



The Florida Green

Winter 2005



Number 2
St. James Bay Golf Club
Carrabelle
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CALL FOR ARTICLES

Hands on Topics: Share your best practices and tips for these upcoming topics. Photographs or slides are encouraged. Digital images that are 5 inches wide at 300 dpi or greater accepted.

Spring 2005 - Successful In-House Projects.

Summer 2005 - Ultradwarf Greens Management

Fall 2005 - Bunker Design and Maintenance

Please submit articles via email if possible. Attached articles should be saved in Microsoft Word or, if you use another word processor save it as a Text file before attaching or you may just copy and paste it into the email text box. Try to limit articles to 1500 words or less. The Florida Green pays \$100 per page and \$50 for 1-3 pictures.

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Conventional Photos: Do not write on the back of prints. Attach a Post-it note with ID information. All slides and photographs should include identification of persons in the picture and the name of the photographer.

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At our recent fall board meeting I asked by a show of hands how many of our 12 chapter executives did not experience hurricane damage at their home courses. Not surprisingly, only one person raised his hand. This further substantiated how widespread this bout with Mother Nature's destructive forces has taken place. In the near future I am sure we will all look at the storm season in a different light.

The end of the hurricane season coincides with the return of our members to our clubs. Hopefully, they have seen a snapshot of the events that transpired last fall and are being

patient with our efforts to get back to some sort of normalcy. I hope everyone is beginning to put all of this behind them and enjoy this holiday season, which has quickly sneaked up on us. Spending time with family and friends is a sure way to help heal wounds and begin to look toward a strong beginning for year 2005.

The next time we will all be together is in Orlando at the 2005 Golf Industry Show in early February. This should be an exciting event with so much available to us in one short week; whether it be the wonderful educational opportunities, the world-class trade show or the networking with other turf professionals and our peers. We

hope you take advantage of this unparalleled opportunity right in our own backyard. I personally look forward to seeing all of you at our FGCSA Reception at the Rosen Centre Hotel on Thursday, Feb. 10. Located just next door to the Convention Center, this event should be very convenient for all to attend. With the show being so large, it sure is nice to know that we can all be together for a short time in one room. It is always one of the highlights of the week for me, and I hope to see many of you there!

With the beginning of a new year comes the excitement of the pursuit of new goals and challenges. One of our biggest goals is to increase funds to be used for turf research. As many of you know, most of the turf research funding is generated from within our own profession. Many chapters have their own fundraisers, set aside funds from their chapter's operating budgets or receive donations from turf supplier companies for much-needed research projects. While these are greatly appreciated and I hope they continue, we have been trying to look "outside the box" to take turf-research funding to an uncharted level. The time is now. We all know that water use is currently a hot topic for the future. The elimination of chemicals, such as Namacur and methyl bromide with no proven alternative products available, and the tightening of governmental regulations on our industry have caused us to think responsibly about future advancements in turfgrass research and breeding.

Coincidentally, the University of Florida is nearing completion of a new turf research station at Pine Acres, just south of Gainesville. More than 25 acres of this site have been dedicated to turf. This site can be a huge help in pursuit of our research goals provided we can supply adequate funds for new turf breeder, Dr. Kevin Kenworthy, as well as other much-needed research projects that will

help us in the future.

We have two exciting opportunities to greatly enhance our current turf research funding. With the assistance of our lobbyist, Mike Goldie, and his legislative relationships in Tallahassee and throughout the state, we are ready to unveil a Matching Fund Challenge Grant Program. When approved, the state government will match each dollar generated for turf research. We are thrilled about this program and have solidified our desire to remain in close contact with our local and state political leaders on all golf and turf related

...we have been trying to look "outside the box" to take turf-research funding to an uncharted level. The time is now. ...water use ... the elimination of chemicals with no proven alternative products available, and the tightening of governmental regulations ...have caused us to think responsibly about future advancements in turfgrass research and breeding.

issues. Thanks to Mike Goldie for all he has done for us, and we look forward to the approval of this program soon.

Another wonderful concept to strengthen our turf research funding was unanimously approved recently by your board of directors. One of our fellow superintendents, Tim Hiers, brought a novel idea to the table. We have worked our tails off trying to raise funds and have overburdened ourselves and our turf suppliers for monies in the past. Why not tax ourselves? Other industries have done it very successfully and we feel we can, too. Our initial thinking is to charge ourselves \$1.50 for each ton of fertilizer purchased throughout the state. In this way, we apportion only a small amount but, spread out over a large area, this can add up quickly. Coupled with the proposed matching-grant program, this could take turf research funding to much deserved and needed levels.

While there are many details yet to be worked out, this wonderful concept is just what we need to kick start the research goals we desire. Should this program take off as we expect there are many other spin-off ideas that can follow closely behind to further turf research in Florida.

While turf research is an important goal of ours for this year and beyond, there are many other exciting challenges we will pursue. Enhancing and organizing our educational opportunities throughout the year, working closely with all related organizations, and strategically planning for the future are only some of the additional pursuits we have targeted for our continued strength and growth. I look forward to a productive 2005 and hope you all do, too.

Looking Forward to 2005

PRESIDENT'S MESSAGE



Joe Pantaleo
FGCSA President



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Fulfilling Own Philosophy Earns DSA for Davis

Darren Davis' success isn't a fluke of destiny, but rather a product and fulfillment of his philosophy and work ethic. As the incoming president of the FGCSA in 1999, he said in an interview for the *Olde Florida* cover story, "Effective superintendents today don't just happen. They are the sum total of not only formal and on-the-job turf education, but also the intangibles of curiosity, a love for the outdoors and the traditions of the game of golf. Successful superintendents don't sit idly waiting for things to come to them. They get



Darren Davis has been at the *Olde Florida Golf Club* since 1992. His top priority is the golf course, and he uses the ideas and information from his travels and association participation to make it even better. Photo by Bruce Mathews.

out and seek knowledge and new ideas. They interact and participate. Relationships with other people in the industry are key factors in making a good superintendent."

In a section on advice to young superintendents he said, "Obtain a formal education. Do not get wrapped up in titles. Set goals and plan your future. Do whatever it takes to obtain your goals regardless of the personal sacrifice. Once you become a superintendent, don't forget those who helped you get there. Don't walk around with blinders on. Travel, even if just locally, and meet and get to know your peers. Don't be afraid to share

your knowledge and experiences. Expand your horizons whenever possible. Make yourself a well-rounded golf course superintendent."

All that makes for great quotes and sound bites, but it wouldn't be worth the paper it's printed on unless the author of those words actually lived by them and walked the talk. In Davis' case that's exactly what he's done. And because he has, the Everglades GCSA nominated him for the FGCSA's Distinguished Service Award for 2004. And it precisely because he delivered on his own advice that he was selected by the board of directors to receive that honor.

Anyone who has ever read a *Florida Green* magazine should know by now that Davis has a permanent feature called "Super Tips" in which he shares the tips and ideas he has gleaned from his globe-trotting travels. But most of them come from his neighboring golf courses in the Naples area or his own shop, hence his advice to at least get out and visit with your local neighbors in the golf community. He has been a regular contributor to the "Superintendents' Videomagazine," a VHS/CD-format educational and informational instrument.

His willingness to share his experiences via GCSAA's *Golf Management* magazine has earned him an unprecedented two Leo Feser Awards (1997 and 2001) for his articles. In 1996 he earned a GCSAA National Steward Award. Counting his volunteer activities serving on boards and committee for the EGCSA, FGCSA and GCSAA, Davis has devoted much of his free time and energy in the promotion of our profession and in the workings and progress of our associations. A couple of his peers had this to say about Davis and his qualifications for the Distinguished Service Award:

"Darren is energetic,



Greg Pheneger presented Darren Davis, right, with the 2004 FGCSA Distinguished Service Award at the Past Presidents Dinner during the 2004 *Poa Annua Classic* in Naples. Photo by Joel Jackson.

enthusiastic, available, willing to step out of the box, not satisfied with the status quo and always pursuing excellence. Above all this he is willing to share his experience and expertise with anyone that will ask. I have watched Darren grow as a person and a golf course superintendent and he is an asset and credit to our industry and profession."

— Tim Hiers
The Old Colliers Club

"As a golf course superintendent, Darren has continuously been involved with the FGCSA and EGCSA from the very start of his introduction to southwest Florida. His commitment to these associations has helped bring and additional awareness of the South to the GCSAA as he has interacted with several facets of the national organization.

"Although it may seem far reaching to think of the local benefit it from an individual such as Darren, it is actually the local area he has served

that has benefited. Southwest Florida is home to several high-profile clubs that are on the cutting edge of golf turf management. Any increased exposure, increased research and increased interest from such high profile industry representatives such as Steve Mona had been of great benefit to EGCSA. Undoubtedly Darren played a huge role in this.

At the same time Darren has continued to elevate the role of the golf course superintendent as an integral and very important aspect to any club. He strives for excellence both on the job and his association involvement and he delivers the results."

— Kyle Sweet
Immediate Past President, EGCSA.

Davis is a goal-oriented person. In 1999, he said he had accomplished many of his early career goals and that he would be reassessing his personal progress and making a new list of goals and then create a plan to achieve them. A man of his word,

Davis is not resting on his laurels or waiting for things to come to him. Not satisfied with his two-year technical certificate in turfgrass management from Penn State, Davis is currently enrolled at Florida Gulf Coast University and is majoring in communications.

For all his volunteer work that has accolades from his peers, his number-one job and top priority has always been his role as director of golf course operations at the Olde Florida Golf Club in Naples, where he has applied his professional work ethic for more than 12 years through construction, grow-in, years of improvements and a complete regrassing renovation. He applies the tips and ideas he shares with us to create time and labor savings on his own course. We just happen to be lucky to go along for the ride via his articles.

Outspoken but thoughtful in his comments Davis continues to serve on FGCSA committees and helps to keep the association making progress in its organization, operation and services to its members. For his

unselfish service and dedication to his profession and his willingness to share his knowledge with others, we say "Well done," and congratulate him on his well-deserved Distinguished Service Award.

Joel Jackson

2004 LCCC Endowment Tournament Nets \$18,000

This year's 13th annual event held at WCI's Hammock Bay G&CC promises to net close to \$18,000 for the alma mater of many of the Florida golf course industry's superintendents and suppliers. This year's participants were treated to a round of golf on a wall-to-wall, 100-percent seashore paspalum golf course, which earned positive reviews from the players.

There were some great raffle prizes including three-day, two-night stays at nearly a dozen resorts from the Florida Keys to Colorado by



Cary Lewis, left, and Bill Schmidt shot a 62 to capture the low gross honors at the 13th Annual LCCC Endowment Tournament. Photo by Robert Toski.



Steve Pope and Mitch Miller used their handicaps to win the low net honors at the LCCC Endowment tournament at Hammock Bay G&CC. Photo by Robert Toski.



