# Supers Can't Create Sunlight, Say UF Turf Pathologust, USGA Agronomist

Editor's Note: As spring unfolds and some of our turf remains thin and less than ideal, we should not forget the lessons two of our leading turf authorities, Dr. Monica Elliott, turf pathologist from the University of Florida and John Foy, director USGA Green Section Florida Region, tried to teach us during the disasterous winter weather patterns.

While some club officials have reportedly derided these facts of nature as excuses, intelligent golfers understand that this has been an abnormal winter and they appreciate the extraordinary efforts of superintendents to provide good playing conditions. You can lead a person to the facts, but you can't make them think! Here is a summary of the facts for those who care to think!

#### **TO: Florida Golf Course Superintendents**

## FROM: Monica L. Elliott, Turfgrass Pathologist

I have just spent three days examining courses in Broward, Palm Beach, Lee and Collier counties, and I feel like I have spoken with a superintendent in every county. This letter has...purposes. First, to inform superintendents that your situation is probably not much different from your neighbor's. Second, to inform the golfing public why this weather pattern is not conducive for growing grass.

#### Plant Physiology

...Photosynthesis is the process by which plants use energy from sunlight to breakdown water and carbon dioxide to produce the carbohydrates (starch and sugars) needed for a plant to grow.

...Bermudagrass requires significantly more sunlight than bentgrass to fix CO<sup>2</sup>. That is why bermudagrass is not looking very healthy in our current weather patterns. It needs full sunlight, especially in the winter when sunlight is reduced due to short days and long shadows.

...The rainfall in December was above normal. It actually flooded some areas. After only a week into 1998, the rainfall



is already above normal for January! This situation has been aggravated by cool temperatures and overcast days. Nothing can be done about the weather.

## **Algae Slime Mats**

... The primary problem observed on bermudagrass greens that have thinned is the development of algae... Algae have all the same growth requirements that bermudagrass does, but algae love water and, even more important, fix CO² like a bentgrass plant. So, it would be expected for algae to become a problem under current circumstances.

#### Nutrition

...Since many of the putting greens are water saturated or close to it, the amount of oxygen present in the root zone is probably quite limited. It also means those pesky root pathogens may be active. This means the root system is not functioning adequately. One of the purposes of roots is to absorb nutrients in the soil. Without nutrients, the plant will not be as healthy.

#### **Cutting Height**

...I know golfers hate to hear this solution, but it really does work! By increasing the height of cut, the plant has more green leaves which means there are more leaves for photosynthesizing (See Plant Physiology 101 above) which means the plant can produce more carbohydrates which means the plant will be healthier and grow better. There are ways to increase the cutting height and maintain decent speed (note I didn't say tournament speed): frequent light topdressings, or rolling 3 or 4 times a week are examples.

And from the USGA Green Section, Florida Region Director, John Foy

RE: 1997/1998 Florida Winter Golf Season From time to time, USGA Green Section offices have sent out informational letters to courses to inform golfers about situations that are having an impact on a large number of facilities in their area.

...Unfortunately, environmental conditions... have caused problems in providing the level of course conditioning and quality desired at facilities throughout Florida. Over the past few weeks, I have conducted Turf Advisory Service (TAS) visits at courses from Jacksonville to Miami. It has been a general finding that the quality of, particularly putting surfaces, has been an issue.

Certainly by this point everyone has heard about the El Nino situation in the Pacific Ocean that is having an impact on weather across the country... an abnormal weather pattern has been prevailing. Along with the early onset of cool temperatures, frequent rainfall and numerous heavily overcast days has had a significant impact on turf health and the level of course conditioning and quality. This is true for both overseeded and nonoverseeded bermudagrass putting surfaces.

In the South Florida area where winter overseeding operations are not as common a practice, again, the cool, wet and overcast weather has had a big impact on the base bermuda turf cover. Especially at courses where extremely low heights of cut are dictated to maintain fast putting speeds, a progressive thinning of turf density was often experienced and this was followed by a rapid invasion of surface algae.

Then, regardless of efforts, problems were encountered with producing a recovery response. It has also been a common finding on TAS visits that the impacts of the weather have been further accentuated in locations where other turf growth-limiting factors such as shade, concentrated traffic patterns and/or restricted drainage exist."

All too often when the subject of weather is brought up, some golfers are of the opinion that excuses are being made. However, as with every other agricultural endeavor, environmental conditions play a major controlling role in turf growth and

in turn the type of course conditioning that can be provided. On a positive note, the base bermuda turf cover of Florida golf courses does possess a tremendous recuperative potential. Thus, with a few weeks of sunny, warm and dry weather, a good turn-around in course quality can be achieved.

...until more favorable environmental conditions occur, some degree of patience and understanding will be required.

# Thanks for Pledge

On behalf of The GCSAA Foundation Board of Trustees, Campaign Cabinet and Committee Members, as well as all superintendents, I thank you. Your recent pledge of \$300 will allow The GCSAA Foundation to support projects in applied research and education programs to help advance the superintendent profession within the ever developing game of golf.

We will report on successes that are a direct result of this campaign through

GCSAA publications. Please know that these are a result of your generosity.

Jamie Ortiz-Patino Carnpaign Chairman

The "Investing in the Beauty of Golf" endowment fund campaign is perhaps misnamed. Maybe it would be better to call it "Investing in the Future of Golf."

I see this drive as another way to diversify and maximize our resources for funding turf research in the future.

We will always focus on supporting in-state fundraising. But, we will also be able to submit Florida projects for funding from this \$3.5 million dollar war chest. Donations from the member level will be vital to the success of this venture.

With Toro's generous matching funds challenge, my donation is now worth \$600.

Sign up today!

Joel Jackson, CGCS GCSAA Class A Retired Member

# **Must-Read Magazine**

This note goes out to Joel Jackson, Mark Jarrell and the others responsible for "The Florida Green." I'd just like to commend you on the general excellence of your magazine. It's certainly a mustread for me, a writer who covers the industry. Great job.

If ever you have any suggestions or input for Golf Course Management magazine please give me a call or drop me an e-mail.

Mike Perrault Staff Writer Golf Course Management

On behalf of our Florida Green team, thanks for the kudos. we couldn't do it without the support of the FGCSA members.

Joel D. Jackson, Editor

(NOTE: I have accepted an invitation to serve on GCSAA's Publication committee for 1998.)





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