



*Ultradwarf Bermudagrasses Meet the Real World (Part 3)*

# TifEagle: Make Sure You Have a Good Mechanic and an Extra Set of Bedknives

*(Editor's Note: This is the third installment in a series of in-depth looks at real-world management of the new ultradwarf bermudagrasses.*

## At Pelican Sound: Loses Aesthetics, Retains Playability During Cold Weather

BY RANDY KORF

*Golf Course Superintendent*

### Routine Cultural Practices

#### Mowing

We use Toro 3100 Triplex mowers daily with Wiehle front rollers and smooth back rollers. The height of cut is .125 inch, and has not been changed since January.

We also use Toro 1600 26-inch walk mowers from October through April for perimeters. Their height of cut is set to .115 inch to match triplexes. We will raise if perimeter is stressed. The reels are ground every 25 hours or sooner if needed. Bed knives are ground two or three times, then discarded (tournament thin bed knives). Primo growth regulator has not been used.

#### Verticutting

We use Toro triplexes with verticut reels. We go a minimum of every two

weeks, or weekly if needed, and the perimeter if needed. Depth is typically 1/4 inch but will back off to 3/16 inch from December to April. We verticut in two directions at 1/8 inch. This produces great speed and true roll. Vertigrooming has not been effective. Traded in groomer reels for second set of verticut reels. Frequent verticutting eliminates all grain.

#### Topdressing

A Vicon spreader is used for light applications although I think a Terra Topper would be better. A Meter-Matic is used after aerifications. We topdress a minimum of every two weeks after verticutting, sometimes weekly but only after verticutting. The sand/soil mix is same as construction material (90/10). A drag brush is used followed by an irrigation syringe.

#### Fertility Program

Granular products 10-2-20 and 0-0-30 are alternated every two weeks, and applied after verticutting/topdressing. Liquid products 12-0-0 with minors or potassium nitrate and a chelated minor product are alternated between granular applications. Humate is applied twice a year. Gypsum is applied every 6-8 weeks at 10 lb/1,000 sq. ft.

#### Aerification

We use a contract aerification service. They use Coremaster aerifiers. Our schedule:

June, 5/8-inch tines at 1.75-inch depth

July, 1/2-inch tines at 1.75-inch depth

August, 5/8-inch tines at 1.75-inch depth

September, 1/2-inch tines at 1.75-inch depth

The cores are collected and topdressing applied. A greens spiker with 1.5-inch solid tines on a drum is used from October to May. This does not disrupt the putting surface.

#### Irrigation Practices

We have a Rain Bird Maxi Nimbus II control system. A typical schedule applies .2 inches of precipitation daily. We typically apply .5 inches of precipitation after topdressing/fertilizing.

When hydrophobic conditions arise (frequently from March to May) a granular wetting agent is applied. Then the irrigation schedule is adjusted to a 6-minute cycle/30-minute soak and repeated for two or three total cycles.

#### General Comments

Contours: We see slight scalping on slopes over 2 percent, but verticutting is

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## Correction

In the Superintendent Journal section of the Fall 1999 issue, the FloraDwarf article titled Ponte Vedra Inn should have been titled The Forest. The author of that material was Rick Tatum and not Jay Reister. Don't ask me how I did that one! JJ

## TifEagle Establishment/Grow-in at Pelican Sound

(Greens had 100% coverage at week number 5)

### IRRIGATION

**Week 1**—Every hour 7 a.m. to 6 pm  
8 minutes per head

**Week 2**—Every 2 hours 7 a.m. to 6  
p.m. 8 minutes per head

**Week 3,4**—3 times per day 8  
minutes per head

**Week 5**—Once a day with about .2  
inch precipitation rate

### FERTILITY

**Week 1**—Milorganite (.5 lb N) then  
ammonium sulfate (.5 lb N)

**Week 2**—D.A.P. (1 lb P) then  
complete fertilizer (.5 lb N)

**Week 3,4**—Alternate ammonium  
sulfate/complete fertilizer (.5 lb  
N)

**Week 5**—Alternate use of 10-2-20 (1  
lb N) and 0-0-30 (1 lb K) every  
two weeks, with liquid  
application in between.

