

age on important issues facing the golf industry in Florida.

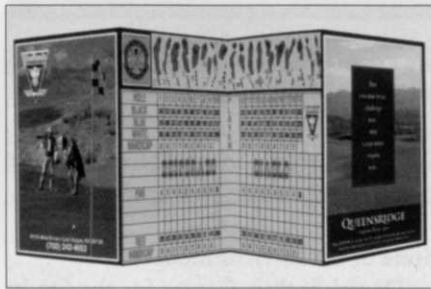
New Products May Save You Time, Money

Editor's Note: We don't normally run "new product" press releases because we get swamped with them. However, a couple of recent announcements caught my eye because they seem like real money and worry savers. Maybe they can help you or your club.

Free Scorecards for Golf Courses

Country Club Sports, Inc., through the newly launched CCS scorecard program, provides interested golf courses with scorecards at absolutely no charge.

The CCS scorecard program is offered free to public and private courses across the country. Utilizing a course's existing



scorecard layout and artwork, design professionals at Country Club Scoring simply add on a patented, perforated panel containing one advertisement. The enhanced scorecards are then supplied to the course at no charge for distribution to golfers. The

entire cost of production is absorbed by the advertiser.

Several things differentiate the innovative CCS Scorecard Program from traditional on-course efforts. Only one approved advertiser will appear per scorecard per course, resulting in an unobtrusive, tasteful product. Since the panel enhances an existing scorecard, the course retains its identity and control of its image. Best of all, Country Club Scoring secures all advertisers and the advertisers pay all expenses. The course approves the final product and receives high-quality, four-color scorecards at no charge.

"The program is catching fire with golf pros and property management across the country," said Lauren Donnelly, assistant vice president of Country Club Sports. The courses are receiving the same, and sometimes better, quality scorecards yet saving the entire expense of production.

The national program already is in place at golf course properties in Arizona, California, Florida, Idaho, Michigan, Missouri, Nevada, Texas and Virginia. Major national and regional advertising participants, such as Golf Digest, Select Comfort, and Golf Tips, have already recognized the value of this innovative advertising vehicle. CCS Scorecards are also a perfect media for local advertisers wishing to reach the local golfing audience.

Country Club Scoring of Las Vegas, in partnership with Ft. Myers-based Country Club Sports, holds the exclusive patent to the perforated panel for scorecards.

Contact Lauren Donnelly at 888-889-1175. Web site: www.countryclubsports.com.

HotWire

HotWire Connects Superintendents to "Heart" of Irrigation System

At the GCSAA Conference in Orlando, Flowtronex PSI unveiled a new product designed to immediately and accurately alert pumping system users to potential system problems. This new tool may help problems from becoming crises.

The device called HotWire, is the only auto-dialer on the market that informs the user of the specific problem through a paging system. With HotWire, the customer monitors up to four specific functions such as a power failure or a hard fault, by assigning a 1- to 5-digit code. If a problem occurs, HotWire picks up the phone, dials the pager service and punches in the code to appear on the end-user's pager.

HotWire also features a programmable timer for each function. The customer can set the timer so that HotWire sends the page anywhere from one second to two hours after the problem occurs. A repeat timer allows for continual paging until the problem is addressed. HotWire can easily be programmed through Windows 95 or 98.

At only 4 inches tall, 3 inches deep, and 1 3/4 inches wide, Hot Wire fits inside a pump station control panel of even the smallest stations. It will be available to customers in April.

Contact Willie Slingerland, Flowtronex PSI at (972) 910-0814

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Third Golf and The Environment Conference

Cooperate or Agitate, Issue is Here to Stay

BY JOEL JACKSON, CGCS

The third Golf and The Environment conference took place in Orlando last December. This series of annual meetings by people representing the golf industry and those representing major environmental groups has been educational for both camps. It has provided a forum where understanding and dialogue can occur without mud slinging and rhetoric getting in the way.

While contrasts and concerns were voiced in the various panel discussions, there were also points of concession and acknowledgement in statements by and or about each others' viewpoints. The GCSAA was represented by Steve Mona, Joe O'Brien, Dave Bishop, Kim Heck and former government relations liaison, Cynthia Smith. Speaking on behalf of Florida superintendents were Ron Andrews of Grand Harbor (Wetlands) and Gary Meyers of Disney (Water Quality and Quantity). There were other golf industry folks there as well including, architects Mike Hurdzan, Jan Beljan and Mark McCumber. The media was represented by The Golf Channel, *USA Today*, *Golf Digest*, *Golfdom* and *Golfweek*.

