The practice green at the Jupiter Island Club shows off its new TifEagle putting surface. Superintendents admit growing the ultradwarf grass is a learning experience, but so far they like its performance. Photo courtesy of Sam Williams.

Editor’s Note: Because TifEagle appears to have gained a dominant position in the Florida ultradwarf market (see GreenSide Up, p. 64), we accepted this article from its marketing arm. We will do the same for other survivors as the dust settles in the market shake-out of the first generation of commercially released ultradwarfs. It’s going to be a long war... and we’re the winners.

TifEagle Sets the Standard at These Florida Clubs

TifEagle is making a terrific impression on players throughout the Sunshine State, but at what expense? Is the trade-off for happy players worth it for the superintendents who have to manage TifEagle on a day-to-day basis?

To find out, we visited with the superintendents at three high-profile clubs with TifEagle. In south Florida we talked to Rob Kloska, superintendent of the Jupiter Island Golf Club, a jewel of a facility nestled between the Atlantic Ocean and Intracoastal Waterway. We also had two good interviews in Tarpon Springs... with Prentis Knotts, CGCS, of Cypress Run and Rob Giampietro, director of agronomy at Innisbrook. Cypress Run is a Larry Packard course and was designed primarily for match play. Innisbrook is a Westin Hotel Resort Community with four 18-hole courses: Hawks Run, Copperhead, The Islands and Eagle’s Watch.

TifEagle History

TifEagle was developed by internationally renowned USDA/ARA geneticist Dr. Wayne Hanna and was released in the summer of 1998. Dr. Hanna had two main objectives: come up with a new bermudagrass variety that would (1) push the bermuda boundary north and (2) equal or surpass the playability of bent-grass.

Dr. Hanna was also concerned with minimizing the physical stress produced by the lower mowing heights and frequent verticuttings necessary to control thatch buildup, two management practices required to deliver faster, more consistent putting speeds. Hanna also conducted extensive research on TifEagle’s ability to recover from mechanical injury, as well as the new variety’s tolerance to drought, disease and mole crickets. Color was an important factor, too.
TifEagle Purity a Priority

To avoid the purity problems (off-types) that have begun to crop up throughout the southeast with Tifdwarf, Dr. Hanna and Dr. Earl Eisner, director of the Georgia Seed Development Commission, decided to establish a growers association to control the propagation and sale of TifEagle.

According to Eisner, “We were determined to make sure that TifEagle was grown, inspected and sold under a rigorous set of rules and guidelines.” As a result, TifEagle is a patented variety, which can only be sold as certified sod or sprigs, and only by a licensed member of the TifEagle Growers Association.

Were Tifdwarf Problems Significant?

Yes and no. All of the greens at all of the facilities were previously Tifdwarf, and, yes, two of the superintendents were having real problems with their Tifdwarf. But it was also a matter of timing. Over the years greens tend to shrink. They lose their shape, size and playability. So when the time came to renovate and replace greens, TifEagle was on the scene and was a very attractive alternative.

Rob Kloska at Jupiter Island recalls, “Our Tifdwarf was basically okay, but our greens...
construction left a lot to be desired. We decided in 1996 that we were going to rebuild our greens. Fortunately John Foy, director of the USGA Green Section Florida Region lives here and has been a consultant for us for the last 12 years. John was big on TifEagle. After I started looking at the research, TifEagle seemed to make a lot of sense for us from a number of standpoints.”

Rob Giampietro at Innisbrook was having TifDwarf problems.

“Our dwarf was all mutating and it just wasn’t performing well. I was looking for a better grass. These days people want aesthetics as well as playability — especially at a resort. After working with the USGA and having two experimental TifEagle greens here on the property, we decided to go with TifEagle.

I also knew that I was going to overseed, so I got on the phone and talked to some superintendents who had some overseeding experience — several with both Champion and TifEagle. They all recommended TifEagle. If I’d been a little further south maybe I’d have gone with Champion, but TifEagle is a much better grass for overseeding.”

Cypress Run superintendent Prentis Knotts was having even bigger problems with his TifDwarf.