### ROLLING

**Week 2**—Roll two directions

**Week 3, 4, 5**—Roll one direction  
each week

### MOWING

**Week 3**—Walkmow at .200" then  
.175"

**Week 4**—Walkmow at .150" twice

**Week 5**—Walkmow .150" every  
other day

**Week 6**—Triplex .140" daily

**Week 12**—Triplex .135" daily (later  
dropped to .125")

### TOPDRESSING

**Week 6**—Topdress lightly

**Week 8**—Quadra-tine aerify, drag in  
cores

**Week 10**—Topdress lightly

**Week 12**—Quadra-tine aerify, drag in  
cores

## TifEagle Grow-In Program at Jupiter Island

### JULY 1998

9 Apply 10-10-10 pre plant fertilizer  
to Group 1 greens (holes  
1,2,5,6,7,8 and 9)

10 Sprig Group 1 greens

15 Fertilize Group 1 greens with 10-  
10-20, setting "K."

20 Walk verticut Group 1 greens and  
roll with 1 ton roller.

21 Fertilize Group 1 greens with  
D.A.P. (Di-ammonium Phosphate),  
Setting "L."

24 Fertilize Group 1 greens with 10-  
10-20, setting "H."

27 Fertilize Group 1 greens with  
AmSO4 (Ammonium Sulfate)

30 Walkmow Group 1 greens at .170  
inches. No buckets.

31 Fertilize Group 1 greens with 10-  
10-20, setting H."

### AUGUST 1998

3 Walkmow Group 1 greens (.170").  
Fertilize with 12-0-2, setting "H."

4 Spiked Group 1 greens and rolled  
with Jacobsen Triplex rollers

5 Walkmow Group 1 greens (.170")

6 Spiked Group 1 Greens. Applied  
pre plant fertilizer 10-10-10 to  
Group 2 greens (holes  
3 & 4 and 10-18)

7 Walkmow Group 1 greens (.170")  
and fertilize with 13-4-13. Sprayed  
with Battle.

Sprig Group 2 greens.

10 Verticut and mow (.160) Group 1  
greens with triplex. Topdress.

11 Fertilize Group 1 greens with 12-  
0-24.

12 Walk verticut Group 2 greens (2x)  
and roll with one ton roller. Spike  
and triplex roll Group 1 greens.

13 Fertilize Group 2 greens with  
D.A.P.

16 Fertilize Group 2 greens with  
AmSO4.

17 Triplex verticut Group 1 greens  
(2x). Topdress with walking  
topdressers. Fertilize with 12-0-24

19 Spike all greens (1x)

20 Fertilize all greens with 10-10-20

24 Verticut all greens. Walking  
topdresser. Fertilize with 12-0-24

26 Roll Group 2 greens with one ton  
roller. Mow Group 1 greens (.140)

27 Spike Group 2 greens (2x)

29 Sprayed all greens with Eco-N  
and 8% Fe (Iron)

31 Verticut, Topdress and fertilize  
Group 1 greens

### SEPTEMBER 1998

1 Roll Group 2 greens with one ton  
roller

2 Spike Group 1 greens (4x) and roll  
with Salsco roller

3 Hand spread weak areas on Group  
1 greens with Milorganite

4 Fertilize Group 2 greens with  
Milorganite

8 Fertilize Group 2 greens with  
AmSO4

9 Aerify Group 1 greens and roll  
with one ton roller

10th Fertilize Group 1 greens with  
13-4-13. Walk topdress all greens  
1-18. Sprig putting green.

11 Spray all greens Eco-N, Eco Mix,  
minors, and Battle

12 Fertilize Group 2 greens with 10-  
10-20

13 Group 1 greens now puttable

14 Mow Group 1 - everyday now

15 Triplex verticut - Group 2 (2x),  
Group 1 (1x). Walk topdress  
Group 2 and fertilize with 10-10-  
20. Roll with one ton roller.

17 Spike Group 2 (1x). Fertilize  
Group 1 with 0-0-26 and Group 2  
with 10-10-20

21 Fertilize Group 2 with 10-10-20.  
Spike Group 1 (1x) and fertilize  
with 13-4-13

22 Triplex verticut and walk topdress  
Group 2

23 Fertilize Group 2 with 13-4-13

29 Spray all greens with minors, Eco-  
N and Battle

30 Triplex verticut Group 2 greens  
and top dress

### OCTOBER

1 Mow Group 2 greens at .125

5 Begin regular maintenance on all  
greens. Mow every day. Light  
verticut and topdressing. Split  
fertilizers between 13-4-13 and 0-  
0-26.

26 Open golf course

more likely to thin the turf on those areas.

Greens construction: Modified USGA greens, no gravel, 90/10 Canadian peat mix, no preplant, sprig rate 20 bushels/1,000 sq. ft.

#### **Overall performance:**

Drought tolerance is high; when localized dry spots develop, the greens get mottled and "ugly," but it's aesthetic only, and they recover without turf loss.

Cloudy, rainy periods can cause thinning of turf on slopes and perimeters, but verticutting is a contributing factor. Daconil and Mancozeb are used to prevent/treat algae on weak areas.

