

*A Superintendent's Journal*

## A Year with Champion at Bonita Bay

No. 18 green Cypress course during January cold snap. Note color contrast with Tifway 419 collar. The putting surface greened back up within a few days. Photo by Matt Taylor.

*It would be an enormous risk, because at that time, no one had planted Champion on 18 greens in the state of Florida.*

BY MATT TAYLOR

**C**hampion bermudagrass had not been planted in Florida when J. Mark Black, former director of golf course operations at Bonita Bay, approached David Lucas, chairman of the board for Bonita Bay Properties Inc., and urged him to look at a new variety of bermudagrass. This grass would be used for the new Cypress Course being built by Bonita Bay (early 1996).

It would be an enormous risk, because at that time, no one had planted Champion on 18 greens in the state of Florida.

It was a risk that has paid off generously for Bonita Bay Properties, Inc. Champion grass has been planted on

three of the latest golf courses built for Bonita Bay from 1997 to 1998. The Creekside course, one of the three original courses on site for Bonita Bay Club was renovated in the summer of 1998 with Champion.

Champion and the other ultradwarf bermudas have finally brought fast, true and consistent putting surfaces to the South without overseeding and their own set of management practices.

### Establishment

The first nine holes at the Cypress course were planted in April 1997 with Champion. The greens mix is 80/20, and are built to USGA specifications without the choker layer. The day before sprigging, we spread a pre-plant fertilizer and incorporated it into the

top 6" of greens mix with a Sand Pro. The next day the greens were sprigged at a rate of 20 bushels per 1000 sq. ft.

The first 10-14 days is about the same as the Tifdwarf, so an initial watering sequence is really at the superintendent's discretion. Irrigation cycles were set for every hour starting at 9:00 a.m. and off at 6:00 p.m. (Champion does not like to be too wet after it has rooted).

On Day 10, the greens were rolled with a Salsco roller to start the smoothing process. Day 15, the greens were mowed with a Toro 1000, set at .180. No grass was cut.

Day 16, the mower was lowered to .150, and the tops of the sprigs' clumps were cut off. Starting Day 17, the mowers were brought down in increments of .010 inch to .100 over a two-week period.

The watering program was cut down to twice a day for a few days and then once per day. After a week, we watered

the greens every other day. At that point, the grass began to fill in quickly, (in conjunction with the following cultural practices).

After the greens were established, we used a Toro 3100 Triplex with double wiehle rollers to mow them daily. This was done so that the labor during the grow-in was at a minimum, because we could not spare four employees to walk mow. Two weeks before we opened (Oct. 1997), we switched to the walk mowers.

The grow-in fertility program, consisted of light frequent applications of fertilizer based on soil and tissue samples. The same day (Day 16) that we lowered them to .150" we started the fertilization on the greens.

We alternated the products, ammonium sulfate, di-ammonium phosphate and a complete fertilizer, every three days at 1/2 lb. nitrogen per 1000 sq. ft., until they were completely filled in. Once they were filled in, we went to

### Key Points

- The sprigging rate on the greens was 20 bushels per thousand square feet.
- The first 10-14 days of grow-in is about the same as Tifdwarf, so the initial watering cycle is at the superintendents discretion.
- Champion bermudagrass does not like "wet feet" after it has rooted. On average we deep water only once or twice every seven days.
- Fertility and cultural programs have to be fine tuned to prevent excessive thatch.
- Super thin bedknives are required for the necessary low heights of cut preferred by the ultradwarf grasses.
- Most people who have planted the new varieties feel the rewards are worth the effort

## YOUR FUTURE'S ROOTED IN THE HEALTH OF YOUR COURSE.



- We are a full service turf distributor, including custom sprayer service with computerized equipment; an average course takes only 5 hours
- We breed (test) and grow our own proprietary grass seeds
- Custom blended dry fertilizer applications using computerized trucks
- 14 warehouse locations throughout the region to answer your needs
- We also have a full line of products and services for lawn care, landscaping and nurseries
- Call your local Southern States representative for Professional Turf Service

 **SOUTHERN STATES**

*Growing Solutions Since 1923*

### Southern States Turf and Ornamental Services

RET-9042 ad #4



Matt Taylor is the director of golf course operations for the two Bonita Bay East courses, the Cypress and Sabal in Naples. The putting surfaces of these courses were planted with Champion bermudagrass. Photo by Joel Jackson.

once a week at 1/2 to 3/4 lb. N/1000 sq. ft. depending on the growth rate.

After six weeks (on a normal program), we started to see a layer of "mat" or "thatch" on the greens that was difficult to get under control. This could have been caused from over-fertilizing the grass after establishment.

Since the 1997 Cypress grow-in, Champion was planted on the Sabal Course in 1998. The Sabal is the second and final course built at the East site.