“Mutations and off-types were beginning to dominate the majority of our putting surfaces. Our greens were becoming less and less manageable and needed to be reconstructed. We knew that TifEagle had strong USGA support. That, along with Wayne Hanna’s research, weighed heavily in our decision, which was basically a collective decision between our greens committee, board of directors and Barbaron, our contractor. I’d have to say that TifDwarf off-types and mutations rank as the number-one reason greens get rebuilt here in the South.”

TifEagle Grow-in is Quick and Problem-free

With the exception of the number 9 green at Innisbrook’s Copperhead, which was sodded, all of the greens at all of these courses were sprigged. It goes without saying that all of the courses were different. Some greens were sprigged in the summer. Some in the fall. Some courses had salinity problems and poor water quality. Many holes had shade issues. Some had drainage problems. But bottom line, nobody reported any grow-in problems. In fact, there was total agreement about TifEagle’s unusually quick establishment.

Every superintendent has his own pet theory about how to fertilize, water and care for new greens, but in reality most management practices are more similar than not.

Kloska recounts, “Fortunately the USGA had chosen us for a simultaneous trial of all of the new ultradwarfs, as well as Tifgreen 328 and TifDwarf. So I got a first-hand look at the new varieties. That definitely influenced my decision to go with TifEagle.

“We planted our first six TifEagle greens in July of 1998 - around the 10th. Then we planted the remaining 12 holes, plus a putting green, in mid-August. Since it was later in the year, we sprigged a little heavier our second go 'round.

“Prior to planting — and I think this made a big difference — we blended our sand and peat with Nitroform, which is a slow-release fertilizer whose activity does not hinge on water, but rather on microbial action. So, even with as much water as we were putting out, our fertilizer didn’t leach, and that really helped.

“Our greens construction was also quite good. AgriScapes Inc’s Ocala unit handled the work. They’re a fantastic group, and they really treated our course with kid gloves.”

Since there wasn’t a lot of in-field experience to draw on, Kloska says he decided on an aggressive grow-in.

“We started mowing our greens as low as we could as soon as we could. We cut at 5/32 inch right away. With TifDwarf, I normally have to start at 1/4 inch and work on down. After about a week, as soon I could grab the plant and not pull it out of the ground very easily, we came back in and verticut and rolled our greens very heavily.

“Eight or nine days later we started walk-moving them. Like I said, we started at 5/32 inch and lowered down progressively until we got to 1/8 inch at about nine weeks. The closer we got to 1/8 inch, the better the greens got. We also spiked our greens twice a week, which is on the aggressive side. And instead of fertilizing once a week heavy, we split applications every three or four days — light. This also helped prevent leaching.”
Kloska had a couple of other concerns: very dry weather and water quality.

"We used to use drinking water to irrigate, but that got to be quite expensive, so we installed a reverse osmosis water treatment plant."

It takes saltwater out of his well, runs it through the system and gives him irrigation quality water. He can make 400,000 gallons per day, but there is a drawback. "The water is so clean, it has virtually no ions."

Kloska was concerned that, without a lot of recharge in his pond because of the drought, and using treated water, he might have problems. He explains, "At the lowest level, grass functions via ionic exchange, so there could be problems if you have water that has no ions. Fortunately we also recycle lots of water here, so we pick up some N along with some other nutrients before it goes back into the pond, where it blends with the reverse osmosis water."
On-going Management is an Educational Experience

Is on-going TifEagle management different from caring for Tifdwarf? These superintendents smile and call it an educational experience. Prentis Knotts says he’s not married to any particular fertility program, but has found that liquids seem particularly well-suited to TifEagle because of its tight texture. Knotts also planned for more aerifications when he wrote his operations budget.

“Instead of three, we’re going to do five. We contract it out, so it’s not a big labor issue for us. Most superintendents in this area will aerify and top dress three to five times anyway, regardless of whether they have 328, Tifdwarf or TifEagle. I’ve always topdressed frequently. And I believe in verticutting and aggressive aerification to keep new growth going all of the time.”