TifEagle goes off color during cold snaps, turning a mottled yellow followed by purple color, which fades with a return to warmer weather.

Ball roll is excellent, with good speed and true roll. Desired green speed is easily attained and maintained, provided that the mowing height is .125 or less, verticutting is frequent, and nitrogen use is limited to prevent excess growth.

Budget factors (fertilizer, sand, pesticides) are similar for maintenance of Tifdwarf, although equipment needs are higher, maintenance of equipment is more intensive, and labor to maintain the greens is higher.

Some of the specific problems at Pelican Sound include thatch accumulation, which has been significant, especially compared to Tifdwarf. TifEagle has a 3/4-inch layer of thatch or mat or "biomass." Whatever it's called, it is a frightening aspect of the grass, and causes the localized dry spots and hydrophobic conditions because water just can't get through that layer.

Fairy rings have been a problem as well, but that is probably not associated with the grass type.

Using the Toro Hydroject caused severe scalping of uneven ridges which resulted from the weight of the machine and the softening of the aerification; height of cut would have to be raised following its use. Ideally, the greens could be walkmowed at .125 or less; it's difficult to consistently get the best quality of cut at that height with the triplex.

Overall, TifEagle has performed even

better than I expected. Response has been favorable regarding the quality of the putting surface, even though aesthetically the greens do not have a lush bright green appearance due to our maintenance practices of verticutting, low height of cut, and low rates of nitrogen. I cannot say that TifEagle is a better choice than FloraDwarf or Champion, but I can say that I cannot ever go back to Tifdwarf.

## **At Jupiter Island: Extremely Dense and Sensitive to Shade; Slow to Heal**

BY ROB KLOSKA

*Golf Course Superintendent*

#### **Establishment/Grow-in Program**

**I** highly recommend sprigging at 30 bushels per 1,000 sq.ft. to facilitate grow-in. We also had a mixture of Nitroform and coated potash incorporated into the greens mix.

This helped tremendously to push the greens. After sprigging we waited approximately 10 days and began verticutting and rolling with a one-ton roller.

Five to seven days after that we started cutting with walk mowers set at .175 inch. After two weeks we lowered the height .010 every week until we reached .125 inches. (*See sidebar for complete grow-in program*)

#### **Routine Cultural Practices**

I recommend using walk mowers all year. We used grooved rollers in warm weather and solid rollers in the cool season. Our height of cut for the winter golf season is .110 to .125 inches and we raise them to .125 to .145 in the summer especially when we have cloudy and wet weather conditions. We maintain stimpmeter readings of 9.0.

We do less actual verticutting and more brushing and grooming to manicure the surfaces. We topdress every week. During the winter season we use dry bagged sand spread with Lesco rotary spreaders. In the summer we use a Vicon spreader with the fertilizer spout.

*The turf is so dense that water has a hard time penetrating... The grass grows vertically more than Tifdwarf. Seems slower to heal over. Suggest you have a large turf nursery for repairs. Watch out for root rot and Helminthosporium when the tropical season is active.*

Our fertility program consists of foliar applications all winter of 28-0-0 Coron, monopotassium phosphate, and Regal Maxi-Green. In the summer we apply 13-4-13 with Nutralene at .5 to .75 pounds per 1,000 sq.ft. per month and 0-0-30 at 1.0 lbs per 1,000 sq. ft. per month. I am experimenting with a Grigg Brothers product in weak shaded areas.

I recommend a monthly core aerification during the summer months with small hollow tines. In the winter we aerify with a Toro Hydroject. We spike almost every week.

Irrigation: I try to dry out the green's cavity. Then water heavily to promote the root system.

#### **General Comments**

The turf is so dense that water has a hard time penetrating. It is extremely sensitive to shade. The grass grows vertically more than Tifdwarf. Seems slower to heal over. Suggest you have a large turf nursery for repairs. Watch out for root rot and Helminthosporium when the tropical season is active. And last, you must have a good mechanic and extra sets of bed knives.



# Good Night, Irene!

*A stand of five green buttonwood trees in the right rough of the second hole on The Falls County Club immediately after the eye of Hurricane Irene passed just north of Lake Worth. A small sample of 130 trees lost at The Falls C.C. Photo by Steve Pearson.*



*The same stand of buttonwood trees one year before Hurricane Irene. Photo by Steve Pearson.*

## Storm Was Weak... But it Dumped 15 Inches of Water

BY W. CRAIG WEYANDT

*The Yacht & Country Club of Stuart*

I had no idea that Hurricane Irene would impact the Treasure Coast... or the east coast of Florida, for that matter. When I went to sleep on Friday night the last thing that I remember was that Irene was going up the west coast and possibly going to move just west of Lake Okeechobee.

