A sepia-toned photograph of two children fishing in a pond. The child on the left is wearing a green shirt, a wide-brimmed straw hat, and denim overalls. The child on the right is wearing a striped shirt, a baseball cap, and denim overalls. Both are holding fishing rods and looking towards the water. The background is a blurred shoreline with trees.

You
can
always
count
on an
old friend.

We're like an old friend, bringing you the level of quality products and service that you have come to rely on. The Harrell family started this business sixty years ago by meeting customer needs, personally. That's the secret of our success, and we're not about to stop now!

Fertilizers, chemicals, grass seed and accessories.

If it helps grass and ornamentals grow, Harrell's has what you need. Every bag of fertilizer, chemical and seed we offer is the best quality available.

Custom-blended, superior fertilizers.

At Harrell's we use cutting-edge technology, top ingredients and expertise to custom build the fertilizer you need, based on your specific soil and growing conditions.

Harrell's means honesty, integrity and trust.

If we say it, we mean it and you can count on it. Harrell's offers the kind of world-class service that sets us apart from the other guys. Call your personal Harrell's rep today.

Serving world-class golf properties, professional sports facilities, nurseries & landscape maintenance operations with six decades of growing excellence.



For reliability you can trust, call toll free 1-800-282-8007

The only thing dictated by day-of-the-week watering schedules is when you water, not how much you water. Some water district officials have admitted that this method did not really save much water. Instead it forced water users to overwater on specific days to try and keep the root zone moist until the next scheduled irrigation.

Overwatering brings on another set of problems including poor playing conditions and poor turf health often requiring application of more chemicals to treat weeds and disease.

For those whose pumping capacity was limited or who had sandy soils, it encouraged - or rather forced - them to water off-schedule just to keep their turf alive and functioning. A rule or law that forces someone or a company to break the rules just to survive is plainly a bad rule.

I heard some superintendents documented their reduction in overall water use to cover themselves, but they watered when they had to, not on the arbitrary day of the week. They met the intent of the law, water conservation, in spades, but they violated the letter of the law which is flawed by not addressing practical agronomy or horticultural requirements. Their message is: We can and will cut back on amounts used during droughts, but let us apply the water when we need it. Enforcement is possible through pumping reports.

To the credit of many superintendents and the water management districts, they have made good strides in working out practical solutions to

these problems. This is a never-ending process and it is critical that superintendents keep their owners advised of the issues and solicit their help in educating politicians, water management districts and the general public about golf's true impact on the community.

TALE OF TWO COURSES

High & Dry or Low & Wet, Use Common Sense

The Highlands Reserve Golf Course is located in northeast Polk County just off US Hwy 27 on the sandy ridge that runs from Ocala to Sebring, and it's also near the eastern boundary of the Southwest Florida Water Management District. Superintendent Dave Datema, CGCS recently moved over from Disney and arrived in time to feel the full effects of the drought on this high and dry layout. Dave's current water source is ground water, but a reclaimed water line is being installed along US 27 from Haines City to the intersection of U.S. Hwy 192. The amount of reclaimed water Dave will have to use is unknown at this time, but hopefully he will be able to pump less ground water in the future.

Meanwhile over in Winter Park, Stuart

Leventhal's Interlachen Country Club was built on an old peat bog that wasn't suitable for residential development. Interlachen is located right next door to the local water treatment plant and so Interlachen irrigates totally with reclaimed water, but does have a backup well in case of emergencies. Drainage and percolation are polar opposites for the two courses and yet the management of the irrigation is based on the same concept - common sense.

Highlands Reserve drains so quickly that, during tropical storm Gabrielle last August, Datema's crew was mowing fairways when the eye of the storm passed over. That was after six inches of rain the previous night and morning. Over at Interlachen when summer rains kick in, Leventhal may not irrigate the fairways for four to six weeks. In fact they often have to go out and trim the grass back off the heads from lack of use.