We tried to lower the nitrogen rates to almost a normal program after the greens had filled in: once every two or three weeks in the summer.

This produced a better product in terms of "mat" production, and caused fewer problems. The grass will naturally produce its own layer, if not mowed low, and cultural practices are not followed.

The greens were topdressed with a Toro Topdresser when they were stable enough to support the top dresser and tractor. The sand was put down heavily at first so that it filled in the voids. When it was dry it was brushed with a steel drag mat.

This was done until the greens were smooth and level. Then we topdressed on a normal two-week schedule lightly.

Verticutting with a Toro Triplex started as soon as the grass was able to be verticut without ripping it from the ground.

Verticutting was done when the grass was dry and then topdressed. (The depth of the verticutter was the thick-

*The grass will naturally produce its own layer, if not mowed low, and cultural practices are not followed...*

*Verticutting was done once a week. We have found verticutting is better to do more often than once deeply.*

ness of a dime). This was done in two directions, usually 4-10 and 8-2. Verticutting was done once a week. We have found verticutting is better to do more often than once deeply.

#### Fertilization

During the last 18 months we have learned a lot about the ultradwarfs, mainly Champion, in terms of fertilization. Our normal program includes dry products as well as many liquid products.

We rely on tissue and soil samples to provide us with data to determine our fertilization needs. Bucket counts on the amount of grass being harvested

Dry Fertilizer  
Bulk Liquid Fertilizer

Office: 954-741-4041  
Fax: 954-741-4082



## GREEN-WAY

Quality Turf Products  
We Specialize in Keeping you GREEN

MANGA PLEX PLUS • ULTRA - GREEN • ESSENTIAL

10008 N.W. 53rd Street • Sunrise, Florida 33351

is also very important to us to use a guide to overall health and vigor of the greens.

Our basic program consists of a dry fertilizer every two to three weeks. It is put out at 1/2 to 3/4 lb. N/1000 sq. ft. depending on growth and time of the year. Usually we use a blend that can be put down evenly at the 1/2 lb rate.

Our liquid program consist of a minor element package once per month or as needed. We also use a 12-0-0 with Fe once per month. During the winter potassium nitrate is sprayed for color and growth response after cold snaps.

Dry fertilizer incorporation is a problem on these greens. A mini or micro blend must be used when heights are below .140.

We are still in the process of fine tuning the program, which has been successful. Rick Tatum at Shadow Wood CC has gone to more of a liquid program and is having great success with his Champion.

***Dry fertilizer incorporation is a problem on these greens. A mini or micro blend must be used when heights are below .140. We are still in the process of fine tuning the program, which has been successful.***

#### **Topdressing**

Topdressing is very important with this grass as with Tifdwarf if you are going to produce smooth surfaces with consistent root zone mixes. We built the greens with 80/20 and switched to 90/10 for topdressing six months after construction.

We have tried straight sand to cut back on the amount of organic matter but found that it dried or wicked the moisture out of the top quarter inch of the profile.

The greens are topdressed every two weeks lightly with a Terra Topper set wide open. At this setting it applies a very light, even coat of sand.

The greens are then brushed with a drag brush when the grass is actively growing. During cooler times when the grass may not be growing as quickly as desired we use a steel drag mat with a piece of shag carpet bolted to it.

During the summer after core aerification or verticutting, a Toro topdresser is used to apply more sand



1-800-432-2214

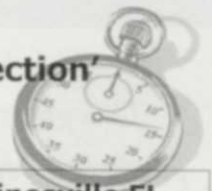
1-561-746-0667

**Distributors for  
Howard Fertilizers**  
**QUALITY FERTILIZERS & CHEMICALS  
FOR THE TURF INDUSTRY**

300 N. Old Dixie Hwy., #108  
Jupiter, FL 33458

**It's Time To  
'Experience the Connection'**

August 9-12, 1999



**University of Florida, Gainesville FL**

#### *Including Special Features:*

- CONCURRENT EDUCATION SESSIONS  
Each Session Especially Designed for All Turf Professionals
- INNOVATIVE Workshops
- NEW – Technician's Seminar  
Presented by the Toro Company
- All the old favorites – Golf Tournament, Corn Boil and Research Reports!
- NEW – Social Hour & Awards Dinner
- Guest Speaker – Dr. John Lombardi
- SOMETHING FOR EVERYONE!

All  
New  
Unique  
Opportunity

An  
Experience!