That meant lots of rain for me but not much else. There was a lot of wind and rain but with Irene being only a category 1 hurricane, I thought that there was no real concern. As everybody said afterward, 'It came so fast that I didn't really

have time to prepare.' That was especially true for me.

I woke up on Saturday morning just after 3 and had to let the dog out. He has a way of sticking his big black cold nose in my face that gets me right out of bed. We went out in the front yard like we would any other morning but something was weird this time. I couldn't figure it out.

Then it hit me... there is no wind! When I went to bed, the wind had been howling and rain coming down in buckets. It couldn't be over that fast. The storm was huge. It must be. It couldn't be. I'm in the EYE!

I ran back inside and turned on the television. I was lucky. We never lost power. I turned on the TV and WOW! I couldn't believe what I saw. The leading edge of the eye had just passed over and

we were inside. Just like they always said, no wind and no rain.

Heck, I could even see the stars. I woke the wife to show her and was surprised to find that she was not quite as impressed as I was. I told her I was going into work. She said, "You're nuts!" I said what has to be one of the most stupid things I have ever said, "Honey the eye is the safest time to be out, I better go in now." She didn't buy it but I went into work anyway.

I got there by 3:30 a.m. only to see two huge ficus (3-foot diameter) blown over in the entrance. The guard shack was

barely lit and I could hear the generator running. The guard said he was glad to see me: we need fuel and there is no power! I had a hand pump but it was still in the box and I was not in the mood to read instructions. I remember that a fuel station had power just down the road and got some cans and filled everything up.

Not much I could do as I drove around for the first time. There was no way to get on the course. The rain gauge was filled to the top at 6 inches (got to remember to get a bigger gauge). It's probably 4:30 a.m. and still not a lick of wind, but I knew it wouldn't be too long before the wind started again.

What do you do at this point?

I drove around to see the damage and was amazed at all the water and trees blown over. After all, it had been raining since Thursday (the last time that I cut the greens).

A golf course maintenance employee had come in to work by 5:30 a.m. and the guard turned him away. Lucky for me he was persistent and came over to the fence by maintenance where I could see him. I immediately told the guards to let him in to help me clear some roads where trees had fallen and get pumps started to help with all the water.

By now it is light, the wind is starting to pick up and the general manager is in. Actually, the storm was so bad the night before that he couldn't go home. He grabbed the club's camera and gave me a call to come pick him up. The damage was beyond words. Over 65 tees down just on the golf course and I would say just as many in the property owners' yards.

The real story was water, water, water. We will never know the exact total of the rain but in three days I had already measured over 15 inches. (The three-month total for August, September and October was over 41 inches).

The streets have been cleared, drains checked and opened and power was coming back on in some areas. It was time to go home and get some rest.

Sunday came early and the water was still there. The most important thing for me was to get the greens mowed. I had

To: Mr. Kaplan, Board of Governors

From: W. Craig Weyandt, GCS

Date: October 18, 1999

Re: Hurricane Irene

The purpose of this memo is to bring understanding of the current condition of the golf course and some of the future challenges of the Grounds and Greens Department.

Drainage - In three days, the Yacht & Country Club received over 11 inches of rain. The exact amount cannot be determined because the gauge was overflowing when I arrived at work on Saturday morning. The three-day total adds up to 149,347,000 gallons of water that the CCA had to deal with. Even on the dry holes like No. 11, 16, and 17 there is standing water two days after the rain has stopped.

Some of the problems are getting access to the debris, mowing, and standing up trees that can be saved. The rain accompanied by cart and mower traffic increases the compaction of the soil and turf under these wet conditions. Some areas of the course where water will sit for days can develop scald. Scald is the condition that exists when a turfgrass plant collapses and turns brown under standing water, high temperature, and intense light.

Bunkers - This is the third hurricane (Floyd, Harvey, and Irene) to impact the Treasure Coast area this year. Rain and wind have to be the worst things for bunkers. During Floyd we did not receive that much rain but the wind was fierce and physically removed the sand from the bunkers. Harvey and Floyd hit us with both barrels (wind and rain).

Both wind and rain damage can be obvious. Wind by physically moving the sand but rain has more lasting damage. First the rain washes the sand off the face of the bunkers then in some cases the bunkers are covered with a layer of silt. This silt can change the physical characteristics of the sand (color and texture). In order for the bunkers to play consistently, each bunker will have to be evaluated and necessary action taken. What this adds up to is labor and lots of it.