"The flavor of G&E group will be changing," said O'Brien, "because they can see golf course superintendents are willing and in many cases already do the right thing. So now the focus needs to be on education of others and that will be a topic to be pursued."

The GCSAA, under the leadership of Information Services Manager Dave Bishop, has been fine-tuning a voluntary data collection project that was a pilot project this past year. They will be trying to get it online and more user friendly in 1999.

Real use and exposure-risk data is going to play a very important role in how EPA deals with pesticides used in non-food crop use. It will be imperative that superintendents be prepared to share their chemical application records to



GCSAA's Joe O'Brien poses the question, "Where do we go from here?" to the attendees of the 3rd Golf and The Environment conference in Orlando. Photo by Joel Jackson.

document reality instead of letting EPA make overly conservative default assumptions. I have heard over and over again from superintendents claiming less and less use of pesticides. It is getting to be time to prove it with a reliable data-collection system.

Here are some of the other comments and concerns from the conference:

Welcome

Terry Minger, Center for Resource Management (Host): "The old verbs like legislate, litigate and agitate are out. Now is the time to cooperate, facilitate and disseminate and even celebrate. We are shaping the next generation. Have we picked all the easy low hanging fruit? The curve will get steeper as we progress."

Paul Parker, Center for Resource Management (Host): "The meeting in Pebble Beach was tense but productive. In Pinehurst we had 22 groups endorse the Environmental Principles. We have seen new projects like Widow's Walk and retrofit projects like the Presidio use them. Now here in Orlando we

strengthen trust and relationship and set objectives for a national agenda."

State of the Environment

Daniel Botkin, Center for the Study of the Environment, Keynote Speaker: "Henry Thoreau viewed nature as it affects man and how it benefited man in every way. Modern environmentalists often take themselves too seriously and are too puritanical. On the other hand golfers also often take the game and course conditions too seriously. People who work in nature often have a truer relationship with nature than the idealists who have expectations but no practical experience."

Paul Portney, Resources for the Future: "State of the Environment. Better than during World War II. Air Quality — lead content down 95 percent and sulfur dioxide down 30 to 60 percent; Water Quality - some improvements depending on area. Philadelphia, New York, Detroit, Chicago improved. Chesapeake Bay in trouble; Hazardous waste and solid waste disposal better than in

Sustainability is the the key issue. Golf courses are challenged to preserve wetlands, water quality, habitat and green space. We must learn to do more with less pesticides, fertilizer and water. We are subjected to needless studies, unrealistic buffer zones and unrealistic management practices.

**Mike Hurdzan
Golf Design Group**

the 1970s; Less progress in wetlands management. 25 percent loss in last 200 years. Florida, Georgia and Minnesota greatest losses. Warnings: Water availability will be a critical problem. Population shifts like those to the Southwest. Water quality concerns from runoff of non-point sources.

Bart Blackwelder, Friends of the Earth: "Two issues. Urban Sprawl and Food Safety. Sprawl drains energy and resources. Food affects global economy. May depend on foreign food sources. What are their safety measures?"

Climate change, global warming: Weather events costing \$1 billion a week in damages. Energy sources — The Federal budget is skewed. Fossil fuels are subsidized to the tune of 65 percent. Renewable source development only gets 14 percent of funding."

State of Golf

Bob Maxon, *Golf Digest*: "There are 16,010 golf courses in the U.S. 11,000 or 70 percent are public, not private elitist courses. Many super ranges/practice facilities are being built. More and more management companies are taking over operations. Lots of mergers, diversification and reorganizations. We need something beside 7,200-yard designs. Golf needs to be accessible and time effective to prosper and grow."

Mike Hurdzan, Hurdzan Golf Design Group: "Golf needs to be affordable, accessible and sustainable. Sustainability is

the the key issue. Golf courses are challenged to preserve wetlands, water quality, habitat and green space. We must learn to do more with less pesticides, fertilizer and water. We are subjected to needless studies, unrealistic buffer zones and unrealistic management practices."