Call  
800 / 882-6721

**Large  
Warm  
Season  
Tradeshow!**



University Tours featuring:  
University Athletic Fields  
State-of-the-art Research Facilities

Wednesday – FREE Lunch  
Thursday – FREE Admission

**Presented By:**  
Florida Turfgrass Association  
in conjunction with  
University of Florida IFAS



***This grass does not produce a very deep root system; most of its strength is in the rhizomes. This will concern most people until you are comfortable with it. I can remember during April of 1998... I would look at the roots and wonder when it was going to check out and it never did.***

*Regular topdressing is a must to groom the putting surfaces. During the cooler months a carpet, which is more gentle on the turf, is attached to the drag mat to work in the top dressing material. Photo by Matt Taylor.*

it needs to be done more or less often. Bottom line it is not on a certain schedule... just as needed.

The grass can definitely take as much light grooming as it can get. It can produce a mat layer that will affect mowing, ball roll etc, if not controlled. When we groom, the grooming reel is set at "0."

This will just tickle the grass and stand it up. You can go deeper if you do not mind the grooves made by the groomer.

Please keep in mind we keep our greens at .120 or lower during the season. We also try to control the mat layer with topdressing and mowing low.

When the grass is actively growing, we use a triplex mower with verticutting reels set at the thickness of a dime in the afternoons between play

to help control the mat layer. We then take triplex mower out behind it and mow them dry. During the summer months the verticutting with the Triplex is stepped up to once per week and is done somewhat deeper.

After the first full season with Champion, we decided in early May 1998 to Mat-a-way them. The aggressive verticutting produced some interesting results. We went very deep, setting the blades until they actually penetrated the soil slightly. After verticutting them we collected the material produced. We then mowed, fertilized and watered them.

After two days we aerified with 5/8-inch tines. They actually came back very well until we got into some weather-related stress. The conditions caused them to thin and turn yellow



*Once a year, usually in May, an aggressive Mat-A-Way verticutting is performed to control potential thatching. Photo by Matt Taylor.*

green in color. In speaking to Mike Brown and Colonel Sam Sifers with Coastal Turf and the Institute of Sports Turf Research, they felt we had taken most of the recuperative capacity out of the grass, mainly the rhizomes. They are probably correct. This year we will Mat-a-away again but much lighter.

#### **Aerification**

Aerification is done up to six times per year on our Champion. Three times with 5/8-inch tines and three times with 1/4-inch tines. The cores are harvested and then topdressing is applied. We also put down the Toro product 12-3-9, which is an organic fertilizer, both the sand and the fertilizer are then drug into the holes. During the winter the greens are also Hydrojected

every three weeks. The Aeration helps to control the mat or thatch layer that could occur.

#### **Miscellaneous**

There are a couple of things that we have learned with the Champion: the granular fertility program must be altered to more of liquid diet. During the winter, dry blends are still very important, but at times of the year depending on heights of cuts are difficult to get incorporated.

We have also learned that during the summer we can keep the height around .150 and spray them with Primo and still produce excellent putting surfaces.

We started with a rate of .05 ounces/1000 sq. ft. and then went to .06 ounces/

1000 sq. ft. every two weeks. The Primo is mixed with 12-0-0 with Fe from Harrell's to help mask potential bronzing. After the first application we got some slight discoloration, but after that received none.

We have also found the walking greens mowers must be equipped with Micro-cut bed knives (thinner than the Tournament knives) to keep the bed bar from dragging at low heights of cut.

I have heard many negative Nellies comment that all of the ultradwarfs are more expensive to maintain. When it comes to the bed knives, I will agree. After you topdress, and the greens are being mowed at .110 no matter how lightly you apply the sand, the bed knives are disposable.



One of the key elements in managing the aggressive Champion ultradwarf putting surface is a regular verticutting program. Photo by Matt Taylor.

As thin as these are, you cannot grind them successfully.

I have seen other people who have other ultradwarfs move the position of the front roller and/or the bed bar to accommodate low cuts and undulations of greens. All of these solutions work.

We have gone from a Toro 1000 to the new Toro 800 walking greens mower on our more undulated greens. This has also helped. If you are fortunate enough to be involved in a new construction of the greens and are planning on one of the ultradwarfs, this is something you should consider. The undulations, unless very minor, will cause problems when you get the heights down.

If you are considering renovation of

existing greens, you may want to consider reshaping severely undulated greens if the slope changes quickly. Slope changes of greater than 1 percent over a small area, will cause problems during mowing.

The new varieties of ultradwarfs can definitely produce some of the finest putting surfaces possible in Florida without overseeding. They also have disadvantages which should be considered before planting.

Most people I have spoken to who have planted one of the new varieties feel as if the risk is definitely worth the reward.

*Matt Taylor is director of golf operations for the Bonita Bay East golf courses.*

***The new varieties of ultradwarfs can definitely produce some of the finest putting surfaces possible in Florida without overseeding. They also have disadvantages which should be considered before planting.***