Trees - No one can miss the amount of tree damage that has taken place with Irene. As a matter of fact this is the most damage the course has sustained in my eight years of employment with the CCA. Sunday morning was the first opportunity that I had to ride the entire golf course and take a count on fallen or damaged trees that would have to be removed. The number even surprised me at 63. This includes the front entrance where three large ficus trees are blown over. One ficus on the north end of the wall will be removed and the two at the front entrance will try to be saved.

Labor - I have come up with a new formula for Hurricanes and the damage they create.

(Hurricane x golf course = Labor). I should say labor to the second power because not only will I have to clean up all the damage created by the storm but I will have to keep up with the daily work as well. The maintenance staff is already behind because of the irrigation project done in-house over the summer.

Now is the time that we normally reserve for grooming the golf course and this clean-up process will delay things even more. We all know of the labor shortage problems and the need for a quality trained staff. Rest assured, nothing will be spared in cleaning up of the course and getting it groomed for the season.



*Flooded low lying areas like this on the 7th hole of the Y&CC of Stuart make it impossible to get around the whole course to begin clean up and repairs. Photo by Craig Weyandt.*

not mowed the greens since Thursday and things were getting a little too tall. I used three people to clear debris in front of the mower. One little stick left on the green and it would have a scar that could last over a month.

Second came clearing the cart paths. I knew as soon as the sun came out that everyone would want to see the carnage. The one thing you can't move fast enough is the water. People will drive around the puddles not thinking that the turf's wet too. So use ropes, signs, whatever means possible to let them know that things are still wet.

A great help in moving the water was a "mow" pump from Stuart's Pelican Pumps. If you do not have one, they are a must. It looks like a jacked-up flymower but this time the impeller moves water through a 2-inch hose. If you have some place to move the water to... the mow pump will move it. This did not prevent all the scalding of some of the turfgrass but it definitely helped reduce it.

Monday Oct. 18, and overseeding day for me. I had no choice but to go for it. I knew the course would be closed for another day or two and I had better take advantage of it because the last thing anyone will want to hear is that the course is closing again. It was great watering the

seed automatically. Normally syringing the seed takes two or three people and now the computer did it.

As a matter of fact, while the course was closed we did all we could to take advantage of it. We painted tee markers, signs, etc while there was no one around. The first days of the week were spent helping tree services clear the major debris while the last part of the week was spent in the bunkers.

Without even thinking about it we had a plan to deal with the cleanup. Clear the debris, mow what you can, bunkers were last, and thank God we had a blower. I don't know what we would have done without it. The blower took fairways that looked terrible and 2 hours later you would have never known that a hurricane had come through just days before.

The downed trees were not removed all at once. I met with a tree service and developed a plan of what had to be removed and what would be first. Some areas were not accessible because of standing water but always the priority remained of getting the golf course playable. There were so many small trees and palms down that we had to buy a banding tool and make dozens of tree stakes.

The tree company gave me each Monday after the storm to continue clean-up and it took four weeks to finish. This may sound like a long time but the priorities were kept and maybe seeing a down tree in the rough is not such a bad thing.

It is a great reminder to those who did not get to see or feel the storm. There are many things that I would do differently if this ever happens again but one thing I will do the same is communicate.

On Sunday night I sat down and typed out the current status of the golf course for the general manager and board of



*The rough on the Y&CC of Stuart's 6th hole under three feet of water. Photo by Craig Weyandt.*



*This live oak between the 3rd and 4th hole on the Y&CC of Stuart was used for screening errant shots. What kind of price tag do you put on this loss? Photo by Craig Weyandt.*

directors. This memo explained how much rain we had received, how many trees were down, and the basic plan of attack for dealing with the problem. So communication was good but next time I will take more pictures.

When it was all over, the course had been closed for nine days after the hurricane and there are a few less trees but the overseeding came up great, and overall we feel lucky that things were not worse.

## **Flooding Usually Worse Than Wind for Golf Courses**

BY JAMES B BEARD, PH.D.

**T**he hurricane season in the Atlantic Ocean has brought major flooding problems to eastern North America. The high winds associated with hurricanes typically result in the downing and uprooting of trees.

This may result in the need for extensive debris removal from turf areas where tree limbs and various materials torn from buildings and other constructed facilities are strewn.

This wood, metal, and similar debris should be removed as soon as possible in order to avoid interference with mowing operations and potential turf injury by light exclusion.

### **Soil Deposition**

The dimension of hurricanes that can create the most injury to turfgrasses is the very intense rainfall and resultant flooding of turf areas. Recent intense rains on the east coast of the United States ranged from 10 inches (25 cm) to as high as 25 inches (63.5 cm) in less than one day.