There were many more presentations that detailed specific projects and accomplishments that showed what can be done when both sides make a commitment to work together for the betterment of the environment.

There were two realities that I took away from the conference. One, it is possible for both sides to agree to disagree and still work together to make progress and reduce the bitterness. Two, the environmental issue is here to stay.

You and your club can chose to be proactive and find ways to participate in the process or you can be dragged kicking and screaming to the table by rules and regulations that you didn't help to write. Educate yourself, your staff, your golfers and your community about what you can and are doing for the environment.

Water Reclamation Project Offers Valuable Lessons

BY PAUL MOSES

Water Specialties, Inc.

Editor's Note: Water resources will be

the number one issue facing golf courses as growth and development continues in Florida. This information is presented for those who may be involved in discussions with state and local water authorities as one example of what can be done. During the drought of 1998, Jacksonville had water pressure problems because development and demand have outraced the system's capacity to deliver the water. Now Jacksonville officials are looking to cut turf and horticulture uses. Even reclaimed water is fast becoming finite resource. You need to talk about this issue with your club officials.

Commercial and agricultural uses for reclaimed water are gaining popularity in municipalities across the country. Formerly forced to pay top dollar for fully treated water, governments and businesses are realizing major benefits from reclaimed water usage.

Additionally, when the indirect benefits to the environment are considered, it's apparent that water reuse is no longer merely an attractive theory, but an environmental and economic necessity.

Many commercial and agricultural water users in West Orange and Southeast Lake counties are seeing dramatic benefits since the inception of their water reclamation project 13 years ago. The project, Water Conserv II, is a cooperative venture among the City of Orlando, Orange County, and the agricultural community.

At 4,000 citrus acres, it is the largest water reuse project of its kind in the world a combination of agricultural irrigation and Rapid Infiltration Basins (RIBs) that divert water into the ground. Water Conserv II was the first water-reuse project in Florida allowed to irrigate crops produced for human consumption with reclaimed water.

The Water Conserv II project is connected to the city's McLeod Road Water Reclamation Facility and the county's South Regional Water Reclamation Facility by a 21-mile transmission pipeline that also runs to the main distribution center in West Orange County. The center distributes reclaimed water to 47 RIB sites on 1,700



acres, and to 76 agricultural and commercial customers on a 43-mile distribution network.

The average daily reclaimed water volume to the distribution center is 30 million gallons per day (mgd). Sixty percent of the volume is sent to agricultural and commercial customers, and the remaining 40 percent goes into the water table via the RIBs. Storage capacity peaks at 20 million gallons, and pump stations are capable of producing a peak flow rate of 76,000 gallons per minute (gpm). The entire distribution system is monitored and controlled by a central computerized system, whereby flow rates, line problems and pressures can be controlled automatically.

Woodard & Curran, Inc. of Winter Garden is the contract operator of Water Conserv II. This environmental and water treatment engineering firm has been in business since 1975, managing environmental fieldwork, wastewater and cleanwater treatment, and hazardous waste remediation all over the country.

The operating personnel realized early on that the massive flow of water was only as reliable as the infrastructure that delivered it. Nowhere was this more evident than in their flow-monitoring system. With 145 flow meters spread throughout the project, any failures here would jeopardize the credibility of the data collected by the agency to determine user allotments and distribution measurements.

"We actually have flow meters from two different companies in operation," said Phil Cross, the project manager at Water Conserv II, "but some of them would not hold up under the high flow conditions for very long. Over time, the readings from these meters would start to drift because their internal circuit boards would malfunction. We'd have to shut down that transmission line to repair the meters whenever these accuracy problems arose.

"We finally decided to quit throwing good money after bad and just replace the defective meters," Cross continued.

Once the operators of Water Conserv II installed the new meters into the transmission flowlines, an immediate change

We've already started to suffer from the consequences of overdrafting the aquifers in the central areas of the state, and in the coastal areas we're seeing an intrusion of seawater into our freshwater aquifers. Reclaimed water presents a very viable alternative to reduce dependence on water from those sources.

in the reliability of their measurements was noted. Given the new stability of their monitoring system, the operators of Water Conserv II were allowed to concentrate on what they do best: providing a valuable resource to their many customers. The results have been noteworthy.