Rob Giampietro agrees, “Fertility is a challenge. In fact, the less nitrogen the better. We feel that spoon-feeding is much preferable to going out and dumping a lot of N on our greens. Once we switched to foliar applications, the TifEagle just got better and better. “We also purchased a slicer, which we run just ahead of our walk mowers. We poke through the sod layer, down about 2 to 2-1/2 inches deep, to create channels for water, fertilizer, root growth and oxygen. This is perfect for a resort like ours, because play can go on as usual.”

The Innisbrook game plan is to spike their greens three times per month combined with weekly verticutttings and hydro-injections.

Kloska reports that he was also already managing his Tifdwarf fairly intensively, so his TifEagle didn’t alter his management practices all that much.

“It requires more grooming and more topdressing at certain times of the year, but we’re almost on the same program as before. Maybe if you were transitioning from 328, you’d have to change your cultural practices, but for us it was no big deal.

“We do use walk-behind spreaders and bagged and dried sand when we topdress now. It’s vital to keep machine-cry off of greens as much as possible during our busy season. We also previously used walk-behind mowers only in season (winter), and triplex mowers out of season (summer). Now we’re using walk-behind mowers all year long. I highly recommend this. You have to give a little to get some back.”

Kloska continues, “Bottom line, the things I can do with TifEagle I could never do with Tifdwarf. We cut our greens once a day. Rarely do we get into double cutting.

“Our membership does not like greens that are extremely fast. If our greens are 8-1/2 to 9-1/2 tops and are consistent every day, they are happy. If I rolled the greens to make them faster, they would kill me. Rolling greens dramatically changes the putting surface day to day.

“You are either going to roll three or four times a week and keep them like that, or you’re not. Rolling makes them fluctuate too much. Consistency is the big issue here. My greens chairman has consistency and playability on the top of his list.

“That’s our main goal. That’s why we topdress once a week. We use a water injection aerifier every week or two to keep them consistent. And we keep our mowing height consistent throughout the season. Our members absolutely love the TifEagle. In fact, we rebuilt our croquet court with it.”

Mowing heights for Prentis Knotts at Cypress Run have varied. “We went down to just below 1/8 inch during the later stages of our grow-in. No doubt we were a little aggressive in the beginning considering we were going to overseeding. So we went back up to 5/32 inch. We overseeded with a combination of poa trivalis and colonial bent grass — a 60-40 ratio. It was very successful. I saw very little grow-in transition problems.

“We also think we’re going to have a good spring transition. Our standard mowing height right now in mid-March is 5/32 inch and we don’t plan to change until after the transition. Probably we’ll go back to 1/8 inch. It’s on its way right now — probably 50-50 due to some very warm weather. I expect by the end of May we should be completely through transition and nobody will even know it happened.”

Knotts is happy. “We called Barbaron to have them take a look at a few things, and to take a look at the development of our TifEagle. We wanted an architect’s impression as to where we were. They responded by letter that our greens were in perfect condition based on their age.

“At first we did have a few thin areas relative to some shading. TifEagle, like other bermudas, does not like shade. It’s best to be committed to having no shade anywhere on your putting surfaces at any time of the day.

“For example, our 5th green used to have a little tiny oak tree behind the green which threw a little blob of shade on the green about the size of this desktop. That was the only thin spot on the green. So we removed the tree, and it recovered instantly. It’s just amazing how much difference full sun makes.”

In a follow-up conversation with Prentis Knotts in late August, he reported that on a recent visit of the USGA Turf Advisory Service, John Foy advised him that his TifEagle was in outstanding shape. “We found our root depths to be five to seven inches, and this was in the ‘dog days’ of summer. Needless to say, our members are extremely happy with our new putting surfaces.”

Management Challenges Worth It

Rob Kloska is up front about the extra work his TifEagle requires. “You have to have the dollars in your budget if you’re going to manage TifEagle. Do the numbers. You’ll have more aerifications and more grooming. And you’ll have to watch your N levels and deal with thatch.

But your members will love it. I wouldn’t change this grass for anything. I’m happy. Our membership is happy. If I have to put in an extra few hours to make sure they’re happy, it’s well worth it.”

SAM WILLIAMS
Sam Williams Advertising
For the Georgia Seed Development Commission
USGA Adds Agronomist for Florida Region

The USGA has hired a new agronomist for Florida, Todd Lowe. Lowe received his bachelor of science from the University of Florida in 1995. He graduated from Clemson with a master of science in August, 1998.