The lateral water flow from slopes onto lower areas of the floodwaters results in the deposition of soil, including clay, silt, and salt. Salt deposited on the grass leaves should be washed off as soon as possible to prevent physiological desiccation and death of the turfgrass plants.

The deposition of clay and/or silt creates a fine-textured layer that is prone to compaction and can become relatively impermeable to downward soil water infiltration for years to come. Thus the removal of this soil deposition as soon as possible is very important, especially from high-sand root zones on putting

greens and tees. The thin layer of soil remaining after mechanical removal of thicker layers should be washed off to the extent possible using water that is pressurized and directed through large-volume hoses.

### **Submersion Injury**

Flooding that persists for an extended period of time can cause the death of certain turfgrasses. Complete submersion under water can result in soil oxygen depletion within a matter of hours. This may result in death of the root hairs and subsequent yellowing of the turfgrass plants due to a nitrogen or iron deficiency.

Ultimately, death of the turfgrass plant may occur by one of several mechanisms, including (a) a build-up of certain toxic compounds, such as ferrous and sulfide ions formed by reduction of anaerobic soil conditions, (b) the accumulation of toxic organic compounds, such as methane or carbon dioxide produced by the decomposition of soil organic matter, and (c) the accumulation of toxic by-products within the plant tissue under anaerobic conditions.

The relative degree of injury to turf-

grass from submergence varies depending on the (a) turfgrass species, (b) submergence duration, (c) submergence depth, (d) water temperature, and (e) light intensity.

Submersion at high water temperatures of 86°F (30°C) can result in death of the fine leaf fescues (*Festuca spp*) in one day, whereas creeping bentgrasses (*Agrostis stolonifera*) may survive more than 60 days submergence at low water temperatures of 50°F (10°C).

Accordingly, it is important to use submersion-tolerant turfgrass species on sites that are subject to frequent flooding.

The extent of injury from submergence increases with increases in the depth of water coverage. Grasses with leaves extending above the water surface are able to survive much longer than if totally submerged. Also, grasses under stagnant or standing water are more likely to be killed than when under flowing water.

However, one of the most important factors in the degree of injury that occurs during flooding is the actual water temperature. The extent of death increases dramatically as the water temperature increases from 50°F (10°C) to 80°F (27°C).

Thus, submersion early in the year at cooler water temperatures is less likely to cause turfgrass injury than submersion later in the summer when water temperatures are high, and especially when also exposed to cloud-free, full-radiant sunlight levels.

**Injury Assessment**

Once the debris is collected and any soil deposition removed as completely as possible, the next step is to assess the extent of damage to the turfgrass, which may appear as a totally brown canopy. Individual plants of the desired turfgrass species from numerous locations under flooding should be lifted out and examined carefully.

Cut a horizontal cross section through the grass crowns and the nodes on lateral stems to determine if they are white, firm, and healthy, or brown, mushy, and dead. This will be an indicator of the

amount of turfgrass recovery that can be anticipated.

Numerous multiple samplings are critical to get a representative assessment. Then the decision must be made whether replanting of critical turf areas will be required to repair the damage. Removal of any dead turf plant material and thatch from the surface is important to avoid a future organic layer problem.

If soil deposition has occurred, fairly intense core cultivation will aid in disrupting the clay or silt layer that has developed. The usual establishment procedures can then be followed.

*Credit: Turfax, Sept-Oct 1999; Vol.7, No. 5*

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**Editor's Note:** *Dr. Beard's article is presented as a cautionary warning of the unseen and possible long term effects from the flooding associated with this very active tropical season. Rainfall amounts exceeding 40 inches have been recorded during the 1999 hurricane season from July to October. Many portions of peninsular Florida experienced effects from Hurricanes Floyd, Harvey and Irene. Golfers and owners should be prepared for tentative turf conditions until enough time and good weather can help heal the turf damage. Weakened bermudagrass now covered with overseeding may still be weak in the spring during transition.*

**Golf Not the Only Agribusiness to Feel Irene's Wrath**

**E**arly damage estimates are in, and Hurricane Irene packed an estimated \$400 million punch, devastating South Florida's fall crops.

Florida Commissioner of Agriculture Bob Crawford has requested the governor's assistance in seeking an agri-

culture disaster declaration from USDA Secretary Dan Glickman.

Preliminary reports indicate that Dade County alone may have suffered losses of more than \$230 million in vegetable, tropical fruit and nursery crops.

In Palm Beach, Broward, Martin, St. Lucie and Indian River counties, preliminary surveys put losses at an estimated \$170 million.