For example, the Mid-Florida Citrus Foundation has worked in conjunction with the cooperative reuse project for many years to research the effects of reclaimed water on citrus fruit and other crops. "Research results to date from the Citrus Foundation conclude that citrus trees grow faster, gain more canopy volume, yield, and pounds of juice per acre, as more reclaimed water is applied," Cross maintained.

"So as highly-treated potable water continues to face tougher and tighter restrictions by water management districts, reclaimed water becomes a very attractive alternative for irrigation."

"Additionally, our agricultural customers have benefited greatly from enhanced freeze and drought protection due to the high availability of water in the system," continued Cross.

"Since the water is free and plentiful, growers are maintaining higher soil moisture levels, which protects their entire crop area, not just a portion of it. We've seen citrus growers realize increased crop yields of 10 to 30 percent and tree growth of up to 400 percent. For citrus growers this means a saving of about \$128 per acre per year."

While the economic benefits of using

reclaimed water are more immediate, the environmental pluses are significant and many. Because "used" water has traditionally been considered a liability instead of an asset, the success of this project counters many myths about reclaimed water

For example, reuse eliminates the discharge of minimally-treated water in surface waters such as lakes, streams, and rivers; it reduces a dependence on underground aquifers by reducing well water usage; and it actually replenishes the aquifer through the discharge of surplus water into rapid infiltration basins. As an added benefit, the excess water helps establish preserves for endangered and threatened plants and animals.

"There is a large influx of people moving to Florida, so we're beginning to face a water shortage here," Cross stated.

"We've already started to suffer from the consequences of overdrafting the aquifers in the central areas of the state, and in the coastal areas we're seeing an intrusion of seawater into our freshwater aquifers. Reclaimed water presents a very viable alternative to reduce dependence on water from those sources."

Water Conserv II has proven that the application of reclaimed water for commercial and agricultural uses is a win-win situation for all concerned, and their use of reliable infrastructure is an important element to their success.

For more information, contact Water Specialties at (800) 800-3544, or info@waterspecialties.com.

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TEAM ^c	■	●	●	●	●	●	NR	NR
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Putting Ultradwarfs to the Test

Appearances Don't Equal Performance

What's New with the NTEP 'Ultra' Trial at Jupiter Island Club

BY JOHN CISAR, PH.D.

UF/IFAS Turf Program Coordinator

There is a great deal of interest in the new ultradwarf bermudagrasses that are now becoming available for golf courses in the United States.

To develop an independent comparative database on the performance of these new bermudagrasses under a variety of climatic and geographical regions and different management, the United States Department of Agriculture's National Turfgrass Evaluation Program in cooperation with the United States Golf Association and Golf Course Superintendent's Association of America have set up an NTEP ultradwarf bermudagrass variety trial in the South at several locations.

Besides the far-reaching cooperation of the trial, a second unique aspect of this test is that all trials are being conducted on golf courses under routine management with play rather than on research farms.

I am the University cooperator in South Florida, while Dr. J. Bryan Unruh, UF, is leading the effort in the panhandle in Mobile, AL, and Dr. Richard White, Texas A & M, is leading a



Left to right. Ike Thomas, Marcus Prevatte, unidentified, Troy Koonsman, John Cisar, George Snyder and Herminia Vivas check out visual quality and ball roll on the test plots at the Jupiter Island Club during a recent visit.

comparative test in Texas.

Every so often, I thought I'd provide updates on the South Florida trial to Florida Superintendents through the *Florida Turf Digest* or *Florida Green*. This is the second article on the test and the first published in the *Florida Green*.

The South Florida test is being conducted on a USGA-specification practice green at the Jupiter Island Club in Jupiter Island with the great support of the club and Rob Kloska, golf course superintendent, and Rob's staff. The

trial was initiated in early June and early grow-in data was published in the Nov.-Dec. 1998 issue of the *Florida Turf Digest*.

The varieties in the test are listed in *Table 1*.

Although the test is being conducted to evaluate ultradwarfs, two standards, Tifdwarf and Tifgreen, have been incorporated into the test to act as benchmarks of performance for the new varieties.

The grasses are receiving routine greens maintenance and the grasses

NTEP Bermudagrass Entries and Sponsors.