Flanking the ice sculpture of the LCCC Endowment Tournament logo, which was the center of attention at the event, from left: LCCC alumni Glenn Zakany, David Fry, John Johnston and Scott Hamm, who have been instrumental in organizing the annual LCCC Endowment tournament. Photo by Robert Toski.



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way of West Virginia, and scores of complimentary golf rounds from top Florida golf courses. The top golf winners were Cary Lewis and Bill Schmidt taking the low Gross Honors and Low Net Honors going to Steve Pope and Mitch Miller.

Most who have played this tournament in the past 12 years know that this fundraiser puts money back into the Lake City Golf Operations that were eliminated by previous state budget cutbacks. Thanks to your support and our generous sponsors, we have donated more than \$125,000 as of this event.

Special thanks to our hard-working tournament committee: David Fry, Glenn Zakany, Scott Hamm, John Johnson, Odell Spainhour, Roy Bates, Mike Smith, Celeste Langer and course superintendent Rodney Whisman. Thanks to our friends from Hammock Bay Golf & Country Club: Bob Radunz, Cory Schaub, Robert Gowett, Robin Strob

for helping to make our outing a special day for all LCCC alumni.

**Chapter Round Up
Hurricane Recovery,
Fundraisers Mark
Fall Schedule**

Calusa

After a couple of hurricane postponements, we held our September Superintendent/GM-Club Official outing hosted by Laurie Frutchey at the Lexington CC. Al Kinkel, chief operating officer of Lexington gave a great presentation on "What It Takes to Be a Success In Golf Course Management, From Manager to Leader." In October we had 62 players show up for our annual Su-Pro-Liers outing at Heritage Palms, and despite the hurricanes the course looked great thanks to Greg Kriesch and staff. Our annual Christmas party in December at the Kelly Greens GC netted a \$1,100

donation to the Abused Counseling Treatment Center of Lee County. If you are looking for news and meeting information about the Calusa chapter be sure and check out our new website at www.calusagesa.com.

Central Florida

Superintendents and equipment managers held a joint meeting/golf event at the Metrowest GC on Dec. 6 to raise money for the chapter's benevolent fund. Former Ridge superintendent Ray Cuzzone provided the barbecue lunch. Thanks to host Jim Kernohan and his staff the course was in great shape.

Coastal Plains

At our September meeting we had Joe Gallagher from A.G. Edwards speak about retirement planning for golf course superintendents. In November, Joel Jackson FGCSA director of communications gave an update on statewide issues. Joel was also up to

do the Florida Green Winter 2005 cover story interview with our host Shane Bass at the St. James Bay G.C. **Everglades**

Our busy fall schedule included our Pro/Super tournament in October at the Hideout Golf Club. Thanks to our hosts, superintendent Alberto Quevedo and golf professional Gene Fieger for putting on a great event. In November we held a golf outing at Tim Hiers's The Old Colliers Club and had a chance to check out the seashore paspalum turf.

The Everglades Golf Course Superintendents Association hosted its annual Christmas Tournament and Gift Drive on Wednesday, Dec. 15 at the Quail West Golf and Country Club, Bonita Springs. J. Mark Black, CGCS, EGCSA president and director of maintenance operations at Quail West, hosted the outstanding event for a record group of 132 players. The two-man scramble format was fun for all

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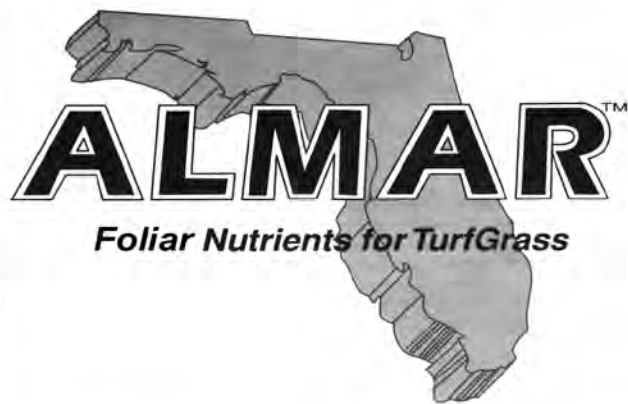
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We had a blast. Hope you did too.

and the golf course was in superb condition.

For the fifth year, the gift drive was very successful with more than 300 toys donated to benefit the Children's Home Society of Southwest Florida. All of these gifts were donated by the tournament participants and are distributed throughout Southwest Florida to provide a merry Christmas to children and their families in need.

North Florida

This fall we had a golf outing at the Deerwood Club and our Christmas outing at the Hyde Park GC in Jacksonville. Happy New Year everyone.

Palm Beach

We are sad to announce the sudden passing of Norm Pilote, superintendent of Frenchman's Creek in Palm Beach Gardens. Norm was 50 years old and was struck down by



EGCSA President Mark Black, CGCS, with Erin Sweeney, Katie Black, Simon Greer of the Children's Home Society of Southwest Florida at the 5th Annual Christmas Tournament. Photo by Kyle Sweet.

a heart attack. Our condolences go out to Norm's family and friends. December was a busy month with our annual Miami Dolphin football trip, and our Christmas Party (88 members and guests showed up to welcome the holidays), then we had our traditional golf outing with the South Florida GCSA at TPC Eagle Trace. We will finish up the year with a holiday golf outing at the



Superintendents Tim Hiers, CGCS and Darren Davis pitch in to help out at the FGCSA display for the Collier County School's annual Career Fair held at the Golden Glades High School in November. Sixteen professional categories to raise occupational awareness were highlighted at the event including Agriculture and Horticulture. Photo by Joel Jackson

Abacoa GC. We will kick off 2005 with a superintendents-only meeting at Emerald Dunes in January.

Ridge

Greetings from Ground Zero. The Ridge Chapter is beginning to see the light at the end of the



From the left, USGA's Florida Region Director John Foy and Agronomist Todd Lowe were joined by Boca Rio's Superintendent Bob Randquist, CGCS as moderators for the 2004 USGA Regional Conference held in Palm Beach Gardens. Photo by Joel Jackson.

tunnel. With the exception of a couple of courses, we are pretty much up and running again. Because of the recent turbulent summer we haven't had much time to take care of a lot of chapter business, however, we did see a little sunshine at our November meeting. We were pleased to award Danny Hidayad, a turf and ornamental student at Florida

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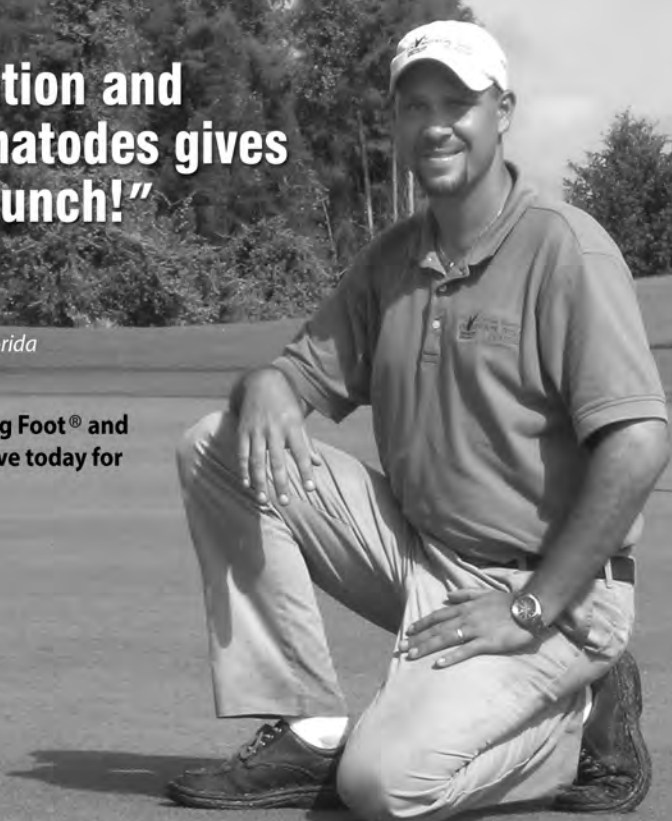
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Southern College, with our first Jack Harrell Sr. Memorial Scholarship. Danny is an excellent student and very deserving of the scholarship. We will be holding our annual Harrell's plant tour and steak lunch in December and our January Superintendent/Vendor meeting will be at the Lone Palm Golf Club in Lakeland.

Seven Rivers

In November we held our 2nd Annual Fishing Tournament in Crystal River and the great weather helped provide a higher fish count than last year. We had a great turnout for our December meeting at the Brooksville CC. Tim Williams from Gatorland gave an entertaining and informative program on gators and snakes. As we close out 2004, we are already planning for the Jeff Hayden Memorial Envirotron Classic in hopes of raising even more funds for turfgrass research.



The Ridge GCSA presented its first Jack Harrell, Sr. Memorial Scholarship to Danny Hidayad, who attends Florida Southern College in Lakeland. From left: Ridge Secretary/Treasurer Jim Rowland, Director Roy Wilshire, CGCS, President Tom Barnett, Danny Hidayad and Director Alan Puckett.

South Florida

With more than 152 golfers teeing it up in our 20th Annual Missing & Exploited Children's Tournament at the Colony West C.C. in October, we were able to surpass our target goal of \$20,000 to \$22,000. Perpetual Chairman of the event, Bill Entwistle, Jr., reflected on the long history of the event which began in 1984. Our chapter has now raised



The South Florida Chapter celebrated the 20th anniversary of its annual Missing and Exploited Children's tournament by raising more than \$20,000 for the 2004 event. The committee cheerfully presented a check for \$22,000 to Nancy McBride, Executive Director of the Florida Branch of the National Center for Missing and Exploited Children.

more than \$206,000 for this worthwhile cause.

After we wrap up the year with our holiday golf outing at TPC Eagle Trace in December, we will be looking forward to the FTGA Regional Conference in January to kick off the new year. We are already making plans for the SFGCSA Turf Expo to be held in March at the UF/IFAS Research

Center in Ft. Lauderdale.

Suncoast

Congratulations to Stephen W. Wood, CGCS, golf course superintendent at El Conquistador Country Club, Bradenton, for completing the GCSAA Environmental Management Program by earning the six required specializations. Of



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the 160 superintendents working towards EMP certification, Wood is one of more than 30 to have completed the program and receive certification. The specialized training consists of six specialized certification programs: Integrated Pest Management; Habitat Development and Management; Employee Safety and Right-To-Know; Water Quality and Application; Golf Course Development; and Storage, Disposal and Recycling.

Inclement weather washed out our November Pro/Superintendent tournament, but the proceeds from registration were fittingly donated to the Red Cross Hurricane Relief Fund along with the proceeds from the Tatum Ridge Sneak Preview Tournament.