Hurricane Irene dumped 15-20 inches of rain and had winds in excess of 80 mph when it tore across South Florida in mid-October.

Surveys are ongoing in Monroe, Collier, Hendry, Glades, Okeechobee, Osceola and Brevard counties.

Commissioner Crawford estimated that over 650,000 acres under production had been impacted by the storm. Crop losses ranging as high as 85 percent on more than 30,000 acres of tropical fruits and winter vegetables in a six-county area have been reported. In Dade County vegetable losses are estimated between 95-98 percent.

Nursery stock losses in the impacted area amount to an estimated \$215 million. In the Indian River citrus growing area, early loss estimates range from 15-20 percent on 225,000 acres.

"South Florida farmers supply the nation with more than 50 percent of its winter vegetables," Crawford wrote to Governor Bush. "It is imperative that all efforts be made to assist the hard-hit farmers in re-establishing this important production as quickly as possible."

Commissioner Crawford is asking for a declaration of an agricultural disaster for the six hard-hit and contiguous counties to authorize all financial assistance available under federal programs.

*Editor's note: I share this information about our brothers and sisters in agriculture not to minimize the recovery time, effort and damage to the hundreds of golf courses in South Florida, but to reiterate Craig Weyandt's sentiments, "It could have been worse!"*

*Credit: Florida Fertilizer and Agrichemical Association's November 1999 newsletter*



# NOW is the Time to Thank Your Mentors

## Taking the High Road Was Dietsch's Greatest Lesson

BY JOEL JACKSON, CGCS

Perhaps the beginning of a new millennium is a time for all of us to look back and thank those people who helped us get to these places in our lives and careers where we can look forward with hope and promise to a new age.

For me it is a long-overdue time to pay tribute and honor to the person who set me on the path which led me to the golf industry which has been so good to me and my family.

My mentor in this profession was William H. Dietsch, Jr. Bill was a golf course architect who never got the accolades and headlines that he deserved. He did however, earn the admiration and respect of those whose lives he touched. Bill is listed in *The Golf Course*, the seminal work on golf course architecture by Geoffrey Cornish and Ronald Whitten.

Bill was one of my heroes in the golf business. Not only for the obvious reasons that I learned the hands-on part of working on a course from him, but for an even greater lesson he taught me. From him I learned to always take the high road in business.

He was a model of honesty and integrity in a business that could lend itself to wheeling and dealing. He staked his reputation on his work, and those who hired him reaped the benefits of his work ethic. He was a perfect model for a young person being exposed to the golf industry.

There were others who appreciated Bill's way of conducting himself in the business. Here's just a couple of comments about Bill's performance:

"...Bill's professionalism and attention to detail were traits that impressed me. But I was not the only one who appreciated his sincere and diligent pursuit of excellence in his work. He did not have a big ego. What he had was a tre-



Bill loved to go fishing! William H. Dietsch, Jr. Friend and mentor (1928-1999).

mendous pride in the work he performed for a client.

"...his work is exemplary and he is able to transform ideas into reality accu-

rately and within the budget parameters. Of particular importance is his willingness to listen to our opinion and give it proper consideration. Mr. Dietsch is a credit to his profession and can provide all the required services to conceive, plan, and construct golf courses. I recommend his services highly.

THOMAS J. COX

Executive Vice President  
Pasadena Y&CC, 1976

"...While completing the construction of the 10 greens (Miami Springs GC), I was able to work closely with Mr. Dietsch. I was thoroughly pleased with his cooperative manner, diligence and personal overseeing the work and the ways he assisted in the work being done. He was on the job over 90 percent of his time; always concentrating on having the work absolutely perfect."

PAUL TURCOTTE

Superintendent of Golf  
City of Miami, 1981

I first met Bill when I was in high school. I worked for him one summer when he was building the Apollo Beach GC south of Tampa in 1959-60. I cut my teeth on the golf course business before

## A Solid Foundation

Bill received a solid foundation in golf course design and construction supervision, especially in greens shaping while working 12 years for legendary golf course architect Robert Trent Jones from the mid 1950s to 1967. Some of the courses that bear Bill's mark:

- Upper Montclair CC, NJ
- Green Spring Valley Hunt Club, Garrison, Md.
- Wilmington CC (South) Wilmington, Del.
- Arcola CC, NJ
- Birmingham CC, Ala.
- Chattahoochee CC, Ga.
- Apollo Beach GC
- Country Club of Miami (East & West)
- Ponte Vedra GC 9 hold addition
- The Homestead Hotel (Cascades Course - Lower), Va.
- Otter Creek GC, Ind.
- Offutt AFB (SAC HQ), Neb.
- Turtle Point CC, Ala.
- Broadmoor Hotel GC (West) Col.
- Fountain Valley CC, Virgin Islands
- The Highlands CC, Mich.
- Corpus Christi CC, Tex.
- River Bend CC, Ga.
- Fairfield CC, Conn.
- Albany CC, NY
- Bellereve CC, Mo.
- Tuxedo Park GC, NY

## Impressive Body of Work

Bill performed either golf course design and construction, supervision, remodeling, consulting or maintenance services on the following courses while owning his own business. D - design; SC - supervised construction; R - remodel/redesign; CO - consulting; M - maintenance.