Turfgrasses	Sponsor
MS-Supreme	Mississippi State University
TifEagle	Dr. Wayne Hanna, USDA
Mini-Verde	Thomas Bros. Grass Co.
Champion	Coastal Turf, Inc.
FloraDwarf	Florida Turfgrass Foundation
Tifdwarf	Standard Entry
Tifgreen	Standard Entry

Table 1.

One of the purposes of this article is to inform you of what's going on with ultradwarf research in the South. Both Rob Kloska (561-546-1184) and I (954-475-8990) encourage you to visit the Jupiter Island Club and take a look at the new grasses under comparative conditions.

are exposed to play as one might expect during the busy winter season in South Florida.

At the present time, Kloska is mowing daily at 0.120 inch. The green is lightly topdressed with sand two to four times per month. Irrigation during the first week of February was very lean — once every four to six days. Prior to that, irrigation had been applied somewhat more frequently. Fertility (especially N) has also been very lean since grow-in.

Turf Quality and Ball Roll

The experiment was initiated in June 1998 and grown in by early September. Dr. Kevin Morris, NTEP National Program Coordinator, Beltsville, Maryland provided the grasses. Tifgreen does not stand up to low mowing heights very well while some of the ultradwarfs are performing quite well even when irrigation was lean during early February (Table 2).

Our preliminary ball roll measurements indicate differences between the grasses as well (Table 2). FloraDwarf had the longest ball roll distance (Table 2). It should be noted that there are slope effects on the practice green and we are attempting to correct for slope differences within plots.

Once we correct for slope the results provided herein may require adjustment as well.

Interestingly, based on these initial observations, there doesn't appear to be a strong relationship between aesthetic quality and greens performance.

NTEP plots at Jupiter Island Club.

SOURCE	Quality 9/26	Quality 11/10	Quality 2/11	Ball Roll(ft) 2/11
FloraDwarf	8.5ab	7.2b	6.3bc	11.1a
MiniVerde	8.8a	8.8a	7.8a	9.4c
TifEagle	7.7bc	7.2b	7.3ab	10.4b
Tifdwarf	8.0abc	7.0bc	6.0c	10.3b
Champion	7.2cd	6.8bc	7.8a	10.4b
MSSupreme	6.3d	6.0c	7.2ab	10.0bc
Tifgreen	3.8e	4.2d	4.3d	9.6c
SIGNIF.	**	**	**	**

Table 2. Observations made from NTEP plots at Jupiter Island Club.

Means with the same letter within a column are not significantly different according to Duncan's Multiple Range Test.

Turf quality based on a 1-10 scale with 10=dense turf, 1=dead turf and 6=minimally acceptable.

** = $P < 0.01$

Consider FloraDwarf. FloraDwarf's turf quality scores on Feb. 11 are not among the best, yet ball roll distance on that date (a key factor for play performance) on FloraDwarf was significantly longer than other turfgrasses in the trial.

As the saying goes, "time will tell," and the race really is just beginning. This trial will be conducted over the next five years with ball roll, color, texture and other performance characteristics quantified.

One of the purposes of this article is to inform you of what's going on with ultradwarf research in the South. Both Rob Kloska (561-546-1184) and I (954-475-8990) encourage you to visit the Jupiter Island Club and take a look at the new grasses under comparative conditions.

Contact Kevin Morris (301-504-5125) for further information about other NTEP sites, tests, etc. Many visitors have already stopped by including representatives of the USGA Green Section Research Committee members, NTEP Director Kevin Morris, Dr. Dave Chalmers, Virginia Polytechnical Institute, and representatives from Thomas Bros. Turf.

Other non-NTEP sites in South Florida with some or all the ultradwarf varieties side-by-side include the Olde Florida Golf Club (Darren Davis, 941-353-4441) in Naples, and the University of Florida's Ft. Lauderdale REC. If you have the time make your own observations, seeing is believing.

The data in Table 2 reflects some visual turf quality scores since grow-in and a winter ball roll score.

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FQPA: EPA's Rush To Judgment

BY JOEL JACKSON, CGCS

On March 3, I attended an FQPA Workshop sponsored by the Florida FQPA Working Group of which I have been a member for the past year.

While I wish I could report an easy solution to the implementation puzzle, when the EPA and politics is involved, nothing is easy! What attendees did learn was:

The politics that went into the passage of FQPA was presented by Dan Barolo, former director of EPA's Office of Pesticide Programs. Barolo is now a consultant with Jellinek, Schwartz and Connolly, Inc and the international working group's main advocate and watchdog on FQPA in Washington, D.C.

