A Superintendent's Journal

A Year with Champion at Bonita Bay

BY MATT TAYLOR

Champion 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 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).

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**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 superintendent's 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.
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 thickness of a dime). This was done in two directions, usually 4-10 and 8-2. Verticutting was done once a week.

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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...
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.

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.

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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 topdressing is used to apply more sand
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.
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.
Opinion
Are We Opening the Gates to Paradise or Pandora’s Box?

There is a new generation of turfgrasses that have been released for use on golf course putting greens. Most of them have been under real-world maintenance and performance conditions in Florida for only two to three years at most. Are they the answer to the fast greens problems superintendents have faced in the last decade? The answer is yes and no.

I wish I could just say yes and we could all ride off into the sunset and live happily ever after, but with fewer than two dozen courses in the state growing at least three different varieties of the new ultradwarf bermudagrasses, there are a lot of unanswered questions. But even this early on, I think there are some realities that need to be discussed before these grasses get a bum rap for being something they aren’t.

The one and only thing I will stipulate to is that these grasses will tolerate a lower cut. They thrive nicely on 1/8 and 1/10 inch cut. Notice I did not say they made for faster greens... only that you can cut them lower. These grasses are denser and that density keeps the ball roll at a medium speed unless you adopt a thorough grooming program. And that is where the misconception of these grasses begins.

Because these grasses require a low height of cut, architects must begin modifying how much they contour the greens or there will be scalping. Yet architects are already specifying these grasses for some of their new courses without much performance data to go by. That’s the first mistake: building in a problem.

If the design and the grass is compatible, then the next area that is overlooked is that of the club’s mission and purpose. If it is a low-volume, private club that can close one day per week, then the necessary grooming of these ultradwarfs can be accomplished and provide the expected fast greens performance.

But if a course is a resort or other high-volume venue that must keep the doors open at all times, I don’t recommend these new grasses at this time. The putting surface will not be as good as a well-maintained Tifdwarf greens if the necessary verticutting and topdressing can’t be performed with regularity.

I have already seen a golf course struggle with performance expectations because they are unwilling to provide closed times. They want that fast putting surface but there is always a group that must be accommodated for tee times. They won’t commit to giving the maintenance staff the time to manage the new grass properly. You can buy a Mercedes but if you don’t change the oil regularly, don’t expect it to perform like the precision machine you thought you bought.

With some of the varieties on the market, it looks like once a year you may have to get very aggressive with your verticutting program during renovation to keep thatch under control. The timing and severity of this process must be factored into the schedule of events of the club and with weather conditions so no one will be surprised during the recovery period.

Performance of these grasses also depends on the precision of the mowing units that must achieve a good
clean cut. It used to be that a good mechanic could tune up a cutting unit with a tournament bedknife and grinder and lapping machine and keep the mowers cutting at 1/8 of an inch for the two-day member-guest tournament or a four-day professional golf event. With these new grasses, mechanics must make sure the mowers can handle .125 inches or lower heights every day.

With a lower growing habit than Tifdwarf, these grasses require even thinner bedknives. Thinner metal means less wear tolerance and faster obsolescence with all the extra topdressing that must be done, which means more money in the budget for reels and bedknives. It is a price that has to be paid for lower-cut greens. And remember: lower cut doesn’t necessarily mean faster unless the other cultural practices are done frequently.

One superintendent who has experienced two of these new grasses has stated that sooner or later everyone will be managing these grasses, that they are the grasses of the future. I won’t argue against that declaration except to note that currently the most successful stands of the new ultradwarfs are at private clubs where budgets are more liberal and they have the time — including off-season low play — to manage the turf properly.

These ultradwarfs may be paradise for some courses right now but they may be also be a Pandora’s box of problems and disappointments for those courses not quite ready for the requirements that come with them.

JOEL JACKSON, CGCS

Unintentional bonus of ultradwarf greens! Mole crickets seem to prefer the Tifway 419 collar instead of the Floradwarf putting surface at the Legends Course at the Orange Lake Resort in Kissimmee. Photo by Joel Jackson.
When I first started in the golf business, working on the construction crew at Sugar Mill Country Club way back in 1969, my boss used to tell all us inexperienced teenagers that we “obviously weren’t tractor operators”, or “carpenters”, or “concrete men,” or very good at any of the various tasks associated with building a golf course, clubhouse, and maintenance facility.