**CC of Miami**, 200 bunkers, (East & West Courses), Miami. (R)

**Arawac GC**, (9 holes), Nassau, BWI (R)

**Coral Springs CC**, Coral Springs (D & CO)

**Calder Race Track**, Ft. Lauderdale (CO)

**CC of Miami**, (18 hole South Course), Miami (D & SC)

**Delray Dunes CC**, (18 holes) Delray Beach (Co-design & SC)

**Torrey Pines GC**, San Diego (CO)

**Fountainbleu CC**, Miami (SC)

**Oriole G & TC of Margate**, (18 holes), Margate (D & SC)

**Lakeview GC**, (18 holes), Delray Beach (D)

**Villages of Oriole**, (9 holes), Margate (D)

**Town & Country Real Estate**, (18 holes), Winter Haven (D)

**Tamiami GC**, (18 holes), Miami (D). \*\*

**Pines GC**, (9 holes), Hollywood (R & SC)

**Mariner Sands CC**, (18 holes), Stuart (SC)\*\*

**Pasadena Y&CC**, (18 holes), St. Petersburg (R & SC)\*\*

**Still Hollow GC**, (18 holes), Lehigh Acres (D)

**Sunrise Lakes CC**, (9 holes), Sunrise (D & M)

**Villages of Oriole**, (18 holes), Delray Beach (D & SC)

**International Gardens CC**, (18 holes), Miami (D & SC)

**Duck Key Land Sales, Inc.** (9 holes), Duck Key (D)

**Development Corp of America**, (18 holes), Clearwater (D)

**College of the Virgin Islands**, (9 holes), St. Thomas (R)

**Bay Beach GC**, (9 holes), Ft. Myers (R)

**W.B. Homes Inc.**, (9 holes), Sunrise (D, SC & M)

**Rolling Hills CC**, (9 hole addition), Davie (D & SC)

**Miami Springs GC**, (10 greens), Miami Springs (R & SC)

**Cypress Lakes GC**, (18 holes), West Palm Beach (D & SC)

**Meridian GC**, (9 holes), Lantana (D)

**Beachview GC**, (9 hole addition), Sanibel (D)

**Lake Worth GC**, (back 9 holes), Lake Worth R & SC)

**Negril Hills GC**, (18 holes), Jamaica (CO)

**Qingdao and Jimo Projects**, China (CO)

**Holiday GC**, (9 hole addition), Panama City Beach (D, SC & M)

**San San Resort** (9 holes), Port Antonio, Jamaica (D & SC)

\*\*I worked with Bill on these projects 1971 - 1973.

triplex greens mowers and utility vehicles were invented and I learned the lore of the golf business as he told stories about the many projects he had been on while working with Robert Trent Jones, the leading architect of the time.

Some 10 years later, I would find myself in a straw hat wearing a hatchet on my belt, tromping through the bushes as Bill's assistant after he started his own golf course design business. I worked with him on three projects, but the fuel crisis of 1973 put a hold on a lot of construction projects. He carried me on the payroll for several months and helped me land a maintenance position at Pembroke Pines. And the rest is history.

I will treasure all my memories of working with Bill and just keeping in touch over the years with him and his

wife Rosemary. He could tell some tall tales and we had our fair share of laughs. Bill was an outdoorsman and he loved to fish. I'm glad I got the chance to take a few trips to some of his secret spots in Biscayne Bay, the Keys and his "snook hole" on the Little Manatee River.

This past September a mutual friend of many years, Ralph White called to tell me that Bill passed away from cancer. Many of you may never have heard of Bill Dietsch, but his hand touched a lot of golf courses, and in so doing has also in some small way touched your lives.

Thank you, Bill, for sharing your wit and wisdom with me. You helped make me a better person and a successful superintendent. To all of you, take some time and call or write your mentor and thank them while you still have a chance.

*Thank you, Bill, for sharing your wit and wisdom with me. You helped make me a better person... To all of you, take some time and call or write your mentor and thank them while you still have a chance.*