Treasure Coast

Congratulations to Melanie Mark for earning her Certified Golf Course

Superintendent status at the Spessard Holland Golf Course in Melbourne Beach. As part of the process, Tom Trammell, CGCS of Hawks Nest GC and Wayne "Bo" Estey, CGCS from the Quail Valley G.C. conducted the required on-site inspection and evaluation.

Thanks to our team of Cody Boutte, Kevin Downing, Chris Gamble, Harry Hanson and Roy McDonald the TGCSA was able maintain possession of the Cavanaugh and Wagner Trophy at the joint Palm Beach and Treasure Coast Meeting in October.

Thanks to Charles Blevins and the Hammock Creek G.C. for hosting our November golf outing. It was a much-needed break from chain saws and tree stumps. On Dec. 10 we will celebrate the holidays at the Gator Trace Golf Club in Ft. Pierce. Gator Trace had some severe hurricane damage, but they report they will be up and run-

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ning in time for our annual Christmas party.

West Coast

We are working on creating a chapter Web site in the very near future. Meanwhile congratulations go out to Andy Neiswender and Matt Felber and Bill Kistler and Jeff Ginther for respectively winning the gross and net divisions of our 2004 Pro/Superintendent Tournament. Our 2004 Bud Quandt Fundraiser Tournament held at Bill Kistler's Tampa Palms G&CC in October raised \$6,000. Beside turf research, the All Children's Hospital and the Moffitt Cancer Center receive donations from these proceeds. At our November meeting we began planning the 2005 calendar of events and are looking into the possibility of hosting a GCSAA Regional Seminar in August or September 2005. In December we held our Vendor Appreciation Day at the U. of South Florida Athletic Fields on campus. It



Congratulations to Melanie Mark, CGCS, right, for obtaining her Certified Golf Course Superintendent designation. Melanie is an IGM Regional Manager at the Spessard Holland Golf Course in Melbourne Beach. Melanie is shown here with her General Manager Rene Uzee. Photo by Joel Jackson.

was a free event complete with equipment demonstrations, food and raffle prizes.

Florida GCSA

At the Fall Board meeting at the Bradenton CC, the board approved and supported the pursuit of a \$1.50 per ton surcharge on all fertilizer purchases to provide a recurring source of turf research funding. In conjunction



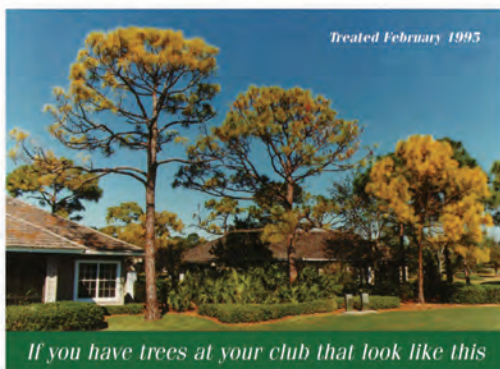
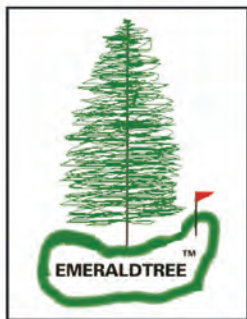
Celebrating his 41st namesake tournament, Bud Quandt, center, is flanked, from left, by golfers Louis Belcastro, Mark Hopkins, Bill Fowler and Rich Wahl for a photo at the Bud Quandt Research and Benevolent Tournament held at Tampa Palms.

with our efforts to get the legislature to create a matching funds rule for all donations made to turf research, it is hoped we can provide a substantial funding resource not solely reliant on inconsistent donation amounts from golf events and chapter treasuries. The surcharge idea is not new, as many Florida agriculture commodities have used surcharges to raise money for research. This concept spreads the cost around so it is not burdensome to anyone, but everyone participates, which is only fair since everyone benefits from the research into better grasses and

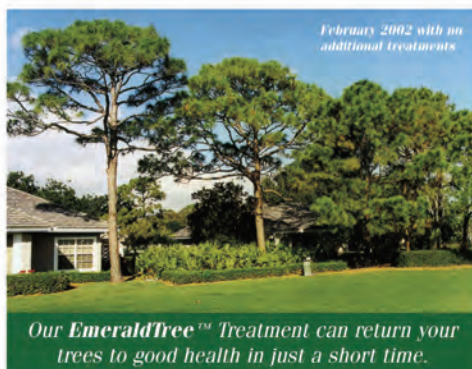
management improvements.

At the same meeting, Suncoast GCSA members Royce Stewart and Jim Svabek were granted Lifetime Member status to the FGCSA. The board was also pleased to see the first-quarter earnings report from the new reserve funds investment plan, which consists of conservative investments, but ones that yield more than the savings and money market accounts previously used. The new investment plan is overseen by the newly formed Finance Committee, and managed by Morgan Stanley-Dean Witter.

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*Par-3, 173-yard 17th Hole St. James Bay Club
Photo by Daniel Zelazek*



In a part of Florida where time moves just a little slower and development even slower, St. James Bay has preserved small pieces of man's history on the land.

St. James Bay Golf Club

Discovering the Forgotten Coast

By Joel Jackson

I'm a native Floridian and thought I had heard all the names for the various sections of the state's lengthy coastline. From Jacksonville down the eastern seaboard there's the First Coast, Space Coast, Treasure Coast and the Gold Coast in the

Dade-Broward area. Swinging up the western side of the state there's the, Platinum Coast, Suncoast, Nature Coast and Emerald Coast in the Destin-Pensacola area. Did I miss anyone? Evidently I did.

It wasn't until this trip to St. James Bay at Carrabelle in the eastern panhandle that I heard Coast Radio 100.5 FM proclaim the station's listen-

ing area as, "the Forgotten Coast from Apalachicola to Tallahassee" and realized I had discovered yet another unique coastal area of Florida. After returning home I found out more about the history of this area on the Internet at www.forgotten-florida.com. It is a story of forestry, fisheries and Camp Gordon Johnson, a World War II training camp for amphib-

Course Facts



St. James Bay Golf Course Maintenance Staff.

St. James Bay Golf Club

Location: Carrabelle

Ownership: Carrabelle Properties Ltd.

Playing policy: Public

Basic Stats: 18 holes, 6,730 yards, Par 72. Course Rating/Slope, Black Tees 72.9/142, Green Tees 70.3/123

Design/Construction: Robert Walker, architect. Highland Golf, construction. Opened September 2003.

Management: Owner Eddie Clark; Club Manager Bob Klein; Head Golf Professional Steve Hatch; Golf Course Superintendent Shane Bass.

Continuing projects: Native area management

Total acreage under maintenance: 80

Greens: TifEagle; avg. 6,200 sq. ft.; total, 3 acres; HOC .100 - .125 in.; not overseeded. green speed goals, 9.0 - 11.0.

Tees: Tifway 419 bermudagrass; 3.0 acres; HOC .500 in.; not overseeded.

Fairways: Tifway 419 bermudagrass; 35 acres; HOC .500 in.; not overseeded.

Roughs: Tifway 419 bermudagrass; 38 acres; HOC 1.50 in.; not overseeded

Bunkers: 60; 4SEA; sand machine-raked with Toro Sand Pro twice per week, hand-raked on the other days.

Native areas: 113 acres of preserved wetlands. 26 acres of preserved uplands. 11 acres of upland preserve that comprises a 25-foot buffer strip across the backs of all residential lots on the golf course that must be left natural.

Waterways/Lakes: 15 interconnected lakes main-

tained by Biological Research Associates. They also prune and trim back wetland vegetation twice per year.

Irrigation: Source: surface water, but will take some effluent from city of Carrabelle in the near future after they upgrade their treatment plant. Pumping System: Flotronex VFD. Control System: Toro Site Pro/OSMAC, 730 heads; Nutrifed fertigation system.

Water management/conservation: The irrigation system was specifically designed to prevent watering of non-turf areas. A lot of adjustable heads were installed to prevent throwing water into lakes, wetlands and upland preserves.

Maintenance Staff: 13 including superintendent. Scheduled 40 hours straight time with occasional overtime only as needed.

Leadership: Assistant Superintendent Larry Johnson, Equipment Technician Floyd Robinson.

Communications: Quarterly meetings of the whole club. Daily crew meetings.

Cultural Programs: Aerification – Turf & Aquatic Management does greens aerification three times a year. Fertilization – Southern States Fertilizers.

Management Challenges: Irrigation, nutrient and drainage management due to heavy soils on a few holes.

Environment: Fully certified Silver Audubon International Signature Sanctuary. We closely manage our nutrients and chemicals since we are so close to Apalachicola Bay where they harvest most of the oysters consumed in the U.S. Many people in this area are down on golf courses. It is our goal and mission to show them that it can be done without harming the environment. The good news is we have made some converts already.

ous operations that paved the way for the Normandy invasion and the island-hopping Pacific campaign.

With the coming of St. James Bay and the first 18-hole golf course it brought to Franklin County, the “Forgotten Coast” has been discovered again and likely won’t be forgotten any more. Of course it’s really unfair to say this area was forgotten; it’s been more like a well-kept secret by people who like to get away from it all. Long on natural resources and short on traffic jams, Carrabelle (population 1,303) and its neighboring small towns enjoy

a peaceful, slow-paced lifestyle. The amenities here are solitude and spectacular seafood from the famous Apalachicola Bay oysters to sports fishing.

Eddie Clark, owner and developer of St. James Bay, has taken care to respect the history and natural resources of the area. The golf villas by the clubhouse were built on the four pads used to anchor a 600-foot radio tower used by the World War II army training camp. Wildlife and native habitat was preserved by developing the project and golf course as an Audubon International Silver Signature

Sanctuary. It was Clark’s willing embrace of the blueprint for sound development and operational practices mandated by Audubon International’s program that helped overcome objections to the project by some local officials and residents. They found out that a golf course done right can be an asset to the community.