Duh! I thought it pretty obvious that 18-year-olds weren’t going to have much practical experience, especially the various skills connected with the construction of a golf course and its attendant buildings. We provided strong backs and quick minds at minimum wage, and by the end of the summer I realized what a bargain we had been even with our occasional missteps.

Over the years I’ve realized I’m not a lot of things, or at least not very good at a lot of things, though I’ve accepted responsibility and tried to do a credible job with many endeavors. So it is with my association work - the Palm Beach GCSCA, Golfweek, the Florida GCSCA, The Florida Green, and now FTGA… I just plow ahead doing the best I can to improve our profession and our industry, and hope that others will see the value in the effort and help out those of us who can and do serve as officers of our associations.

Which brings me to my point. Damn few of you are helping out, and I find it hard to believe that you don’t believe that the education and research our associations support aren’t of benefit to you. I realize that not everyone can serve on a board, or even a committee, but the percentage of those who do anything on behalf of the profession that sustains them and their families is appalling! We’re not talking about a social club that you join if you meet and like some of the people in it; we’re talking about your profession, and your obligation to give something back to it and to those that have helped you achieve your status and salary. You joined the day you decided to become a golf course superintendent.

What’s that? You don’t like Mark Jarrell? or Scott Wahlin? or Mike Perham? or Darren Davis? So what - if we all dropped dead tomorrow, the FGCSA and FTGA would still be in existence and working to find ways to make our industry better, and you would still be a golf course superintendent living on the edge. If we’re not doing a good job, then tell us how we can do better.

Don’t like the University of Florida, because their football team beats your alma mater’s football team year in and year out? Get over it! The University of Florida is our state’s land grant institution and is charged with conducting a turfgrass program consisting of teaching, research, and extension. Past weaknesses in the program have been, or are being, addressed. We now have a turfgrass coordinator, Dr. John Cisar. New positions are being filled. Since October, we have a man in charge of UF/IFAS, Dr. Mike Martin, who recognizes the value of golf and turf to the people of this state, and the turfgrass program is poised to become the leading program in the country.

Seventeen research proposals were recently submitted by UF turf scientists to the FTGA Awards Committee, totalling nearly $511,000. Obviously, we don’t have the funding necessary to support even a fraction of these proposals, but an industry the size of the golf and turf industry in Florida should be able to handle this amount on an annual basis. With over 1400 golf courses in the state, this would amount to about $350 annually from each club - a drop in the bucket out of the typical club’s budget.

I find it hard to believe that anyone who is reading this would disagree with the need for turfgrass research to help make our jobs easier, more secure, safer, cheaper, and friendlier to the environment. I also find it hard to believe there are so many in this industry who take advantage of the hard work of others without making a contribution themselves. Won’t you please help those of us who are trying to help you?
This is a call for articles for the 1999-2000 issues of the Florida Green. Contact Joel D. Jackson, Editor for more information. Phone: 407-248-1971. Fax: 407-248-1971. E-mail; FLGrn@aol.com. All slides and photographs should include identification of persons in the picture and the name of the photographer.

**HANDS ON TOPICS** for 1999:
Share your best practices and tips for these upcoming topics. Slides or photographs are encouraged.
- Fall 1999 Issue - Superintendent Image and Visibility
- Spring 2000 Issue - Time Management Tips

**Call for Articles**

- **Summer 2000 Issue - Insect Control Since FQPA**

**SPOTLIGHT:** People and events making news in Florida. From award winners to chapter tournaments and other accomplishments. Send in your story.

**SUPERINTENDENT’S JOURNAL:**
Personal observations or experiences related to any phase of the turf management profession.

**PROFESSIONAL DEVELOPMENT:**
General management topics beyond turf. Examples: Education, facilities, personnel, computers, training, etc.

**INDUSTRY NEWS:** News items of interest to Florida superintendents from allied associations in the turf/horticulture industry.

**OPINION:** Exactly what it means! Articles voicing a personal point of view on any topic concerning Florida superintendents.

**RESEARCH:** A section reserved primarily for university and technical authors to report on research results within the turf industry. Also reports of practical on-course testing.

**RUB OF THE GREEN:** Articles and anecdotes with a humorous twist.

**STEWARDSHIP:** Superintendents are invited to submit ideas and articles about environmental issues and initiatives at their courses.

