8 ounces per acre of Embark on greens. Yes, I meant to say greens. I'm not recommending it for putting green use. But, if some can use it safely on greens, use on fairways at those rates should be safe enough. Do not respray the same spring. Cutless shows as much if not more promise than Embark for bentgrass fairways.

Concerning authors: If you have set down recently on a cold winter's evening, a turf textbook in hand with the goal of improving your turf knowledge and gone to sleep - try it one more time with either Vargas or Madison. Madison maybe a little too philosophical for some. Vargas is definitely humorous at times. Both are easier to read than the standard turf texts. Both will give you food for thought. Madison also has a 2nd text "Principles of Turfgrass Culture". This latter text is definitely an advanced text. In it (pages 172-194) you will find one of the best explanations of soil modification problems and solutions.

LETTERS TO THE EDITOR: and more on fertilizing bentgrass greens.

Stanley J. Zontek now USGA Green Section Director for the Mid-Atlantic Region reports: "We are beginning to see moss developing on greens in Michigan that have been sand toppedressed a lot, cut closely for green speed and have all but eliminated fertilizer applications."

AND MORE

On the same subject, I just uncovered an article that agreed with Dr. Schmidt. i.e. Higher potassium encourages more Poa annua. This was a research article in the Agronomy Journal of 1978 by Waddington et al (and others), pages 713 -718 of vol. 70. The nitrogen rate they were using was 5 pounds per thousand per year if I did the conversion from kilograms per 100 meters squared correctly. Two to 3 pounds is probably sufficient for championship green fertilization at that elevation in Pennsylvania.

Well, I need your help! Are any of those using potassium levels equal to your nitrogen levels beginning to see an increase in Poa annua? Dr. Waddington did you continue that research still further? If so what are the results now? Do you, any of you, have any other comments on high potassium use?

GCSAA CONFERENCE AND SHOW - enjoyed it. It is always good to see old friends again. I wish I had attended both of the Thinking Superintendents sessions. Seeing the "ants" at work made my day.

STILL NO WINNER FOR PRIZE OFFERED IN ISSUE TWO.

JACK NICKLAUS'S NEW "SHORT" BALL:

I've seen two articles on this new development. Nicklaus has designed and built a golf course "Britannia" on Grand Cayman Island to go along with the ball reports USA TODAY in a Valentine's day article. The article sounds much like those I read a decade ago extolling the advantages of executive length golf courses. Well they didn't sweep the country. But, I'm not so sure that if combined with the "short" ball executive length golf courses might be a real going thing. The article gave enough positive points to intrigue me. I suggest you might want to look it up. What it didn't point out I will attempt here.

Playing time is reduced to 2.5 hours. That means you should be able to almost double the play a normal golf course can handle with 4.5 hour rounds. The golf course itself will occupy about half the land a regulation course occupies. Now those two pluses are great for the revenue picture. But, how do you double the rounds and still maintain a satisfactory turf? Also, it will be considerably harder to stay ahead of the play in those early morning hours.

Well Mr. Nicklaus's new ball just might catch on. Do you have an executive length golf course for sale? Or an old nine hole layout you can easily turn into a "Cayman" or "Modgolf" 18 hole layout? I suggest you go at it. I hope this doesn't get me labeled a financial consultant.

Bill Brewer - Like myself Bill was a USGA agronomist. He responded to my request to write something with an article titled CHARITY BEGINS AT HOME. If someone would like a copy of the article I would be glad to send it along with his address. As he notes the article sent was not what I had in mind although well written and certainly something we all need to think about - adequate life insurance. It was good to hear from you Bill and good luck in your new profession.

----- COMMENTS

It has been good in the last month to get out and get some hands on experience. Both of my last two positions (USGA Green Section and teaching at the Univ. of Maryland) did not allow too much of that. I have been working parttime for Dr. Milt Engelke a turf breeder at Texas A & M at Dallas. Sterilized a greenhouse bench with methyl bromide, and did alot of wire wrapping and soldering. We were preparing to do some intense electrical monitoring of soil temperatures. Takes me back to my graduate student days at Cornell and U. of Maryland.

After getting the above done it was time to do a literature search. Well I don't know how you did your last literature search but, my last scientific search was done a little over ten years ago. It took forever. I'm not done this one yet but two hours at a computer terminal connected by phone to another computer sure got us off to a fast start. Two hours latter and for less than \$100 of computer time we had a real good idea of what articles had been written and where the articles were on the subjects of our interests.

END