Under normal conditions Highlands Reserve will pump 350,000 - 375,000 gallons per irrigation cycle and Interlachen will pump an average of 155,000 gallons. Both superintendents are addressing the needs of the turf and maintaining good playing conditions, and both use weather forecasting data to adjust their nightly watering to reflect the constantly changing conditions.

With the sandy conditions at Highlands Reserve, Datema has had to amend his native-soil greens to slow down the water percolation since there is no perched water table effect.

"While the greens drain super, I cannot



SHOW AN OLD COURSE NEW TRICKS

The University of Florida recently renovated its golf course, and it needed a high-quality fertilizer to help get its turf into shape. The obvious choice was **GreenEdge**®.

Unlike other organic fertilizers, **GreenEdge**® contains slow-release potassium to enhance root growth and increase stress tolerance. It also acts as a bioactivator to increase beneficial microbial activity.

GreenEdge®'s unique multi-release mechanism provides both initial and extended release of nutrients through hydrolysis and microbial degradation over an 8-12 week period. It also minimizes environmental impact by eliminating leaching and runoff.

Give **GreenEdge**® a call at toll free 877-GREEN30 and let our products work wonders for your course.



GreenEdge®

GreenTechnologies, Inc.

*Available in:
-Standard and Greens Grade
-15-5-10, 8-1-8, 6-2-12 or custom
blended to your specifications
*Patent Pending

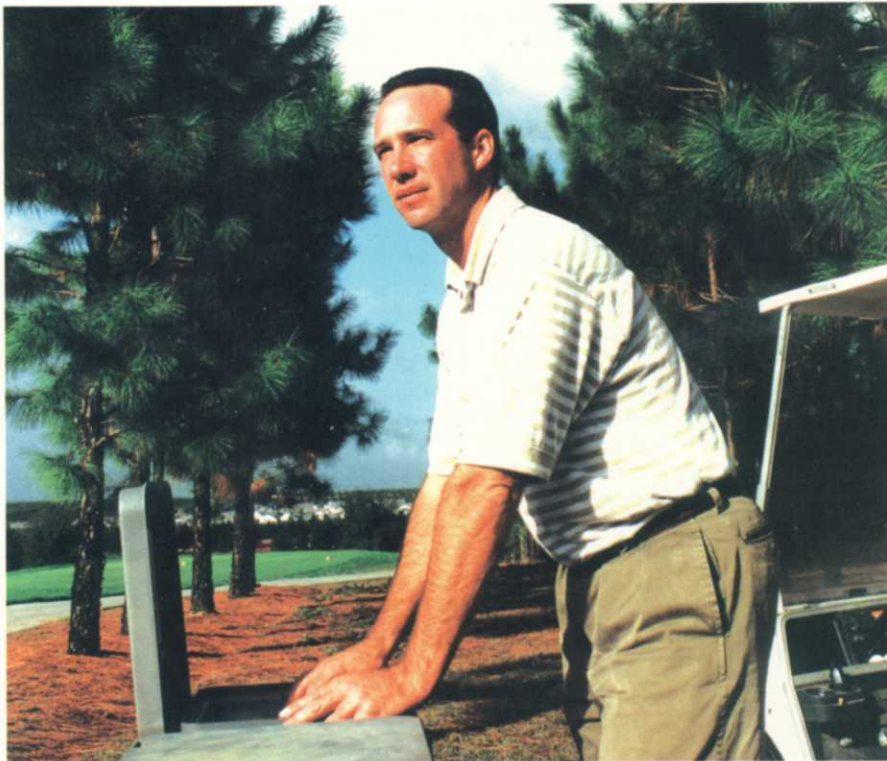
keep the root zone moist without daily watering," says Datema. "This past spring I aerified with 1/2-inch tines on 2x2 spacing, removed the cores and topdressed with a 70/30 sand and peat mix and some granular LescoFlow wetting agent. We dragged that into the holes and found we have helped some of our chronic hot spots to disappear and maintain better turf cover."

Over at Interlachen, Leventah has no real option to amend the heavy soil under the fairways. His salvation has been an upgraded irrigation control system.