St. James Bay just became certified thanks in large part to the efforts of the golf course superintendent Shane Bass, CGCS. “Mr. Clark, by nature is a tree lover,” Bass said, “I think we had

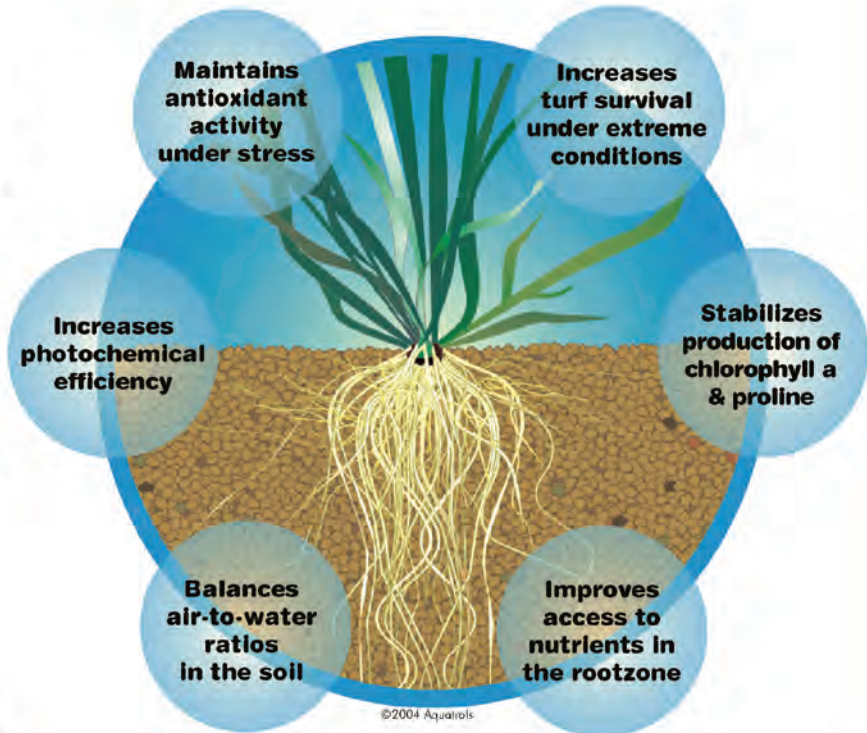
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almost 25 miles of orange-poly fencing installed to identify and protect stands of trees as we began clearing. We had lots of conversations with Robert Walker, the golf course architect, over routing and specimen tree placement and protection. I've been to our corporate headquarters in Dallas several times and some of the largest pecan trees I've ever seen are incorporated into the landscape of the office complex. The man loves his trees."

Bass continued, "We are virtually surrounded by the Apalachicola State Forest and there are three continuous wildlife corridors running across the property that provide safe passage for the wildlife."

Consequently the course can be described as tight and challenging for those who tee

important role as representing the golf industry for state legislators to see up close. Grateful thanks go to Jeff Heggen, external vice-president for his tireless efforts over many years to represent the chapter and to relay FGCSA communications to his members.

Around 16 of the 23 members made 45-mile the journey to see and play the new St. James Bay course. The whole operation had that "new car aura about it and there wasn't much for the Coastal Plains superintendents playing the course to comment on other than how clean the course looked. The two-year old TifEagle greens were flawless.

Bass came on board the St. James Bay project three months before clearing began. This is an ideal situation for a superintendent, and pays div-

and so it is with St. James Bay as Bass found himself not only building and growing in a golf course but also working with contractors building roads and developing lots. As if his plate weren't full enough, Bass managed to attain his certified golf course superintendent status with the GCSAA at the same time.

There's no question that the Panhandle of Florida marches to the beat of a different drummer. While superintendents from Jacksonville south are hastily preparing for the winter migration of snowbird golfers, Carrabelle and the "Forgotten Coast" mark December, January and February as their slow season. That fact, says Bass, is why they have chosen not to oversee the TifEagle greens — or the rest of the course, for that matter. Bass says,

Superintendent Facts



The Bass family: Shane, Karla and Bryce.

Shane Bass, CGCS

Originally from: Titusville

Family: Wife Karla and son Bryce

Education: B.S. in ornamental horticulture from

Florida A&M.; B.S. in psychology from Florida State University

Employment history: 2001-Present St. James Bay, superintendent; 1999-2001 Lely Resort-Flamingo Island Club, superintendent; 1996-99 Killlearn C.C., assistant superintendent; 1995-96 Royal Oak C.C., assistant superintendent; 1991-95 Killlearn C.C., crew member.

Professional affiliations and awards: Member of GCSAA and FGCSA. vice president of the Coastal Plains GCSA chapter.

How did you get into the business? In high school I worked the golf carts at Royal Oaks C.C. in Titusville. I was influenced by Steve Hill the GM/golf pro and went to FSU with the intention of becoming a general manager. During my studies at FSU, they needed some help on the Killlearn CC course to prepare for an LPGA event. It was there I met Geri Bucheit and Floyd Robinson and changed my mind. Geri hired me and let me work on the

course around my class schedule as I went back and got my BS in ornamental horticulture.

Mentors: Geri and Floyd. Floyd was old school and had been in the business for 30-plus years and Geri was a Texas A&M grad with lots of PGA and LPGA tournament experience. I had a great learning atmosphere of the old and new ways of doing things. I also owe a big debt of thanks to my parents who taught me never to quit on anything no matter how difficult it might be.

Goals and accomplishments: Becoming a CGCS, achieving Audubon International certification as a Silver Signature Sanctuary and opening a new course all in the same year.

Work philosophy: Live every day as if it is your last. Smile and put your family first.

Memorable moments: Telling my wife after she had our son Bryce, "You can name him anything you want.

Hobbies/Interests: Fishing, surfing, golf

it up from the tips, but I played it from the white tees as a 22-handicapper and the only real trouble I had was from poor shot-making. Because the course is built in a coastal marsh environment surrounded by pine forests there are numerous carries over preserved wetlands, but the GPS Shot Link monitor on the cart gives yardages to help club selection, shot strategy and pace of play.

Bass was hosting the November chapter meeting of the Coastal Plains GCSA during my visit, which gave me a chance to meet some of the members of the state's smallest chapter that exists primarily in the metropolitan Tallahassee area. Although small in number, the chapter holds an

idents down the road for owners who have the foresight to recognize how valuable a superintendent can be to the overall picture. Bass said, "I was included from the beginning and worked with Mr. Clark, the engineers and the architect Robert Walker. I was able to voice maintenance concerns and help the owner realize his vision of a golf course with reasonable maintenance costs. The original design concept had lots of contoured fingers in the bunkers requiring lots of Flymow work. We were able to negotiate down the number of bunkers with fingers to 13 out of a total of 60 bunkers."

As just evidenced, communication is always a key element in any successful operation

"Sure we can have some cold days, but by being so close to the Gulf, our weather is definitely warmer than, say, Tallahassee to the northeast. We have some shaded greens we have to watch closely because of the surrounding trees, so we don't need the extra competition with the overseeding; plus Mr. Clark is an avid golfer and he really despises transition."

One of Bass's early challenges was in finding and training a golf maintenance staff in an area not previously known for the sport. Besides Bass the only people on the crew with experience were his assistant Larry Johnson and equipment manager (and former superintendent) Floyd

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Golden wildflowers flourish in a preserved native area on the par-4, 16th hole. Photo by Daniel Zelazek.



These golf villas were built on the foundation slabs of Camp Gordon Johnson's 600-foot radio tower used during World War II. Photo by Joel Jackson.

Robinson. The area's primary labor pool consisted of former fishermen and oystermen but, once they understood the mission and learned their roles and responsibilities, Bass says they have become a topnotch, dependable team.

Bass is part of the new generation of young superintendents. They grew up with environmental issues as part of their education and routine content in the news. Bass says he does not find managing golf turf within the Audubon program any more time-consuming than any other maintenance program he was involved in while learning the business.

Bass praises his mentors Steve Hill, Geri Buchheit, CGCS, and Floyd Robinson. From them he received encouragement and training in the business from the pro shop operations under Hill at Royal Oak CC in Titusville to golf course maintenance from Robinson and Buchheit at Killlearn CC in Tallahassee. Bass said, "Floyd and Geri were great teachers. They came from two different generations of superintendents so I got a lot of practical turf management history and changes from them. Geri's active involvement in environmental stewardship, the Audubon program and working with the Leon County Extension Office with their Master Wildlife Conservation Program made a lasting impression on me."

Bass said, "The truth is we use fewer chemicals now and the course is in great shape. The only times I use a boom is to foliar feed the greens and treat greens for armyworms, which are our biggest nuisance up here. I do apply some pre-emergent herbicides for *Poa annua* control in the cool season. We spot-treat all weeds with 2.5-gallon sprayers. I have trained three guys to identify and treat weeds. It takes them maybe three days total to do the whole course. We spend less on chemicals and labor doing it this way, and we certainly don't

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The 9th hole. Play it safe or challenge the lake on the long par 4. Photo by Daniel Zelazek.



On the 5th tee, native muhlygrass's lavender inflorescence on display. No. 8 green is in the background. Photo by Daniel Zelazek.

overspray in this sensitive environment.”

This selective, curative approach seemed to be working as the course was 99 percent weed-free on my tour around the links, and Bass was hard-pressed to identify any really tough turf management challenges at the course. After nudging him further, he did acknowledge that armyworms were the worst in the Panhandle than any other place he'd been from Tallahassee to Naples.

He said, “People told me that armyworms can be a problem with new turf and grow-in and they were right. But I still take a cautious approach and monitor the damage until the extent of the infestation is known. Mr. Clark concurs with a threshold-level approach to minimize pesticide use. When I treat I generally rotate Talstar and low rates of Orthene. I tried Di-Pel, but it took a little too long and the damage became unacceptable.”

Bass also said, “I do have some torpedo-grass problems that were self-inflicted. Fill dirt excavated around one of the original lakes on site had some torpedo-grass infestation and the dirt got used on the course before we had a chance to fumigate it. However, we keep an eye on known spots and make several applications of Drive during grow-

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The par-5, 15th hole doglegs around a wetland from tee to green. The wetlands are hand-pruned at least twice a year. Photo by Daniel Zelazek.

ing season, which has been keeping it in check.”

Overall Bass maintains he is blessed with a great sandy site that drains well. Among

other things this was once forestland harvested for paper production. Most of it is sandy and well drained. Bass says only two or three holes at the

lower end of the property have heavier soils that require close moisture management. He says there are at least three micro-environments on the site

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Fun Facts



Bryce Bass – Future Superintendent? Photo by Shane Bass

Here are some things you may not know about our cover story superintendent

Car: Ford F-150

The last good movie I saw: Finding Nemo

I stay home to watch: FSU Sports
The book I've been reading: The Going to Bed Book by Sandra Boynton
Favorite meal: Rock shrimp and corn fritters (Dixie Crossroads, Titusville)
Favorite performers: Jimmy Buffet
Prized possessions: My family
Personal Heroes: My parents
Nobody knows that I: Would rather be surfing
I'm better than anyone else when it comes to: Fishing (That's for TC & BJ)
I'd give anything to meet: Flip Pallet
My fantasy is: To work on a golf course that doesn't allow carts
The one thing I can't stand: People who are lazy or liars
If I could change one thing about myself: I would learn to count to 10 before I speak
My most irrational act: Anytime I don't count to 10 before speaking
My most humbling experience: My son being born
The words that best describe me: Loyal, passionate and dependable.



Florida Green Cover Photographer Daniel Zelazek shown here in his pre-dawn set up at St. James Bay, which resulted in this issue's cover picture. Photo by Shane Bass.

water quality, his wells are also used to measure the water table levels and he reports these depths twice monthly to the Northwest Water Management District. It wasn't a formal requirement, but he wanted to stay ahead of the curve and demonstrate a proactive approach to working with regulators.

