

The only expectation with the Trump brand is excellence. As one of seven courses owned worldwide by Donald Trump, Trump International Golf Club in West Palm Beach, Fla., must meet his high standards. Based on its accumulated accolades, the 27-hole course has successfully distinguished itself as one of the country's premier golf destinations and lived up to the Trump promise.

Architect Jim Fazio designed the club's original 18-hole course, which opened for play in 1999. In 2005, the club opened an additional nine holes, and one of its highlights is an island green, Hole No. 8. The 153-yard par-3 hole at Trump International is one of the most beautiful spots on the property.

The wind plays a major factor for golfers hitting from the hole's elevated tees. Most opt for a pitching wedge or 9-iron to clear the water and land on the isolated green.

Certified Superintendent Andy Kjos has carefully maintained the two courses at Trump International for seven years. He is a member of what he calls a "fraternity" of Trump-property superintendents, who share an unshakable commitment to keeping their courses in pristine shape for golfers.

"There's an attention to detail that does not change among properties," Kjos said. "At Trump facilities, you'll find consistently well-maintained courses."

To protect the bermudagrass on the fairways and greens at Trump International, Kjos applies Insignia® fungicide. He sprays this broad-spectrum product preventatively year-round.

"In winter months, we can't take chances. Our warm-season grass gets very little sunlight and can be susceptible to diseases," Kjos explained. "Insignia is a staple in our rotation."

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GOLFDOM'S HOLE OF THE MONTH IS MADE POSSIBLE BY:



#### **Shades Of Green**

OPINION

lobal warming is the most significant computer-generated weather forecast of them all. It predicts dire consequences for mankind, but what proof do we really have it exists?

Weather data — whether it be good, bad or indifferent — is based on historical information. If the past two hurricane seasons are any indication of weather prediction models, then I doubt seriously that I will be seeing the ocean lapping at my doorstep anytime soon.

Did you ever hear of the Dust Bowl and the Depression of the 1930s? Seems the hottest recorded temperatures occurred during that time instead of the past couple of decades, contrary to widespread reporting. That statistical error by NASA has been discovered recently, but it has been buried by the press since it contradicts the data used to hype the current hysteria model.

I'm happy that our more well-heeled celebrities can run out to buy hybrid cars and pave their rooftops with solar panels to offset their gluttonous consumption of energy in their mansions and their private jets, which tends to overshadow the emissions from us middle-class minions. I've been driving four-cylinder automobiles for more than 30 years. Don't preach to me.

Thank goodness our profession grows grass. Did you know that 1 acre of turf sequesters a ton of carbon per year? Now go figure your golf course's carbon footprint. Of course, you must add the emissions from turf equipment. But I'm looking forward to the day we have solar-powered fairway mowers as the world races toward a carbon-neutral existence. People, we are a carbon-based life form. The Earth is always changing.

So much for the global gas bags, what about your local weather person? Ever since the hurricane seasons from hell in 2004 and 2005, every rain event has been transformed into the storm of the century, and any weather condition forecasted is cause for alarm. Just check it out.

TV stations now have sinister names for their weather shows — Early "Warning" Weather, "Severe" Storm Center, not just The Weather Center. With the Super Duper HD Viper Doppler Radar, which sounds like a military weapons system, we can view a thun-

#### Storm Stories: Forecasts of Fear

BY JOEL JACKSON



CONSTANT NEGATIVITY
BREEDS CYNICISM
AND DESENSITIZES
PEOPLE TO THREATS
AND WARNINGS OF
LEGITIMACY

derstorm and check instantaneously for any smidgen of rotation, which we all know by now is code for "possible tornadic activity."

I swear the weather folks seem ecstatic if stormy weather is approaching. They move to center stage, and we get multiple updates throughout the night on the movement of a routine thunderstorm. It's as if none of us have ever dealt with thunder and lightning and high winds. If people don't know by now to come in out of the rain, making every afternoon storm out to be a life-and-death situation won't help. It becomes too much like the boy who cried wolf.

The mundane has become murderous on the nightly weathercast: A sunny day means danger from UV rays, so put on extra protection against skin cancer. A windy day means rip currents at the beach. A dry-windy day means upgrading the wildfire index. Rain means flooding and treacherous traffic conditions. A calm day means the air quality (smog) index will go up. Hot and humid forecasts include warnings for people to drink lots of water and limit outdoor activity, and those with respiratory ailments should hunker down indoors.

It's ironic that the famous quote by President Franklin D. Roosevelt, "We have nothing to fear but fear itself," should become a cautionary warning about our daily weather forecasts.