"Going to the Rainbird Cirrus control system is the best investment we have made," Leventah says. "With the precise timing control of the computer, we have been able to micromanage our heads and regulate the playing conditions much better than the old electro-mechanical dials which could be off minutes plus or minus."

Both superintendents put irrigation monitoring as a high daily priority, and the superintendent, assistant or irrigation technician inspect, monitor and make changes as needed. To the trained eye, uneven dew patterns in the morning reveal the onset of dry conditions or malfunctioning sprinklers or maybe even a zone or system failure. Wet spots are clues to leaks and stuck heads. Later in the day foot printing (collapsed blades) and gray colored turf are sure signs that wilt conditions are setting in.

Special projects, meetings, repairs etc can take the primary irrigation observers off task on



Dave Datema, CGCS, superintendent at Highlands Reserve GC, adjusts his irrigation program daily to allow for changing conditions and turf stresses. Photo by Joel Jackson.

Computer-Exact Custom Mixes. Every Order. Every Time.

- All Loads Scaled
- Soil Analysis Available



- Next Day Service
- Volume Orders

Visit our website at www.golfAg.com!

Traps Installed to Spec.



Golf Agronomics meets all your top dressing needs with our ability to customize your mix with a variety of soil amendments including:

- Dolomite
- Hi-Cal
- Charcoal
- Wetting Agents
- Humic Acid
- Minor Elements
- Rock Phosphate
- Gypsum
- Customer Products

**GOLF AGRONOMICS
SUPPLY & HANDLING**

Serving all of Florida

(800) 626-1359
(941) 955-4690 Fax

any given day, so observation and monitoring is a team effort by the whole staff.

The person who cuts cups is also trained to report wet and dry conditions in the soil plugs taken when moving hole locations on the greens. Other crew members, especially equipment operators, are trained to report damaged heads and wet or dry areas.

Both superintendents employ wetting agents to help the plants take up water more efficiently. At Interlachen the heavy soils can be induced to percolate better and at Highland Reserve they help the quick-draining soil from becoming hydrophobic.

Datema says, "We make a wall-to-wall wetting agent application through our fertigation system about once per week. We also make applications to greens and tees using our portable sprayer. In fact, if rain is forecast we specifically time those applications to help the rainfall penetrate and not just run off."

While Interlachen is not impacted by water restrictions with its reclaimed water source, Highlands Reserve is in a more precarious position.

"I understand the intent of water restrictions during drought conditions, and I make sure we conserve water," Datema says. "When directed or asked to cut back, I cut back, but in all honesty in the performance of my job to manage our turf-grass, I have to fudge on the day-of-the week schedules, but I feel like I am within the rules that

allow for watering to prevent heat stress.

"We normally run 20 minutes per fairway head per night, assuming no rainfall help. With restrictions in force, I can cut that time by 66 percent to 7 minutes per station and thus save water, which is in keeping with the intent of the restrictions. But I cannot keep the root zone moist in this sandy profile by simply cranking up the time on the fairway heads and only watering one or two days per week.

"The soil drains so fast I'm just wasting the water. It makes more sense to put out less water overall, but more often when the plant needs it and can use it. Compounding the problem is our high nematode counts in this old orange grove location. They keep the grass roots short so they can't take up more water even if I increased the times."

Both superintendents agree that people in the industry have gotten more water-wise over the years especially with the advancements in the technology. As Datema says, "There are abusers in every business and I'm sure there are some folks out there who still overwater out of habit or ignorance or a fear that using less will jeopardize their jobs. But most superintendents have tried to live within reason while respecting the intent of restrictions."

One of the best examples of being water-wise was observed when I visited Olde Hickory C.C. last year for a cover story. Instead of

maxing out his run times during periods of no restrictions, John Stach knew that restrictions would invariably return, so he kept his turf hardened off and learned to produce good playing conditions with less water. This is a lesson every superintendent needs to learn in the coming days of water shortages whether they are real or political.