The irrigation system has 711 heads, mostly part circle, which were strategically located so that irrigation water would not carry into the wetlands and uplands, and the 15 lakes are interconnected so that the surface water at the low end of the property can be pumped back up the line and be recirculated allowing more filtering of the water before it leaves the property. There are no deep wells for recharging the irrigation lake.

By providing 85 acres of open turf area in the densely wooded area, the golf course has created lots of "edge habitat" which helps to increase biodiversity in the area. Bass says wildlife ranges from deer, bobcat, coyotes, foxes and an occasional bear to rabbits, squirrels and many species of birds. I saw a couple of hawks, an osprey and hundreds of perching birds on the course, including an eastern bluebird.

As man and nature learn to co-exist on amicable terms, Bass is working on a solution to a unique problem. He said, "Of course we love the wildlife; it's part of what this is all about. But right now I am stumped trying to find a way to keep the young coyote cubs from chewing (teething) on our bunker rake handles."

In a part of Florida where time moves just a little slower and rapid development even slower, St. James Bay has preserved small pieces of man's history on the land, and even larger expanses of the native land itself. It's a guarantee that this part of Florida's coast will not be forgotten at all.



Maintenance friendly – this fairway bunker on the first hole is one of only 13 with extensive fingering out of the total of 60 bunkers on the course. Photo by Joel Jackson.

requiring different irrigation and nutrient management approaches to maintain good healthy turf and not waste resources.

The numerous preserved wetland areas are pruned back at least twice a year by hand to keep sight lines open and shot-making over them possible. The series of marshes and lakes provides the surface water used for irrigation, although an agreement is in place for the course to take effluent

as needed from the nearby town of Carrabelle in the very near future. Taking advantage of the filtering effect of properly managed turfgrass will provide efficient disposal of the town's effluent and Bass reports that the water quality sampling in his monitoring wells required under the Audubon Sanctuary program has shown a decline in background nitrate levels already as the turf has matured.

Bass says that besides monitoring

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201 Crooked River Rd, Carrabelle, FL
Congratulations to Shane Bass, CGCS, and his club for being selected
as the Winter 2005 cover story for the Florida Green!

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What We Have Here is a Need to Communicate

By Bruce R. Williams, CGCS

Golf course superintendents do a wonderful job of providing great golfing conditions. Some have learned the trade through formal education and others have learned through hard work and good mentors. At some point we all acquire the skills to keep the turfgrass looking super within the constraints of our budgets and weather conditions. However, there is one area that I believe to have a wide variance in competencies and that is our ability to communicate.



Bruce Williams, CGCS, MG

I have a couple of theories on communication and how it can affect superintendents. By sharing them in this article, I am not expecting everyone to agree with me but it may start a few people thinking about the value of communication.

- More people lose their jobs over poor communication than poor turfgrass conditions.
- Many superintendents miss opportunities to shine by not telling their stories.
- Writing, speaking, providing reports, etc. are not natural talents but skills that must be acquired. They take practice and effort.

Let's look at a few things that you might be able to put into practical application at your golf course.

I hope you have some vehicle to convey your message to your golfers. Standard vehicles would be a golf course newsletter, a Web site, bulletin boards in the pro shop, locker room, etc. Every month I receive about 100 newsletters from clubs all

across the country via our GM. Only 20 percent have monthly articles from the superintendent, yet all of them have monthly articles from the pro and GM.

The same is true with Web sites. Some superintendents have done a marvelous job of contributing to their golf course Web sites but again the golf pros and managers outshine us in this category. It is easy to say that you don't have time to write a monthly message but I would say that you can't afford not to take the time to communicate clearly the great and exciting things that are happening on the golf course.

I can't tell you how many times I have had peers tell me the Rodney Dangerfield line "I don't get no respect." Perhaps it is because we don't do a great job of developing our own public relations campaigns. It has been said that the three key steps to promoting your success are:

1. Do the right thing.
2. Do the right thing.
3. Tell people that you are doing the right thing!

To be successful and receive the respect you are due, you must recognize opportunities and take advantage of them. When you get a chance to attend board meetings, committee meetings, golf advisory meetings, etc. welcome the opportunity. Prepare well for these meetings and be certain to present your message professionally either verbally or in print. Too many people shy away from these opportunities. When you are invited to the Guest Day banquet, don't turn the chance down. Sure, you got up at 4 a.m., but you owe it to yourself and your crew to rub elbows with the players and receive the accolades for the great golf course.

When problems arise on the golf course, don't allow someone else to tell your story. I never want to depend on a waiter, bartender, golf shop employee, etc. to explain why we have some thin

areas on the golf course. The message is sure to get mixed up and perhaps put you in a bad light. Be accessible when problems exist. People typically want to know three things when trouble happens on the golf course.

1. What happened?
2. What are you going to do about it?
3. When will it be back to normal?

Nobody can carry the message better than you. Communicate it every way you can until the problem is resolved.

A picture is worth a thousand words. Use pictures as a vehicle to communicate your successes or to demonstrate areas that need improvement. In this era we should all learn to utilize digital photography and power point to make powerful presentations to promote programs and projects. It is a tool that can make us all look pretty good in front of our employers.

While space does not allow me expand on the subject, suffice it to say that the largest area for communication improvement is the skill of listening. If you go to the library you will find hundreds of books on public speaking. However, I doubt if you can find any that deal with listening. Listen to what your golfers want. This can be done through customer evaluations or personal feedback. Don't hear what you want to hear but try to understand what people are really saying. Don't be defensive. Learn to accept constructive criticism. Employers want people that bring them solutions rather than someone who gives excuses.

Think about the top five superintendents you know. What puts them in this special category of high esteem? Is it their ability to grow grass or is it their ability to communicate? I feel strongly that today the grass growing is the fundamental part of the job but the ability to communicate is paramount to career success.



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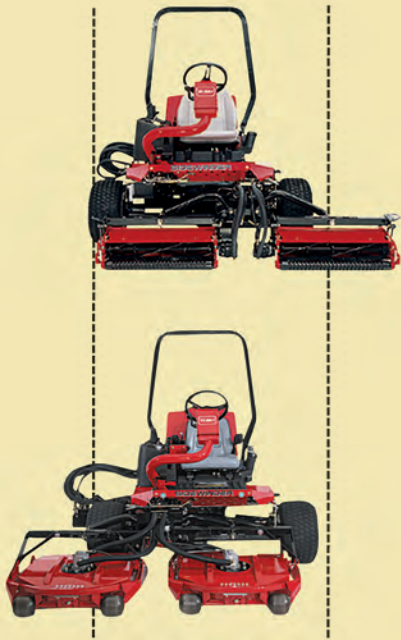


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What's Up with Weed Control?

By Joel Jackson, CGCS

After Illoxan came out in the late 1990s to provide a new weapon for goosegrass control and Basagran and Manage were rolled out to battle the sedges, it seems like there has been a long gap in new weed-control products other than the controversial clopyralid (Lontrel) for broadleaf control. Users who did not follow the label and let clippings of treated grass get into municipal compost operations caused the problem. Meanwhile we have relied so heavily for so long on MSMA for grassy weed control; perhaps the recent concerned focus on arsenic levels in golf course soils stirred the pot and hastened new products in the pipeline. Maybe they just needed a nudge.

Whatever the cause, Revolver and Monument have debuted recently and, according to two of the articles below, have proven to be effective weapons and can replace MSMA in some cases. One holdout that still seems to respond only to MSMA is tropical signalgrass. Sure hope the scientists are working on an alternative. The makers of MSMA are still negotiating with EPA and Florida DEP to do a study to prove that MSMA is not a problem for arsenic loading in the soil, but the jury is still out on the successful defense of the product. Don't be surprised to see some label changes in the near future.

Just to restate some of the obvious trends that will be evident in the articles below and echoed in the cover story on St. James Bay, the days of large-scale boom spraying are over. There may be some isolated cases of course renovation and cleanup after years of neglect where large-area boom-spraying may be required, but the trademark of responsible pest management is spot spraying.

Over the past 10 years, the business and environmental climates have forced superintendents be more frugal and sensitive to the environments they manage. Consequently less material is being applied and only where needed.

From the manufacturing side, products are becoming targeted to specific weeds. While that may drive up one aspect of the cost of weed control, the amount of active ingredient required is smaller,

helping to offset the cost. Some courses are resorting to consistent, gradual hand-pulling of obvious weeds.

If you are using less MSMA and 2,4,D, make a note of that fact. Document your chemical use, especially if you are using less overall. This is a good story and needs to be shared with our regulators and legislators. From my travels, it appears to be the trend, but I don't want to generalize. Now read on for current weed control programs at three Florida courses.

Keeping it Simple at Seminole

At the Seminole Golf Club we try to follow strong agronomic practices such as proper fertility and irrigation to keep the bermudagrass as healthy as possible, thus reducing weed intrusion and the need for chemicals for weed control. My worst weed problems have come either from over-irrigation or weak bermudagrass turf. As a result, 90 percent of our current weed control is hand-spraying post-emergent herbicides, or hand-cutting and -pulling bigger weeds such as goosegrass.

The only time we really boom-spray for weeds is during the summer when the golf season is over, mainly because of the potential for discoloration of the turf and, of course, most of our weeds are more active that time of year. We do not use pre-emergent weed control because of our strong post-emergent control program.

For the first time, we now have a full-time chemical technician who works only on weed and insect control. This has almost eliminated the need for boom spraying and pre-emergent control at Seminole.

We use the following products:

- 1) Broadleaf weeds - Lesco 3 way, Quicksilver and Manor (for spurge)
- 2) Grassy weeds - MSMA, Illoxan
- 3) Sedges - Basagran, Manage

We have experimented with Monument but have seen no great advantage over the products mentioned previously. Again, the key for us has been to keep the turf healthy and constantly "spot spray" or cut out weeds, which reduces the use of herbicides. We try to keep our weed control as simple as possible.

Hal Hicks, Superintendent
Seminole Golf Club

Good for the Goose, Good for the Sedge

Goosegrass was the No. 1 weed problem when I arrived four years ago, but we started an aggressive weed pulling program which I feel was very helpful in removing future seeds. Then we started spot-spraying with MSMA and Sencor in a

15-gal. sprayer. At the same time we applied Ronstar at 2 lb. of active ingredient per acre in January, April and October. This has really worked well for us.

I did try a fourth application in the summer twice and did not think it was cost effective.

Currently our two biggest weed problems are crabgrass and the sedges. We are using Monument on sedges with fantastic results, and MSMA on the crabgrass. The areas of sedge infestation are large enough right now to use a boom sprayer but that should change as we get a better control of the problem.

We are using a 15-gal. electric sprayer for spot-treating the crabgrass. This year we also used Monument in the rough on some goose grass with very good results. The chipping green also had large areas of goosegrass that got out of control after the hurricanes this year. I used Monument on the Tidwarf for these areas and saw no damage to the 'Dwarf and had excellent control of the goosegrass.