Constant negativity breeds cynicism and desensitizes people to legitimate threats and warnings.

Common sense is the best defense while living with the natural elements we have no control over. So put on your sunscreen and go outside and play golf. And if you hear the storm siren, come in out of the rain and head for the high ground.

Certified superintendent Joel Jackson is executive director of the Florida GCSA.



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#### **Designs on Golf**

ARCHITECTURE

few years ago I penned a column urging anyone undertaking a golf course project to document, document, document, document, document. But anecdotal evidence tells me that golf course superintendents, architects

and club officials did not fully digest my scintillating treatise outlining the benefits of documentation.

Digital camera makers haven't reported any camera sales spikes since that column. And the big electronic manufacturers and online photo-hosting sites haven't offered me bribes to pen another life-changing column, either. Worse, every time I hear about a great project and ask to see photographs of what things looked like before, I feel like a detective at a 1930s Chicago crime scene. No one saw anything. No one knows anything. And for damn sure, there aren't any images to see.

I understand that documentation takes time and can be an annoyance when you are also juggling details that relate to actually getting a job done. Nonetheless, in just a few short years since I last wrote about this, technology has transformed how we take photos and how we share them. There are no more excuses for failing to document and show off what you do, whether it be a new green, tree removal or converting turfgrass to a native area.

So in interest of time and space, and without too much condescension, I'm going to whittle this down to the basics. Here's what you need to document:

- 1) A digital camera. In the past few years, Canon, Nikon and the other major manufacturers have been getting better with each product line, but the current point-and-shoot digital cameras take truly amazing photos. You should not have to spend more than \$225 to get something outstanding that captures images in 8-million megapixels (all you'll ever need).
- 2) A plan. The entire point of documenting a project is to capture those great "before" photos because people tend to forget how things were prior to the work. Grab a legal

### Make Sure to Get the Whole Picture

#### BY GEOFF SHACKELFORD



JUST A FRIENDLY
REMINDER TO
DOCUMENT WHAT
YOU DO

pad, figure out where the best views are of the work at hand, and write down where you took the photos from. Map it with GPS if you want. Just don't lose your record. Tape it to the side of your computer if you must. And don't worry about dating and timing the shots since all of today's digital cameras store that information with each image.

- 3) A computer. Most computers come with easy-to-use photo editing software (if they don't, you can always download free software like Google's Picasa). These programs make editing and touching up images easy, while making your efforts to e-mail photos much easier than a few years ago.
- 4) An Internet connection. Since I last pleaded with you to document your work, sites like www.flickr.com and www.shutterbug.com have made it easy to upload a large number of images from vacations or, say, interesting golf course projects.
- 5) A video camera. Yes, as computer hard drives have gotten bigger, so has the potential to do video. Panasonic makes amazing high-def video cameras for reasonable prices (\$1,000 or less). Not only are they great for capturing the family vacation in stunning clarity, but now it's possible to weave together fun little videos where you tell the story of a project. And if you use something like Apple's imovie '08, the video is easy to edit and graphics are easy to add. And then you can load it up to YouTube for anyone to see.

Documentation has never been easier. The tools to do so are available to you — and they are affordable. So don't make me write this column again in three years.

Contributing Editor Geoff Shackelford can be reached at geoffshac@aol.com.





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#### Turf M.D.

THE DOCTOR IS IN THE HOUSE

#### aintaining proper nitrogen fertility levels is the cornerstone to turfgrass health. The soils present on most golf courses are generally buffered,

allowing for relatively considerable leeway with nitrogen applications. The exception is the high sand content soils or rootzone mixes, specifically on tees and greens. In these relatively low-buffered systems, designing a program that maintains the necessary nitrogen to the plant and the system is critical and often the most difficult to accomplish.

I've never been an advocate of using nutrients, specifically nitrogen, in an extreme manner to manipulate a turf system — for example, using nitrogen at ultra-low rates to discourage annual bluegrass invasion or enhance green speed. The goal of a nitrogen fertility program as an essential and macronutrient is to maintain an adequate level in the system that promotes the desired growth and plant health of the turf. Given that statement: What is the desired nitrogen level, and what benefits can you expect to see?

I need to add a qualifying statement before proceeding to address these questions. Factors like soil type, length of growing season, climatic conditions, irrigation source, amount of play, expectation of green's quality and green speed are just a few of the factors involved in developing a fertility program. Also, I'm going to restrict my conversation to creeping bentgrass/annual bluegrass. Now let's pull some recent work together to help develop a nitrogen program.