To that end, every superintendent needs to discuss his current irrigation management program with his/her ownership. The owners need to take responsibility for how the superintendent proceeds, especially during water restrictions. It is not good stewardship or responsible leadership to merely tell a superintendent, "Keep it green or else." During droughts, club owners and members need to expect firmer, faster and temporarily off-color turf. Each club should make every attempt to reduce overall water use during droughts and document the savings of water.

As Datema puts it, "The basic tools of turf management have always been irrigation, cultural practices and chemicals and fertilizers. When control of our most important tool, water, is taken out of our hands, it's like trying to manage the course with one arm tied behind your back. We need a good, common-sense approach to water conservation and not some convenient arbitrary rules that don't address the root of the problem."

Joel Jackson, CGCS

South Florida Grassing, Inc

Over 35 Years in the Grassing Industry

TifSport • **SeaIsle**
Certified Seashore Paspalum

Sod, Sprigs and Rolls available

- We provide reworking and planting services for fairways, tees and greens
- Our grass is grown in Hobe Sound on gassed, sand-based soil
- Hydro-mulching, grassing and mulching also available

Tifway 419

TifEagle

Tifdwarf



Certified Producer

Southern Seed
Certification Association

(561) 546-4191

www.southfloridagrassing.com

800-483-4279

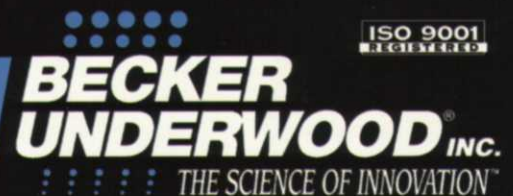


Bite Back.

If mole crickets are taking a bite out of your turf, turn revolutionary new Nematac™ S on 'em. There's nothing else like it. Nothing lasts longer or is safer. Nematac S consists of insect-parasitic nematodes, genetically predisposed to seek out and devour tawny and southern mole crickets. Simply mix Nematac S with water, apply with regular spray equipment and then irrigate. The aggressive nematodes will hunt out and penetrate adult and late instar mole crickets, releasing bacteria that quickly kill their hosts. Then the nematodes reproduce within the carcasses, unleashing a new generation of predators, ready to attack. Nematac S requires no EPA restrictions, no re-entry interval, and produces absolutely no hazardous residue. Produced by Becker Underwood and tested at the University of Florida, use Nematac S with confidence and peace of mind.



*Nematac S means persistent mole cricket protection.
Contact your distributor for more information.*



ISO 9001
REGISTERED

A 17-YEAR SAGA

Our Water is Gray, but Our Grass Is Green

Our water source at Winter Pines Golf Club since 1984 has been 100 percent reclaimed water, and our main line is connected directly to the Winter Park Estates Treatment Plant approximately two miles away. We are connected from the city's 24-inch mainline by a 15-inch line and then a 10-inch line that runs to the center of the golf course and connects to the course's 6-inch mainline pipe. We share this reclaimed water source with Interlachen C.C. and several of the city's park and recreation areas.

The pump station is located at the treatment plant and maintained by the city. We have 120 psi static pressure in the pipe 24 hours a day which delivers 60 psi at the sprinkler heads. The city maintains the main line and we take care of all other lines on the property. We have no back-up system, so we are dependent on the city for having the system up and going all the time, which is part of the contract. They have been excellent at supplying us with water for the past 17 years.

We have a contract to use around 150,000 gallons a day and to pay for the electricity

to pump it to us. However, we are not required to pump the water if we don't need it on rainy days, and we can exceed that amount if we are in dry period or have to water in pesticide or fertilizer applications.

The overall water quality has been good, but we usually make 1-2 applications of gypsum during dry periods to combat some of the high sodium and bicarbonates in the water until we get some good rains to help flush them out of the root zone. A little extra spiking and slicing also helps minimize any water quality problems on our weaker greens.