**Wanted:** Slides and photographs to help tell the stories!

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**1999 Florida Green Photo Contest**

**Category 1** - Wildlife on the Course:
includes mammals, birds, reptiles, amphibians.

**Category 2** - Course Landscape:
Formal Plantings: includes annuals, shrubs, trees, entrance and tee signs.

**Category 3** - Course Landscape:
Native Plantings: includes aquatic vegetation, grasses, shrubs, trees and wildflowers.

**Category 4** - Scenic Hole Layout Shots: includes sunrises, sunsets, frosts, storms and any other golf hole view.

**Prizes**
- 1st Place ($100) and 2nd Place ($50) in each category.
- Editor’s Choice-Best Overall Photo - $100.
- All winning entries published in the Fall 1998 issue.

**Easy Rules**
1. Color prints or slides. Only one entry per category.
2. Photo must be taken on an FGCSA member’s course. Photo must be taken by an FGCSA member or a member of his staff.
3. Attach a label to the back of the print or slide which identifies the category, course and photographer. DO NOT WRITE DIRECTLY ON THE BACK OF THE PRINT. Each photo shall be attached to a sheet of 8.5 x 11 lined paper. Line up the photo with the vertical and horizontal lines to square the photo on the page. Attach the print to the paper using a loop of masking tape on the back of the photo. Slides must be easily removable for viewing.
4. A caption identifying the category, course and photographer should be typed or printed on the sheet of paper below the print or slide.
5. Judging will be done by a panel of FGCSA members not participating in the contest.
After 18 months of working as your director of communications, I haven't reached a lot of conclusions, but I do have a greater appreciation for the pieces of the puzzle that make up the golf industry in Florida.

I have covered our traditional FGCSA educational sessions and fund-raising events. I have participated in government-relations working groups like FQPA, Pesticide Review Council, and Pesticide Poisoning Surveillance. I have attended the golf-media-based International Network of Golf Conference. I am serving on committees for GCSAA Publications and FTGA Conference and Show. I am a board member of the Florida Golf Alliance and the Agricultural Institute of Florida. I am writing for four golf publications in addition to *The Florida Green* and *The Greensheet*. I am not retired!

I have learned that at many of those activities, turfgrass in general has not been a very active player, and my presence in your behalf has been welcome. Remember, however, that all politics is local and I can't be everywhere. Therefore, local chapters must constantly share the burden of involvement on issues and then share that information statewide.

In many arenas superintendents have become advocates for issues that go beyond their job descriptions and I would really like to see owners and managers pick up some of that slack. Superintendents are employees and sometimes they jeopardize their “day job” as they tackle community and association service issues. Owners and managers in partnership with superintendents should take more of a lead in fighting water resource and other environmental issues. Superintendents have the expertise, but owners and managers often have more influential contacts on a daily basis.

It was interesting to attend the ING conference in Daytona last May where I rubbed elbows with golf media, golf equipment manufacturers, marketing reps and other golf-related businesses. There is a whole world of golf out there that has only a fleeting interest in what we deem to be critical issues. While superintendents are acknowledged as playing an important role in conditioning golf courses, these folks are busy attracting players to the game and outfitting them with the longest distance golf ball, the “can’t miss” golf club, and the latest training aid that will improve their swings. It would be nice if somehow a fraction the millions of dollars spent on greens fees, equipment and golf travel each year could find its way to turf research.

Finally, it seems that apathy keeps rearing its ugly head as far as participation at local chapter meetings is concerned. No one seems to know why more superintendents can't make it to the meetings in greater numbers. Associations are run by those who show up! You don’t have to spend the whole day. Just attend the business meeting and educational session. Chapters have tried having meetings in the morning, afternoon and night. Some chapters have even picked up the tab for the meeting so it doesn’t cost the member anything.

Chapter leaders want to know, “What is the problem?” Are people job scared or just lazy? Ever notice how the numbers do go up when the meeting is held at a new upscale golf course? Do they have a bone to pick with the chapter leadership or education programs? If you only want to be a “checkbook member,” don’t complain or criticize.

Maybe the pool of truly professional superintendents is shrinking. Maybe the new generation either knows it all or doesn’t know enough. Maybe they haven’t established good working relationships with their owners and managers, and they just work hard and endure. Maybe they lack the confidence and ability to run a good program that will let them take off for a few hours once a month to get involved in their association that seeks to make them professionally and personally better.

The golf industry is a big puzzle and there are a lot of ways to look at it. Our piece of the puzzle holds the key to a lot of solutions to problems that affect the whole picture. Make a commitment to be an active partner in putting the puzzle together.