Barolo went on to say that Congress literally voted on the Food Quality Protection Act without having even read or debated it. It was last-minute legislation agreeable to all parties (if implemented as originally discussed) that was designed to replace the old cumbersome Delaney Act.

It turns out that the FQPA is turning out to be the most significant and far-reaching environmental legislation passed in decades.

For that reason the politicians in EPA are taking a hard line and narrow approach to implementing the law.

In reality, no one — including EPA — was aware of the enormity of the undertaking required by the new law. EPA was not staffed adequately to do all the tolerance reassessments in the time allotted. That is one reason EPA is using quick and easy default assumptions which grossly exaggerate pesticide use and exposure.

The biggest disappointment in the process so far is the Department of Agriculture's slow, almost non-existent response to the FQPA implications. The USDA has information which could help with some of the conservative assumptions EPA is mak-

ing. Pressure is being brought to bear on them, but they have not been doing their job for agriculture.

There was a case study presentation by representatives from DuPont and Rohm & Haas. The difficulty in registering new products was highlighted including the time line and costs.

The bottom line is that with current trends from EPA, manufacturers are making business decisions today that will affect the ag industry 15 years from now.

They called it a "death by 1,000 tiny cuts."

There won't be any headline-grabbing product bans. But over time, with a series of label and use changes and costly tolerance reassessments, manufacturers will abandon niche products which become unprofitable and refocus on international markets where resistance and regulations are not so odious to deal with.

Our arsenal of tools will shrink by attrition, and new research will not be very vigorous.

Business is business.

A wrap-up panel discussion produced these take-home messages:

1. Encourage state and local regulators to take "real world" use and exposure data to EPA to provide better insight into the process.

2. USDA is key. They have US ag statistics that could help EPA. The ball

is in their court. It's not a money issue, rather one of priorities.

3. List/prioritize products that are important to our industry. Describe critical needs. Provide actual USE data and any mitigation data.

4. Tell registrants/manufacturers about your product concerns and that you expect their support through the reassessment process. ID those pesticide you need!

5. It's a legislative issue. Ask why EPA is ignoring current law provisions, and taking hard line and narrow interpretations. (Barolo: "The professionals/scientists in EPA want to do a good job. They don't want their name on bad rules. The politicians in EPA are what cause the problem.")

6. FQPA requirements keep shifting and it's hard to pin EPA down to address/discuss actions. Final decision will be made this summer which will then focus issues that can be addressed by working groups for sanity and fair play.

7. The international working group has a "road map" plan for EPA to guarantee a logical, systematic, scientifically-based way to implement the law. EPA so far has not been inclined to use that plan.

Keep writing your representatives and keep asking for good science and real world data in implementing the FQPA.

FQPA-Participation Critical

Allen James, executive director of Responsible Industry for a Safe Environment (RISE) says now is the time to keep up the pressure on Congress. Grassroots response has slowed down the process, but EPA has not been swayed from their course of faulty risk assessment. Joel Jackson, FGCSA director of communications will prepare a letter to your representative and senators for your signature on your club's letterhead stationery. Just send three sheets of your club's letterhead stationery and a self addressed stamped envelope to: Mr. Joel Jackson, FQPA, 6780 Tamarind Circle, Orlando FL, 32819. The letters will be returned to you for your signature and mailing to your legislators to keep the pressure on EPA to use good science and common sense in enacting the law.

Ban On Methyl Bromide Delayed

Recently Congress and the Clinton administration changed the U. S. Clean Air Act to allow continued use of methyl bromide until the year 2005.

This extension is quite a rare accomplishment, but due to the communication efforts of many turf and agriculture professionals, industry, and numerous trade organizations, Congress understood the importance of methyl bromide as a soil fumigant to all of American agriculture.

The 2005 date was set by a treaty known as the Montreal Protocol for all developed nations. The United States law had previously required a phase-out by the year 2001.

The extension however is accompanied by a 25 percent reduction in methyl bromide production beginning in Jan. 1 and followed by an additional 25 percent cut Jan. 1, 2001 and another 20 percent

The extension however is accompanied by a 25 percent reduction in methyl bromide production beginning in Jan. 1.

decrease Jan. 1, 2003.