Our control system consists of nine Griswold 24-station satellite panels located around the course. To aid in cold and weather protection, each one is mounted inside a separate locked cabinet, which helps provide insulation from heat and cold. We also have Griswold electric valves in the ground which control anywhere from one to five heads each, depending on their location. We don't have a central controller, so each satellite is adjusted daily to meet the conditions or shut off manually when it rains. A normal night irrigation cycle takes six to eight hours to complete.

Inspection of green and tee head operation is usually done twice per week by using a syringe cycle to check proper head rotation and nozzle performance. Fairway heads are checked while syringing off the dew ahead of the fairway mower on certain holes with heavy growth. Any repair work is done by me or the assistant superintendent.

We like to use Rainbird 51D impact sprinklers on the greens and tees so if we need to syringe a localized dry spot, we can just hold the impact arm and aim the head. It saves dragging a hose when time is a factor on a busy public course. We don't have a lot of quick coupler valves anyway.

Most of the fairways have double-row coverage with Rainbird 81B, Thompson 188s or Legacy G90s. We have part circle Rainbird 47Ds and Legacy G95 part circle heads along lake banks, property lines and at the clubhouse area.

The fertigation system was taken out when the old pump was removed and we hooked up to the city's reclaimed water line. All foliar fertilizers, wetting agents and growth regulators are applied with our Smithco 160 Spray Star. Primo (PGR) is used on some of our wetter fairways and the driving range during the summer. Wetting agents are applied as needed on greens, tees and fairways to help moisture penetration along with frequent slicing of chronic problem areas.

As with any older system, we are constantly tweaking the design by moving or adding heads to get better, more efficient coverage to help grow healthier turf.

Joe Ondo, CGCS

Joe Ondo, CGCS is superintendent, Winter Pines GC; 407-657-7565; fax 407-671-3420.

It's all in the wrist.

Caterpillar® Skid Steer Loaders are as easy to operate as they are productive. Cat's unique low-effort, pilot-operated joystick controls require less time on the throttle, which reduces operator fatigue while increasing fuel efficiency.

Now – for a limited time only – you can own a Skid Steer for as little as **\$535.00 a month!***

Ringhaver



TAMPA 813/671-3700	DAYTONA BEACH 386/947-3363	ORLANDO 407/855-6195	SARASOTA 941/753-7535
BROOKSVILLE 352/796-4978	MULBERRY 863/425-4951	PALM BAY 321/952-3001	TARPON SPRINGS 727/938-1515

*Prices quoted do not include sales tax, document stamps or recording fees.
Subject to approval by Caterpillar Financial Corp.
Units equipped with Cat BOCEHD Bucket. Work tools sold separately.
Offer good through 03/31/02.



0%

Financing for 36 months
with 10% down!

Contact a sales representative, or visit us online and build yourself a quote! <http://ringhaver.cat.com>



COVER MORE TERRITORY WITHOUT LEAVING TRACKS BEHIND.

Introducing the industry's lightest 7-gang mowers. Weighing in at roughly 750 pounds less than other 7-gang mowers, the Jacobsen LF-4675 and LF-4677 models are the lightest available. Plus, you get a legendary Jake cut that stretches across nearly 140 inches — about 40% wider than with a 5-gang mower. While these 7-gangs may be new, their 22-inch cutting reels and chassis are not. In fact, both models are built on the same time-tested chassis as our popular LF-3400 and LF-3800 fairway mowers, so you'll get the same reliable performance. Not to mention, those fairways will be cross-cut in no time — without the worry of leaving tire tracks behind. For more information or a free demonstration, come in or call today.

Tresca Turf & Tractor:

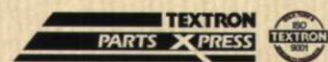
4827 Philips Hwy., Jacksonville, FL 32207
904-448-8070
2300 Silver Star Rd., Orlando, FL 32804
407-291-1717
www.tresca.com

Kilpatrick Turf Equipment:

7700 High Ridge Rd., Boynton Beach, FL 33426
561-533-1450
1620 Trade Center Way, Naples, FL 34109
941-594-1958
www.kilpatrickco.com

Golf Ventures:

15790-1A Chief Ct., Fort Myers, FL 33912
800-481-8911
2101 E. Edgewood Dr., Lakeland, FL 33803
800-330-8874
www.golf-venture.com



www.ttcsp.textron.com
©2001 Textron Golf, Turf & Specialty Products
All rights reserved. Printed in the U.S.A.