Michael Carver, Superintendent
Monarch Country Club

Timing is Everything

Revolver is great for goosegrass, but it may require two, three or, in some cases, four applications to really get the goosegrass under control, especially in heavily infested areas. Timing is critical to be successful. I made a second application 10 days after the initial application. Generally this will kill the mature weeds.

For heavily infested areas, third and fourth applications at 10-12-day intervals may be needed to control juvenile plants springing up from the germinating seed bank in the soil as long as the weather is favorable for germination. A little lower rate will work in the follow-up applications because you'll be going after the seedlings. Again timing is the most important thing using Revolver. Goosegrass is tough and loves heavy traffic areas, so you need to be aggressive with the turf you have, and try to cultivate a healthy turf cover to prevent infestation.

Revolver also took out *Poa annua* in bermudagrass very well, but *Poa* seed can lie dormant for years so problem areas will probably need multiple applications over the years.

I did a test study for Syngenta before Monument was labeled for the U.S. It works great on all of the sedges and kyllinga. It seemed to eliminate the sedges after two applications, where as Basagran and Manage seemed to do as well on the root systems. Monument gave longer control and it also worked well on taking out unwanted *paspalum* in bermudagrass. It is also labeled for torpedograss

MSMA vs. Arsenic: The Facts

MSMA is an organic herbicide that has been used safely and performed reliably for over 40 years. Its toxicity and behavior in the environment have been studied extensively. All studies have shown that there are no significant health effects associated with MSMA, and that it does not pose risk to the environment.

The molecule of MSMA contains arsenic just like the molecule of water (H₂O) contains hydrogen and oxygen, or the molecule of table salt (NaCl) contains sodium and chlorine. Arsenic, like hydrogen and chlorine, can be dangerous in certain forms and not in others.

There are two groups of arsenic compounds – organic and inorganic. Organic compounds of arsenic are those in which a carbon atom (C) is bound to the arsenic atom (As). MSMA is an organic compound of arsenic. Organic arsenic compounds are less prevalent in nature and are 10 to 100 times less toxic than inorganic compounds. They are much less toxic to aquatic organisms, are not mutagenic, and unlikely to be carcinogenic to humans.

Arsenic is a ubiquitous element occurring nearly everywhere on earth as a component of soils and natural rock formations. The common form in nature is inorganic arsenic and hence the term “arsenic” usually refers to the inorganic form. Long-term exposure to inorganic arsenic can cause health problems.

The carbon-arsenic bond found in organic arsenic is stable under a variety of environmental conditions, thus it is highly resistant to chemical degradation. A small number of soil micro-organisms are capable of metabolizing MSMA via cleavage of the carbon-arsenic bond, to form inorganic arsenate. However, conditions in field soils are unfavorable for these processes. If small amounts of inorganic arsenicals are released through this process they are rapidly inactivated in soils by forming insoluble salts of iron and aluminum.

Inorganic compounds are used in the glass and ceramic industries and as feed additives for poultry and swine. Arsenic trioxide (As₂O₃), the most important commercial arsenic compound, is produced as a byproduct of the smelting process of copper and lead ores. Inorganic arsenic compounds are no longer used in agriculture because of their toxicity. Organic compounds of arsenic, including MSMA, are

used in agriculture, forestry and turfgrass management as pesticides and herbicides.

The greatest portion, by far, of applied MSMA binds to soil particles in the top-most layers of the soil. Most soils have been shown to have extensive capacity to trap and hold organic arsenicals tenaciously, so they are not dislodged through the soils by natural flow of water from irrigation or rainfall. In fact, when performing soil analysis in the laboratory, rigorous digestion processes (i.e. digestion in strong acids at high temperatures for a day or two) are required to remove the bound arsenic from soil particles. Such processes never happen in the natural environment. This binding or “sorption” acts as a scavenging mechanism, preventing MSMA residues from leaching into underlying groundwater. Proper application of MSMA is not likely to cause leaching of organic arsenical residues in a wide range of soil types.

In conclusion, MSMA is a nontoxic organic compound that has been safely used as a highly effective broad-spectrum herbicide for grassy weeds for over 40 years without risk to human health or the environment.

(Editor's note: The facts and statements above were taken from fact sheets supplied by the MAA (MethaneArsonic Acid) Task Force (MAATF). The Problem: The only way to test for arsenic in the field samples is to measure total arsenic. The samples are put through the rigorous “un-natural” laboratory digestion process and the arsenic amounts do not specify where the arsenic came from (soil, water, fertilizer, mulch, rock or herbicide or previous human activity). The state says it currently must regulate by total arsenic levels. In some previous studies, samples from mix/load sites were combined with random samples on the golf courses thus confusing the results of normal use accumulations versus a more controllable mix/load location. The MSMA manufacturers are currently working with Florida regulators to conduct specific tests to see if the normal use of MSMA does pose a risk to the environment. If you have any questions regarding the use of MSMA or want more information, you can contact Dr. Michal Eldan, Ph.D. at MAATF, P. O. Box 33856, Washington, D.C., 20033-0856. Phone: (800) 890-3301; Fax: (901) 761-9477; Email: meldan@luxpam.com

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but I prefer Drive at 0.5 oz. in 5 gallons of water. It doesn't burn the bermuda. Multiple applications will be needed. Torpedograss is a real tough one to control.

Tropical signalgrass is also a tough customer to deal with. I use MSMA at 2.25 pints/acre tank mixed with Sencor at 0.25 oz./acre with a spreader-sticker. This mix is applied on roughs mowed at 1.5 inch height and up.

When spraying tee tops and fairways, we apply the same products at two-thirds the previous rate. Second and third applications will be needed. Timing again is important. Use a 7- to 10-day interval between applications, not 7 to 11 days.

When mixing small quantities for spot spraying, the DEP people and some labels require 0.5 ounces of MSMA per five gallons of water. This just doesn't work.

(Editor's note: When you break down the ratio of MSMA (2.25 pints = 40 ounces) in a 100-gallon tank, it comes to 2 ounces of MSMA per 5 gallons of water. There seems to be a conflict concerning boom application and hand spraying concentration of MSMA in a given square foot.)

For broadleaf weeds I typically use Lesco Three-way, Trimec Southern formula, and Pro-Source Strike Three at 0.75 oz./gal. for spot spraying, and no more than 40 oz./acre with a good surfactant if using a boom sprayer. Again timely repeat applications at 7-10 days have to be done or you're just throwing money away.

As far as equipment, I use 2-gal. pump-ups and 15-20-gal. electric sprayers. I also have a small 10-foot boom sprayer calibrated to 30 gal/acre and pull it behind a cart and use it where I can.

I think the boom sprayer has been a valuable tool. You can cover in an hour what would take someone all day to spot spray. For those concerned about over-spraying beyond a solitary target

weed, I feel that with the small boom you are taking out small immature weed seedlings not readily visible, especially in chronically infested areas.

Royal Poinciana is more than 30 years old. Weed control will be an ongoing program. You just have to stay with it and have some good guys or gals who like their jobs and don't let it get to you. With a good timing program, you'll get great results. Remember to follow all of the Personal Protection Equipment requirements on the product label.

Ken McCalister

IPM Manager, Royal Poinciana Golf Club

Q&A with Jim Walker, Greynolds Park G.C.

What is your No. 1 weed problem at a high-traffic municipal golf course, and how do you manage it?

Our biggest challenge is goosegrass. We apply Barricade at the label rate in October and February. We spot treat with a MSMA and Sencor mix for any weeds that break through.

Do you do any boom spraying these days or is it all spot treatments?

The only time we use a boom is for treating large patches of sedge.

Last year there was a lot of discussion about MSMA on golf course and the debate continues. What has been your approach?

We have reduced our overall use of MSMA 90 percent. As I said earlier, we only spot-treat using a 15-gal. electric sprayer to limit the treated area.

Have you tried some of the new products like Revolver?

We tried it once, but had poor results.

Anything else?

Well, we mechanically remove (hand-pull) weeds from tee tops, collars and fairways or obvious weeds anywhere. I use a paint brush to dab on MSMA on signalgrass. It's the only product currently on the market that will touch it.



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Wagons Ho!

Improving the Utility of a Utility Vehicle

By Darren Davis

The phrase, "Give credit where credit is due," was instilled in me at an early age and I have

capacity of a Toro Workman vehicle.

The idea of converting the Workman into a stake-bed "wagon" originated more than five years ago when my local Toro distributor, Wesco Turf, delivered a piece of equipment that I had ordered. I noticed that the driver also had a Workman utility vehicle on his truck. The Workman caught my eye because of the high wooden sides that someone had constructed on the



Creating a high-sided wagon accessory for the Toro Workman cost less than \$100. Photo by Darren Davis.



This view shows the tailgate assembly and the "tension" chain that keeps the back and sides from rattling during transport. Photo by Darren Davis.

always tried to live by that rule. Unfortunately, in the case of this Super Tip, I am unable to credit the originator of this idea that increases the utility

bed of the vehicle. I took a few pictures of the construction and stored them away for future use. Recently, I came across those pictures and I was reminded of the idea.

The task of recreating the Workman wagon was subsequently assigned to my long-time equipment manager, Guillermo Gomez. Guillermo, or "Memo" as we refer to him, accepted the assignment, analyzed the pictures, and went to work on the task. As you will see in the pictures, it is not an overly complicated piece of equipment and Memo completed the construction of two wagon accessories in less than eight hours.

The wagon rails can be installed in or removed from our Workman 3200 full-bed utility vehicles in less than five minutes. Tools that were used on the project include a measuring tape, a circular saw to cut the boards, a table saw with a blade capable of cutting steel, a paint brush, and two socket wrenches to attach the boards to the metal supports.

The sides, back, and tailgate are four boards high, extending 23 inches above the Workman bed. The side boards measure 64 inches in length, the back boards measure 51 inches in length, and the tailgate boards are 53 inches in length. The wood planks that we used are 5-5/8 inch high by 1/2-inch wide.

Both the side- and back boards are bolted to a 2 by 1-inch piece of channel iron that is cut to a length of 34 inches. The channel is attached to the boards (open side out) so that the channel can slide into the 2-1/4-inch square holes on the back and sides of the Workman bed. To add stability to the side and back pieces, a piece of 2-inch-wide, flat metal stock (23 inches in length) was bolted to the boards in the middle of each section.

When the two side rails and the back section are placed in the Workman bed there is a little play, which can create a rattle, and be annoying to the operator and/or distracting to golfers. For ease of storage when not in use, and for ease of installation onto the Workman bed, we did not want to permanently affix the side rails to the back. Therefore, to stabilize the sides and back when the wagon is in use, a bolt with a "hook" end was placed on both sides at the top, back of both side pieces. Between the two hooks, a 43-inch piece of chain is attached, and when the bolts are tightened it pulls the chain tight which squeezes the back of the wagon snugly into the sides.