Researchers at the University of California-Riverside (Green, et.al, 2008) found in Southern California that 3 pounds of nitrogen (N) per 1,000 square feet per year was inadequate for maintaining turf quality and recovery on creeping bentgrass/annual bluegrass greens, while 6 lbs./1,000 sq. ft./yr. was found to be optimum. These rates accounted for the effluent irrigation water and were applied as a liquid on a three-week interval.

Other researchers have found that annual nitrogen rates of about 3 lbs./1,000 sq.ft./yr

#### 'Leveling' With You About Nitrogen Use

BY KARL DANNEBERGER



I'VE NEVER BEEN AN
ADVOCATE OF USING
NUTRIENTS IN AN
EXTREME MANNER
TO MANIPULATE
A TURF SYSTEM

on predominantly annual bluegrass fairways in northwestern Ohio/southern Michigan had less foliar anthracnose than the 6 lbs./1,000 sq.ft./yr. regardless of carrier type (Danneberger et al., 1984). Accounting for the difference in climate conditions, these two studies, as examples, substantiate those optimum ranges for turfgrasses found in turfgrass text books. Those ranges reported are an excellent place to start to build your fertility programs.

Building on the annual rates, the timing and frequency of nitrogen applications can influence plant health. Researchers at Rutgers University reported that nitrogen had the greatest influence on the severity of anthracnose (Inguagiato, et al., 2008). The greatest reduction of anthracnose occurred when soluble N was applied 0.10 lbs./1,000 sq.ft. on a seven-day schedule from late spring through summer compared to a 28-day schedule.

Regarding fall applications, a previous study found that nitrogen programs containing a late-season application had less anthractors than a program where late-season fertilization was excluded (Danneberger, 1984). Although the explanation is rather brief and uses anthracrose as the primary benchmark for plant health, the take-home message is that application rate and timing influence plant health.

Finally, as you develop a nitrogen program for the coming year, stay balanced and use all the tools (carrier, application technology, etc.) available to you. Remember that as you manage turf on the edge, you do not want to fall off by drifting to the extremes.

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## The AUTAL

With an affinity for the great outdoors, Joe Hubbard was born to be a golf course superintendent

#### BY LARRY AYLWARD, EDITOR IN CHIEF

ying on his back in the ice-cold mountain stream, 12-year-old Joe Hubbard shivered from head to toe. While the water running over him was painfully frigid, lying there was something Hubbard had to endure—lest he could die in the California wilderness from a poisonous rattlesnake bite.

Hubbard was hiking in the Sierra Nevada Mountains with his two friends, who were twin Navajo Indian brothers, when the rattlesnake lunged at him and bit his left index finger. The three, who had been camping in the mountains for several days, were about 90 minutes from the nearest town and hospital. The brothers, aware of an old tribal remedy to combat snakebites, told Hubbard to lie in the creek. They knew the cold water would act as a natural antidote to slow the snake's venom traveling through Hubbard's body.

Then the brothers went to work like a couple of emergency-room workers on Hubbard's wound. They opened the cut wider to let it drain and placed a wad of chewing tobacco on it so the tobacco's carcinogens would draw out the poison. They wrapped the tobacco against the wound with spider webs to keep it in place. Then they kept watch over Hubbard, feeding him fresh-caught trout from the stream for nourishment.

My arm turned real red, and I was sick for a couple of days," Hubbard says. "But then I got better."

Sitting in his office at the Broken Sound Club in

Boca Raton, Fla., where he is the director of golf course maintenance, Hubbard recalls his brush with death that summer day in 1969 with a nervous smile. He holds out his finger to reveal the nasty scar from the snakebite.

A lot of people after enduring such a harrowing situation would probably put away the hiking boots and camping gear for good. But not Hubbard, now 51, who loves the great outdoors more than anything the world has to offer. It's precisely why he made the golf course maintenance field his profession — so he could work outside and tend the terrain while overseeing the creatures that inhabit it.

"I truly believe that most golf course superintendents are environmentalists," Hubbard says. "We love being outdoors, and we love seeing the wildlife. We're just visitors here, so we know we must be stewards of what we've been handed."

At the Broken Sound Club, Hubbard has been handed two golf courses to maintain — the Old Course and the Club Course. Hubbard, who's celebrating his 25th year in the business this year, came to Broken Sound in 2004. The profession has landed him in several states, including Idaho, California, Washington, Oklahoma, Virginia and throughout Florida.

Hubbard says he has worked many long and stressful hours to get to his current level. Through it all, Hubbard has always enjoyed the natural

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