JACOBSEN
TEXTRON

Precision Cut. Legendary Performance.

Elevate to Irrigate Temporary Nursery

Eric von Hofen, director of agronomy at Calusa Pines Golf Club unquestionably had his hands full when he accepted his current position at the recently opened Hurdzan/Fry-designed golf course in Naples. The golf course, which is certain to receive accolades for its dramatic design, will definitely also catch the eye of many for the extensive landscape that complements the 18-hole layout. According to von Hofen, over a million dollars of landscape was installed during the construction of the golf course, for which he was responsible for the placement, and survival. The species that were planted included live oaks, cabbage palms, slash pines, palmettos, and hundreds of thousands ornamental grasses, all of which blend in nicely to the existing flora giving the perception that the course has been in place much longer than it has.

With the ownership of Calusa Pines providing the extensive funds that were needed to con-

To help assure the survival of the vast quantity of containerized plant material, von Hofen directed the construction of a temporary holding area where all landscape material would be delivered... and receive immediate irrigation.

struct the golf course and the facilities, it was expected for all parties involved to be diligent and not allow any waste to occur. To help assure the survival of the vast quantity of containerized plant material prior to installation, von Hofen directed the construction of a temporary holding area where all landscape material would be delivered, stored for an extended period and receive immediate irrigation.

To assure adequate moisture would be provided to each and every plant that was delivered,



A simple, inexpensive quarter-turn ball valve controls water flow to each sprinkler. Total cost of temporary irrigation system was less than \$100 to protect huge investment in plant material. Photo by Darren Davis.

a temporary overhead irrigation system was installed. To accomplish this, six pine trees that recently had been discarded from the golf course clearing process were limbed up and cut to a length of approximately 35 feet. These straight tree trunks were then buried to a depth of ten feet, leaving approximately 25 feet of exposed trunk. A two-inch PVC line was attached on the side of each trunk leading to the top where a full circle Toro 670 irrigation head was secured. Each head can be isolated at the base of the trunk with a quarter turn ball valve. The trunks were placed in a grid, three per side and approximately 60 feet apart.

The water was needed prior to the installation of the computerized irrigation system on the golf course so originally a portable pump was used to supply water from a nearby lake. However, once the irrigation system was in place, a "T" was



Toro 670 heads were mounted on trimmed pine tree trunks to cover nursery holding area. Elevated position insured all plant material received adequate watering. Photo by Darren Davis.

added in an adjacent main line so the system became a little easier to operate.

Being overhead, it was easy for von Hofen and his staff to see from a distance and know that it was in operation which gave them peace of mind knowing their concentration could be given to other necessary tasks. The end cost of the entire system was less than \$100 due to the fact that the six irrigation heads went into inventory for future use on the golf course leaving the only true cost being the discarded PVC pipe and PVC quarter turn ball valves.

Darren Judd Davis.

Darren Davis is director of golf operations, Olde Florida GC; 941-353-4441; fax 941-353-5947; darrenjuddavis@aol.com

Smooth—PowerSM

(800) 340-3888

Soil Reliever Technology

www.aerificationplus.com

AERIFICATION ⁺ **PLUS, INC.**
TURFGRASS AERIFICATION AND ROOT ZONE MANAGEMENT

Howard's Turf Pride® with RONSTAR® Solves Weed Control Problems Without Harming Turf Roots