The tailgate was constructed to the same height as the sides (23 inches) and the width is 53 inches. A 23-inch piece of metal plate was bolted to the boards in three locations to secure the tailgate. When the tailgate is desired, it easily slides into a groove created by a 23-inch piece of 2-inch "L" steel that was bolted on both side pieces. When installed, the base of the wooden tailgate rests on top of the Workman tailgate. Two 6-inch handles were also attached to the wagon tailgate for easier installation and removal.

The final step in construction was to apply a coat of Kilz primer, and then the following day a coat of "rust-stopper" black enamel was applied. Excluding labor, the cost of each wagon accessory was under \$100.

Obviously, the engineers at Toro have a designed load capacity for the Workman that should not be exceeded. However, we have found the wagons very useful when we are hauling bales of pine straw, picking up palm fronds, or other light debris. We have also found the wagon beneficial when we are transporting walk-behind spreaders. The high sides decrease the likelihood of the spreaders tipping over or falling out.



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Hurricanes Set Record Nobody Wants Broken

By John H. Foy

The 2004 Atlantic hurricane season will certainly go down in the record books, and I for one hope the record is never broken!

Things got started off with Charlie taking a sharp right turn and making landfall in Port Charlotte on Aug. 13. This devastating category 4 storm traveled across the central part of the state and moved out into the Atlantic near Daytona Beach. Over Labor Day weekend, Hurricane Frances made landfall on the south end of Hutchinson Island. This very slow-moving category-2 storm affected the lower east coast from Palm Beach County north through Vero Beach and Melbourne. After making landfall, Frances turned north and worked her way up through the central part of the state, crossing over the earlier path of Charlie. Less than two weeks later,



John Foy

Hurricane Ivan threatened the Florida west coast on a similar path to Charlie before making landfall just east of Mobile Bay. Ivan was an extremely powerful storm that devastated a good portion of the Florida Panhandle before moving up through the southeast and exiting into the

Atlantic. While Ivan never regained hurricane strength, its remnants did circle back south, and dropped an additional 4 to 6 inches of rain over Florida.

After making a circle move out in the Atlantic, Hurricane Jeanne turned west and made landfall during the last weekend of September. Along with intensifying to a category-3 storm, the eye of Jeanne made landfall within two miles of where Frances came on shore. The odds of winning the Florida lottery are better than the odds of two hurricanes coming on shore so close together. With four major hurricanes hitting Florida, the entire state has been impacted and some areas endured the path of two or even three storms.

For the few days before and after a storm, the news media provides ample coverage of hurricane preparations, the actual storms, and then the impacts of these natural disasters. However, it is impossible to fully appreciate the disruptions and impacts on every-

day life caused by hurricanes.

Battening down the hatches and taking on supplies in preparation for a hurricane consumes several days, and during this time everyone's mental and physical stress progressively increases.

Regardless of whether you evacuate to a shelter or ride out the storm in your home that has been closed up with plywood or storm shutters, stress levels hit a peak. The electricity inevitably goes out and you end up spending hours sitting in the dark listening to the howling winds and battering rain. Once the storm passes, people gradually come out and make initial



Impacts to golf courses from Florida's 2004 hurricane season may last longer than just debris clean up. Photo by Greg Phenegeer

damage assessments. For the first several days after a storm, recovery efforts are very slow to begin because of downed trees and power lines that make the roads very hazardous. Once recovery efforts begin in earnest, life slowly begins to return to normal, but it still takes weeks to fully get back to pre-storm routines.

Essentially every Florida golf course was impacted as a result of the hurricanes. The exception to the rule were the lucky few who were on the outer edges of the storms and experienced only minor wind damage and periods of heavy rain. For the vast majority, extensive tree and landscape plant material damage was experienced. Reports of 100 or more trees blown down are common, and for courses along the Treasure Coast that were in the path of both Frances and Jeanne, damage to 300 to 500 trees was typical. While it will be possible to save many of the trees, the aesthetic character of the golf courses has forever

been changed.

Another consequence of the storms was defoliation of trees and landscape plant material. The result is a look similar to the mid-winter as opposed to the end of the summer. While regrowth has been occurring, it will not be possible to make a full recovery prior to the onset of the winter play season.

On a positive note, the hurricanes did help address some tree and landscape problems. While certainly not as selective as desired, damage and loss of trees has effectively alleviated shade problems that existed at many courses. The challenge will now be fighting off demands to replant trees, which would re-create shade problems a few years down the road. At many South Florida golf courses, over-planting and the use of noxious, exotic plant material is a common problem. Hurricane damage is an excellent reason for removal of this material and, where necessary, replanting with native and better-adapted materi-

al. Damage at facilities where pruning and on-going landscape management programs were in place was less compared areas to where this basic component of course management was ignored.

Along with the obvious damage to trees and landscape plantings, bunker damage was another major consequence of the storms. In addition to the loss of sand due to wind erosion, severe washouts and sand contamination was experienced. At some courses, working the remaining sand back into place and adding an inch or two of new material will suffice. However, at the vast majority of courses that I have visited, the bunker sand is so severely contaminated with soil, rocks, shell, and organic debris that complete removal and replacement is the only option for recreating pre-hurricane conditions.

Repairs to damaged turf perimeters and internal drainage systems also are needed. Replacement sand costs alone can easily exceed



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\$50,000 to \$75,000, and then there is the challenge of finding a contractor to perform this work. No doubt at some courses it will not be possible to complete the repairs and refurbishment work before next year.

Thunderstorms and a lot of rain can always be expected in Florida during September. However, in Palm Beach County the hurricanes dumped more than 28 inches, which broke all previous records for monthly rainfall in September. Naturally, course flooding was a common problem, and matters were compounded at facilities located on the barrier islands, which were inundated with salt water. It has been my experience that the bermudagrasses are a resilient species, and can recover after being under water for a couple of weeks or longer. As soon as the water recedes, aeration of flooded areas is recommended to aid in the recovery process.

Unfortunately, we are quickly running out of good growing weather and thus a complete recovery will not be possible. Record-setting rainfall has flushed all nutrients from the soil, and it is necessary to start all over with fertilization programs.

Clean-up of storm debris that littered every square foot of golf courses is very time-consuming and must be completed before routine maintenance practices, such as mowing, can be re-initiated. Debris clean-up can easily take a week or two, and it is being reported by many courses that finding extra help has been very difficult, further prolonging the clean-up process. Direct turf damage from the hurricanes fortunately did not occur, but having to take heavy clean-up equipment out onto the very wet and soft turf causes damage and will require additional repair work.

At the very least, the hurricanes caused a two- to three-week setback in course preparations for the upcoming winter season. For those who have had to deal with two or even three storms, the preparation setback is more in the six- to eight-week range. To compensate for environmental stresses, heights of cut have been raised, and several weeks

will be required to gradually work heights back down and reestablish appropriate conditioning. It is very important to minimize scalping damage so as not to exert additional mechanical stress and further slow growth and recovery.

I have been impressed with the speed at which recovery efforts have progressed so that the courses can be reopened to play in pretty good overall condition. As we go into the winter season with a much weaker base turf cover, there will be additional challenges and problems with maintaining course condition and quality in keeping with expectations during the winter season. Regardless of inputs, making a full recovery from the hurricanes will not be possible for many until next spring and summer. Ongoing golfer education efforts throughout the winter months are advisable to foster a degree of understanding and patience about the impacts of the 2004 hurricane season.

Green Section Internship Program – A Valuable Experience

By Todd Lowe

The USGA Green Section Internship Program offers opportunities for students studying turfgrass at universities throughout the United States to travel with USGA agronomists for one week each year. Some students hope to be golf course superintendents while others aspire to be turfgrass researchers, professors, or active in some other aspect of the industry. In any case, the internship is a real eye-opener as to the issues that superintendents face on a daily basis.

The Florida Region recently completed the 2004 Green Section Internship Program. Two graduate students from the University of Florida, Tina

Duperron and Nick Pool, learned a great deal about golf course renovations, managing golfer expectations, and factors affecting the long-term health and playability of golf course turf. The interns also evaluated the playability of seashore paspalum for Florida golf courses.

Some of the agronomic issues discussed during Turfgrass Advisory Service visits included putting green playability and issues affecting turf health. Nematodes were active at most of the golf courses during the visits, and various chemical and cultural programs were discussed. Also, with the peak golfing season approaching, protecting the turf against excessive cart traffic was a common topic as well.



Todd Lowe

Numerous other topics were discussed and the interns were busy taking notes during each visit.

The action-packed week was filled with TAS visits, courtesy stop-by visits as well as a regional golf course superintendents meeting. The interns also interacted with Edison Community

College's Golf Course Operations director, Dr. Lee Berndt, as they toured research/demonstration plots and discussed an upcoming USGA-funded research project that will be conducted at the college. Lastly, the interns attended a golf club membership meeting, where a presentation on putting green renovation was followed by a lively discussion with the members.

Having once been an intern myself, I know that the USGA Green Section Program is a valuable experience. No matter what segment of the golf course business the interns choose following graduation, the information gained during the internship will certainly benefit them and the entire industry.

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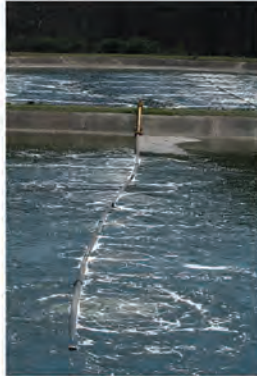
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Methyl Bromide Critical Use Exemption Update

Partial Approval Granted for Florida's Needs

It took years, mountains of paperwork and meetings all over the globe, but finally, the U.S. and ten other developed countries won a partial one-year reprieve from the Jan. 1, 2005 deadline to phase out methyl bromide. At its March 24-26 extraordinary meeting, the parties to the Montreal Protocol approved critical-use exemptions (CUEs) for 2005 at 35 percent of 1991 levels — sort of. Any increase above 30 percent can only come from those countries' existing stocks of materials.

Florida Fruit and Vegetable Association, in cooperation with individual commodity groups, prepares and submits the CUEs for Florida crops.

Changing the Rules

The 11 countries granted CUEs are Australia (145 metric tons), Belgium (47), Canada (55), France (407), Greece (186), Italy (2,133), Japan (284), Portugal (50), Spain (1,059), the UK (128) and the U.S. (7,659). The United States requested a multi-year CUE, but faced strong opposition from the European Union and developing countries. Those considered to be developing countries have until 2015 to phase out methyl bromide.

The Crop Protection Coalition (CPC), a group of more than 40 agricultural associations including FFVA, praised the U.S. delegation's efforts. CPC Chairman Reggie Brown said, "There's no doubt that they tried to advance the interests of the U.S. food and agricultural industries in a reasonable and responsible way consistent with treaty provisions."