At Clemson, Lowe worked closely with an old Florida friend, Dr. Bert McCarty. While at Clemson, he worked as a graduate research assistant/technician conducting turfgrass weed research and screening pesticides for use on turfgrass and ornamentals.

He constructed and maintained turfgrass research plots, including a 12,000 sq. ft. TifEagle green, maintained the turfgrass plots, and supervised three to five students yearly. Also while at Clemson, Lowe co-founded the Clemson University Turf Club/GCSAA student chapter. He has published six refereed manuscripts, 13 scientific abstracts, seven university extension articles and eight golf course trade magazine articles.

Lowe worked at the Walker Golf Course at Clemson University and coordinated its ACSP program. In addition, he also worked at Plantation Country Club in Ponte Vedra for eight years.

He plays golf and he also enjoys hunting and fishing.

Lowe is currently setting up his office in Englewood, but he can be reached through e-mail at tlowe@usga.org, or call the Florida Green Section office in Hobe Sound at 561-546-2620 for his phone number.

SHELLEY FOY
USGA Green Section
Florida Region

2001 Florida Plants of the Year - Part 1

Editor's Note: The Florida Plants of the Year program was launched in 1998 and has been beneficial to both consumers and growers. Purchasers are introduced to under-utilized but proven Florida plant material. This program is sponsored by the Woody Division of the Florida Nurserymen and Growers Association (FNGA). The plants are chosen each year by a committee of horticulturists, nurserymen, educators, landscape architects and other members of the horticulture industry representing Central, North and South Florida. If this series, now beginning its third-year run in The Florida Green, has been of value to you, please contact me. Thank you.

COMMON NAME: Ribbon Palm

BOTANICAL NAME: Livistona decipiens
HARDINESS: Zones 9-11
MATURE HEIGHT AND SPREAD: 20’-30’ feet tall with a 15’ spread
CLASSIFICATION: Palm
LANDSCAPE USE: Specimen plant
CHARACTERISTICS: This widely adaptable palm with a solitary trunk and gray-green foliage is drought and salt tolerant and grows well in many soil types. This is not just another palm, but has its own unique look. Initial growth is very fast, but slows when it reaches maturity at about 20’. Makes a better shade tree than other palms and has no major disease problems.

COMMON NAME: Lindley’s Butterfly Bush

BOTANICAL NAME: Buddleia lindleyana
HARDINESS: Zones 5-10
MATURE HEIGHT X SPREAD: 4’ x 4’
CLASSIFICATION: Woody perennial/small shrub
LANDSCAPE USE: Specimen or accent plant for long-lasting bloom in the perennial border.
CHARACTERISTICS: A deciduous bush with cascading branches, constantly producing cuttable purple flower spikes that attract butterflies and hummingbirds. The plant is somewhat salt tolerant and not fussy about soil.

COMMON NAME: Spathiphyllum ‘Domino

BOTANICAL NAME: Spathiphyllum ‘Domino’ US Pat #9944
HARDINESS: Zones 9-11
MATURE HEIGHT X SPREAD: 3’ x 4’
CLASSIFICATION: Interior foliage plant
LANDSCAPE USE: Can be used in warmer climates in areas with shade
INTERIORSCAPE USE: Specimen or massive plantings
CHARACTERISTICS: The only variegated patented Spathiphyllum variety available on the market. This plant with dark green leaves has a vibrant color contrast that blooms too. This great interior plant is versatile for 4 through 10 inch containers and is tolerant of temperature extremes.

COMMON NAME: ‘Profusion’ Zinnia

BOTANICAL NAME: Zinnia ‘Profusion’
HARDINESS: Annual for zones 8-10, sensitive to frost
MATURE HEIGHT X SPREAD: 12’ x 12’
CLASSIFICATION: Annual/bedding plant
LANDSCAPE USE: Massed in beds and containers
CHARACTERISTICS: This bedding plant is easy to produce by seed, is heat and mildew resistant and is a butterfly and hummingbird plant. It has some salt tolerance and comes in several colors including red, orange, pink, etc. The self-branching plant forms a nice mound in beds.