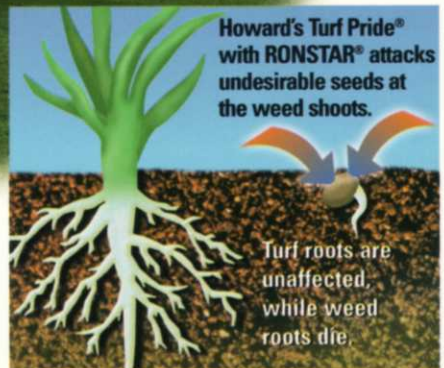


Most herbicides can't distinguish
a bad root from a good one.
RONSTAR® Can!
Brand Herbicide

Howard's *Turf Pride®* with *RONSTAR®* brand herbicide is the premium product for pre-emergence broadleaf and grassy weed control. *RONSTAR®* provides season-long protection

without harming turf root development.

Weed seedlings aren't so lucky. *RONSTAR®* is quick to target and destroy undesirable germinating weed shoots like DNA-resistant goosegrass,



crabgrass and *Poa annua*. Use Howard's *Turf Pride®* with *RONSTAR®* to kill weeds without affecting new turf sprigs. Help turf recover with *RONSTAR®* for quick and long lasting results.



Order Howard's *Turf Pride®* with *RONSTAR®* by the bag or let us spread it directly on your tees and fairways.

Call 1-800-899-3141 or 407-855-1841

Groveland • Immokalee • Orlando • Quincy

RONSTAR® is a registered trademark of Rhône-Poulenc.

H O W A R D
fertilizer & chemical
company, inc.

www.howardfertilizer.com

BENHAM'S BEAT

Other Shoe Drops: IFAS Budget Cuts Go Deeper

By Donald Benham



The University of Florida has been told to cut another \$2 million after already cutting its budget by \$2.1 million. Dr. Mike Martin, vice president for agriculture and natural resources, has sent a letter outlining the new reductions. In other words, the other shoe has dropped. Several of these reductions will

have direct, immediate effect on all of us. For example the closing of three RECs, restructuring of two more, closures and restructuring of selected campus research programs. To quote Dr. Martin "Be forewarned, we will have to reduce or eliminate programs, if we are to keep our commitment to excellence and some very productive, loyal and long-serving staff members will be laid off."

Did you know that Ft. Lauderdale REC is part of the group being looked at for restructuring or closure? What can we do about it? Obviously writing, E-mailing or faxing your local legislator lets them know how you feel. Talk to your board of directors and general manager. You probably have

**DONALD R. BENHAM, DIRECTOR OF PUBLIC RELATIONS
FLORIDA TURFGRASS ASSOCIATION
7309 LINKS COURT
SARASOTA, FL 33813
OCTOBER 31, 2001**

Dear Donald:

At the recommendation of Jan Beljan, Associate Designer with Fazio Golf Course Designers, you are invited to join Jonathan's Landing Golf Club to officially open our newly redesigned "Village Course". During this event the members of Jonathan's Landing would like to present a check in the amount of \$6,500 to benefit the Florida Turfgrass Association.

The membership at Jonathan's Landing is appreciative of the dedication shown by the organization in developing superior products to better the game of golf. Through your efforts and those affiliated around the country, the continued research improving turf conditions has greatly assisted our industry.

We would appreciate your attendance.
Sincerely,
Peter H. Young, CCM
General Manager/COO

some very influential members in your club.

There is a third way: encouraging your board of directors and general manager to have your membership join "Golfers for a Better Environment." To refresh your memory, the \$5-a-member program is jointly promoted by the University of Florida and the FTGA. We cannot replace the large monetary reduction caused by state budget cuts, but by encouraging your club to join the \$5-a-member program for turfgrass research, we can accomplish two things: First we obviously gain more research money for needed projects with the faculty of the University of Florida. Secondly, and we gain political clout to go to the Legislature for matching funds.

If 25 clubs with an average membership of 500 were to join this spring, 12,500 voting members would be contributing. Take it a step further. If only 25 clubs from each coast joined for a total of 50 clubs, that is 25,000 registered voters supporting turfgrass research in Florida. I am not saying we could save a particular REC. like Ft. Lauderdale, but I am saying we might gain support in the Legislature to promote our turf research with a line item to do it. Politicians listen to numbers of voters. Think about it - only 25 clubs on each coast.