What this means is that the supply of methyl bromide is and will become increasingly tight as the next reduction phase kicks in. Prices will continue to rise, particularly in the lower-volume uses, such as quarantine, commodity and structural fumigation.

Ironically, the continuing development of improved turfgrass varieties is making the concept of "strip, till, fumi-

gate and grass" more feasible than ever. This concept, however, will not last much beyond 2005 without complications unless comparable alternatives are found.

The United States Department of Agriculture has the responsibility of trying to develop alternatives to methyl bromide fumigation for agricultural use and has spent millions of dollars in the effort. The only current study under way is being funded in part by the GCSAA with research being conducted jointly by the University of Florida at the Milton IFAS station, Georgia Foundation Seed and Hendrix and Dail, Inc.

The United States EPA is currently in the process of determining critical uses of methyl bromide and will seek input from various user groups. We will need your help again, as it will be very important that the EPA hear from you. The Methyl Bromide Working Group will let you know how and when you can help.

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Bentgrass in Florida: Rolling the Dice Again!

Old Marsh Knowingly Decides To Gamble and Try Bentgrass

BY JOEL JACKSON, CGCS

I know. I know. You're saying, "Why in the world would anyone plant straight bentgrass greens in Florida? Didn't we already try that in the mid 1980s?"

The answer to the second question is, "Yes, and only one of them still has their bentgrass greens."

The answer to the first question is a little more complicated and is the reason for this article.

Before the word gets out that the Old Marsh Country Club in Palm Beach Gardens has planted bentgrass greens and the members just love it, I wanted to do an article about what went into the decision and the factors involved at Old Marsh that made it feasible at least to make the attempt.

Back up to 1996. The greens at Old Marsh were 13 years old and the original Tifdwarf was not performing well, especially during overseeding and transition. The owner, Larry Delpig, Sr. and the members were of a mind to replant the greens to improve the playing conditions year round. Superintendent Steve Ehrbar, CGCS began looking at the new ultradwarf grasses down in Fort Lauderdale at the FGCSA Research Green. While these had definite possibilities, they do not overseed easily and the members were not keen on some of the area courses they played that were not overseeded. So Ehrbar began looking at the new bentgrass varieties.

Dr. Milt Engelke of Texas A&M, developer of the new Crenshaw bentgrass, was brought on board as a consultant. Engelke had also been involved with the bentgrass greens at the nearby Loxahatchee Golf Club, which recently decided to replant with bermuda. Steve and Dr. Engelke rode and graded the entire golf course, rating each green for



After a year of testing several bentgrass varieties on the site, Superintendent Steve Ehrbar, CGCS, left, and his assistant Jim Colo are optimistic about their chances of managing all of the newly replanted G-2 greens at the Old Marsh Golf Club in Palm Beach Gardens. Photo by Joel Jackson.

soil profile, drainage, air movement, sunlight, traffic patterns and contours. The course graded out to a B - B+ rating and Dr. Engelke ventured that it might be possible to try some of the new bentgrasses.

The owner asked Ehrbar to come up with a proposal of what tools it might take to grow bentgrass and he looked at aerifiers, fans, and irrigation modifications. Ehrbar visited with Scott Bell at Bent Pine in Vero Beach with his bentgrass-over-bermuda base greens and with David Lowe at the Plantation at Ponte Vedra, who still had 15-year-old Penncross greens from the mid 1980s. Lowe has had to resort to installing several fans on each green for his location, and this was not acceptable for Old Marsh. Ehrbar also visited a course in

South Carolina with Crenshaw greens.

At the GCSAA conference in Anaheim, Ehrbar attended a presentation by the superintendent of Pinehurst #2 that had new G-2 bentgrass greens and heard what an aggressive Mat-A-Way and top-dressing program it required. He also talked to superintendents from the Atlanta area to pick up any information he could about bentgrass management in the south. But each location and course is different and the only place to really tell is on your own course. So, that's what Old Marsh did.

In 1997 Ehrbar planted the practice green in G-2 bentgrass and planted a chipping green with 1/3 Crenshaw, 1/3 L-93 and 1/3 with a blend of those two varieties. He managed those greens for a whole year putting them through height