On a happier note, I just returned this morning from a wonderful day at Jonathan's Landing on Friday, Nov. 30. Thanks to General Manager Peter Young, Club President Paul Moore, the board of directors and Michael J. Perham, GCCS director of course maintenance, Jonathan's Landing presented FTGA President R. Alan Puckett and me with a \$6,500.00 check representing \$10 a member from 650 members.

The presentation was made at the official opening of the redesigned "Village" course at the recommendation of Jan Beljan, associate designer of Fazio Golf. I was invited to play the opening round tournament with the club president and general manager. There was a lot of friendly protest when we won the tournament. The FTGA was enthusiastically thanked for its promotion of this grassroots member program. Please see the enclosed letter from the club.

Dr. Terril Nell of the University of Florida and I would be happy to come to your club and explain the program to your club officials.

Donald R Benham is director of public relations, Florida Turfgrass Association; 941-355-7679; fax 407-896-6857; rdbenham@aol.com

USGA UPDATE

Gabrielle Dumps 18 Inches, Unites Members & Staff

Another hurricane season has come to an end in Florida, and golf courses along coastal regions can breathe a sigh of relief. This region has witnessed a year of extremes in weather conditions (especially rain). Even though some areas are still under drought restrictions, many regions experienced more than 40 - 60 inches of rain from June

through September.

September was especially harsh for parts of West Florida as Tropical Storm Gabrielle brought near-hurricane strength wind and rain. Some golf courses only received elevated rainfall while others experienced major wind damage. One such golf course (El Conquistador Country Club) in Bradenton was located near the eye of the storm and received nearly 18 inches of rain and strong winds, which destroyed more than 80 trees and damaged 50 additional trees.

Nearly 50 members came together to help the staff clean the debris from the golf course and get it ready for play. The course was closed for an entire week and the golf course superintendent, Mr. Stephen Wood, CGCS, was overjoyed for their assistance. "With the members' help, we never fell behind on the day-to-day maintenance that sometimes requires several weeks to catch up on", added Mr. Wood. When the entire project was complete, 83 truckloads (25 cubic yards per truck load) were required to haul away the debris caused by Gabrielle. Also, at the end of the week the members took up a collection of more than \$800 for the maintenance staff. We hear of how the nation has been brought together during these trying times, but it's nice to see it on a local level as well.

Todd Lowe

NEW DISEASE IMPACTING POA TRIVIALIS OVERSEEDING

A new patch disease has been making its presence known these days in the SE Region on overseeded bermudagrass putting greens. Dr. Bruce Martin has identified two known cases at the Clemson-Pee Dee Research Station. The new disease has been identified as belonging to the chytridomycete fungal group. Dr. Larry Stowell www.pacepri.com/PTRI/Documents/Diseases/0111. PDF of PACE Consulting originally diagnosed the disease on the West Coast in 1995 at golf courses in Nevada and Arizona. USGA agronomists have seen the disease at Carolina coastal golf courses over the past few years, but never knew the cause of the problem.

The disease impacts Poa trivialis, Poa annua, and perennial ryegrass. It really wipes out Poa trivialis, by far the most popular overseeded turf now on putting greens in the SE Region. The disease resembles the pythium fungus as the turf looks water soaked prior to death along with dime-size spots. The disease tracks along with the mowers and can attack in the both the fall and spring. It is spread by zoospores like Pythium, but the organisms live inside the leaf cells, which is one reason why it has been so tough to identify in the past.

The common denominator at sites with this new disease problem has been poor water and soil quality. The disease operates best with soil or water conditions of high EC, high salinity, and high bicarbonates. It is especially prevalent during droughts (just like we are experiencing now) and at sites without an aggressive soil amendment and flushing program.

From what is known, every variety of Poa trivialis is impacted. Ryegrass is affected as