At the same time, however, Brown said the CPC was outraged that other parties to the treaty, particularly the European Union, were unwilling to even consider the request of the U.S. "Rather, the EU focused on attempting to rewrite the rules in the middle of the game. Those parties are pushing to ban methyl bromide even where a lack of technically and economically viable alternatives has been established," he said.

FFVA Assistant Director,

Environmental & Pest Management Division, Mike Aerts agrees, and says that the Montreal Protocol had been concerned all along with production amounts, not existing supplies plus what was produced. "The Montreal Protocol was supposed to apply to amounts of material produced," he said. "Our thinking is that because an amount was produced in 2004, it shouldn't even be on the negotiating table for 2005," he said. "Now that the existing stocks have found their way into the equation, they'll be there from now on, even though the Montreal Protocol only addresses production."

Another issue is the one-year versus multi-year exemption concept. Aerts says that the U.S. had solid reasons for requesting multi-year exemptions. "It would decrease government investment, for one thing," he said. "From petition generation to review, throughout the whole nomination process, it's expensive. EPA has a whole division that has done nothing but work on CUE nominations for the past two years."

Aerts also makes the point that annual petitions put the grower at a disadvantage. "How can you plan your production schedule without knowing if you'll have access to something like methyl bromide, and in what quantities?" he said. "And before banks lend you money, they want to know those details."

A Little Background Information

The full name of the meeting was the "Extraordinary Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer," or ExMOP for short. The more than 350 participants represented 114 governments, UN agencies, non-governmental organizations, inter-governmental organizations, industries and academia.

The parties discussed issues left over from the Fifteenth Meeting of the Parties last November in Nairobi. They reached a "compromise" by differentiating between usage and production for CUEs, they reviewed the work of the Methyl Bromide Technical Options Committee (MBTOC), concluded that there was room for improvement in the nomination process, and estab-

lished several contact groups to work on improving the CUE nomination process. They also initiated discussions regarding further specific interim reductions of methyl bromide for the period beyond 2005 for developing nations.

The Montreal Protocol is administered through the United Nations Environment Programme (UNEP), which was created back in May 1981. It addressed scientific evidence originally produced in the 1970s, which alleged that various substances were damaging the earth's ozone layer. At that time, UNEP began negotiations on an international agreement designed to protect the ozone layer. The resulting Vienna Convention for the Protection of the Ozone Layer was adopted. It called for cooperation, but did not force parties to reduce the levels of ozone-depleting substances.

The Montreal Protocol, developed in September 1987, defined obligations to reduce levels of ozone-depleting substances and established a timetable. A number of discussions, refinements and adjustment followed, all leading up to the March extraordinary meeting. (The term "extraordinary meeting" refers to a meeting that was organized to take care of business unresolved at a previous, regularly scheduled meeting.)

Misperceptions Rampant

The decision to grant the one-year 30 percent CUEs did not go unnoticed in the media. The Inter Press Service News Agency quoted Monica Moore, co-founder of Pesticide Action Network North America, as saying, "It is a cheap reward for those farmers and agribusinesses that have refused to use alternatives to this dangerous and unsustainable substance

Dr. Jamie Liebman, staff scientist with the group, told the Financial Times of London that "for all of the major uses of this pesticide as a soil fumigant, there are examples of the same crops currently grown profitably, in the U.S. and other countries, without methyl bromide."

And Fox News reported that "over the last three years, the Bush administration has repeatedly opposed or sought to weaken and delay multinational action to reduce dangerous chemicals." This is from a network considered to be fairly friendly to the current administration

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centrated long-term program of research into methyl bromide alternatives was taking place, they'd be a little more open-minded. Aerts, who helped prepare the Florida CUEs and attended the extraordinary meeting, said, "It would help our effort if we were able to get all the information from everyone who has been exploring alternatives," he said. "We have the information from university and USDA research, but we need to hear from other grower-type people who have done their own experimentation with alternatives. We know people are doing the experimentation, but we don't get the feedback."

In fact, the FFVA Foundation, which funds research and education that benefits Florida fruit and vegetable growers, supported a stack of research projects into alternatives last year. Research hasn't stopped. Experimentation continues.

"It has to be a systems approach," said Aerts. "And much needs to be understood about that type of systems approach," he said.

Friday Surprise

"What the U.S. government proposed that Wednesday morning of the extraordinary

meeting was a multi-year, 30 percent level in 2005, 30 percent in 2006 and 28 percent in 2007," said Aerts. "And by that Friday night, when we walked away from the meeting, we were getting 30 percent for one year plus existing stocks,".

He says the parties were under the impression that countries could not go above 30 percent according to the Protocol. "All the State Department lawyers and others in this country say is no, that's not a statutory requirement in the Protocol, that's just their understanding of it," he said. "The U.S. government said we needed 38.2 percent of the baseline amount, and the whole point of the Protocol is that it's based on demonstrated need. That's our demonstrated need, 38.2 percent," he said. "Friday's decisions came as a surprise to many people," said Dan Botts, FFVA's Director, Environmental & Pest Management Division.

"The primary reason the European Union and others were so intransigent is pure politics. At the urging of the U.S. non-governmental organization activists, they assured a delay would result in different outcomes in the next round.

"It's an election year in the U.S.," said Aerts. "They have certain feelings about dealing

with the Bush administration, so they roll the dice in case a new administration might be elected. They have nothing to lose."

*Credit: FFVA news release at www.ffva.org
Editor's Note: We work with the FFVA on the Spring Regulator Tour, in which we host a golf course tour at The Old Colliers Club in Naples each spring. It is never too late to keep writing your senators and congressmen to intercede on this issue.*

The GCSAA, working with methyl bromide manufacturers, submitted the critical-use exemption paperwork on behalf of all golf course turfgrass managers. However this report by our friends at FFVA, who did the same for Florida agriculture, is a prime example of the difficulties encountered in trying to work out a fair and just allocation and use of this product.

As recently as October, Hendrix & Dail was asking us to send letters and emails to our legislators to impress upon EPA the need for a economical and practical allocation system so that the turfgrass industry can use the best and most environmentally sound soil fumigant since no comparable alternative has been produced.

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The key to attracting purple martins to golf courses is location, location, location of the nesting apartment houses. The perfect site would be on the shore of a pond, lake, stream, river or bay with no tall trees within 40 feet and a home or building within 40-50 yards.

Being next to water guarantees the purple martins open spaces for soaring and hunting, availability of water for drinking and cooling eggs or chicks in very hot weather. Young purple martins defecate in membrane-lined fecal sac which the adults carry away from the nest and drop in the water, as opposed to land, so that predators cannot follow a trail back to the nest.

Before eastern Native Americans started hanging hollow gourds for purple martins to nest in, martins nested in abandoned woodpecker cavities. For the last 1,000 years or so, first native Americans,

then colonists and then subsequent generations of Americans to the present have put up homes for purple martins.

East of Arizona and New Mexico's suaro cactus deserts, purple martins have completely abandoned tree cavities as nest sites and now nest exclusively in human-supplied housing. Martins have learned that by living close to humans, should there be a predator attack (raccoon, snake, hawk or owl) frantic purple martin activity often brings human assistance to drive the predator away. Knowing this, purple martins are more likely to colonize an apartment close to human dwellings rather than one farther away.

Purple martins are preyed upon by coopers' and sharp-shinned hawks. If the martins see a hawk coming and can get into the air, their terrific flying skills prevent them from being caught.

However, if nearby trees obscure martin vision of an approaching hawk, they can be caught sitting on their apartments before getting airborne. Thus, instinctively, martins usually choose apartment sites 40 feet or more away from tall trees.

Please note however that it is not necessary to choose the absolutely perfect location for an apartment house (near water, away from trees, close to a dwelling) to attract purple martins in Florida. There are so many purple martins seeking nesting opportunities in Florida, they will frequently choose less than ideal sites. They will nest away from water if there is a dwelling and no tall trees close by. Occasionally they will nest closer than 40 feet to tall trees. The closer to the ideal site, the greater will be the probability of attracting martins.

In south Florida, a purple martin apartment in an ideal location has at least a 90 percent

Purple Martins and Golf Courses Go Together

By George McBath

Purple martins are relatively easy to attract to a golf course. Photo by George McBath



probability of attracting them in the first year. Of the 50 or so apartments I have erected in the last eight years, almost all had nesting birds the first year. How fast can it happen? Once at a Corkscrew Swamp Sanctuary festival, I set up an apartment as a demonstration at my display booth in the parking lot at 8 a.m. By 11 a.m. there were four purple martins inspecting the housing, even with cars and people milling about close by. On another occasion I put up a martin apartment for a friend at Windstar Country Club. When I finished, we retired to his lanai to celebrate with some wine. After half an hour I heard purple martins vocalizing in the distance. In the next 30 minutes we had 10 martins going in and out of the gourds. Boy, we really celebrated then.

Some purple martin enthusiasts use a trick or two to increase the probability of success. I have not found them necessary, but I offer them if you are so inclined:

1. At dawn near the apartment, play a tape recording of the purple martin dawn song.
2. Martins instinctively know that

Ospreys on the Golf Course

Editors Note: We start our second year of running the "Wildside" feature by Craig Weyandt, which serves as part of his environmental education and outreach to his club members by writing monthly articles for his club's newsletter. He gets lots of positive feedback and interest from his members. We encourage you to share these stories and your own observations and photos with your club members as a means of educating the golfers and public about the environmental benefits of golf courses.

By Craig Weyandt

Returning to work after the hurricanes in September 2004 we found the golf course a mess. Trees were down, debris everywhere, the bunker sand was gone and water damage was visible throughout the course. While the staff and I were busy doing the clean up I would stop every so often to check around for wildlife. At first there was not much to see. I think the smaller the animal was, the faster the return. I don't know if that was true; it was just my observation.

One bird that we did notice in its return was the osprey; not only because of its size but there were many more ospreys after the storm then before the storm. Sometimes I could count as many as 20 at one time from the No. 6 tee.

I believe that there were more ospreys after the storm because their nests were blown down and they were looking for new nesting sites or because there just happened to be an abundant amount of food in the area. Either way, it was nice to see so many around the golf course. I hope the following information helps you enjoy this bird as much as I do.

Flight and Hunting

Ospreys are fish hawks that have brown and white markings on their bellies. They can soar on wind currents, but most of their flight is with wings flapping actively. Ospreys hunt by flying over the water looking for fish. They hover before diving



An Osprey perches on a hurricane battered mangrove near the 6th tee at The Moorings Club. Photo by Craig Weyandt.

towards the water, then plunge in feet-first. Mullet are a good prey fish in Florida because they school, swim in shallow water, and are rich in fat.

Ospreys usually hunt alone during early morning and late afternoon. Ospreys that are not parents need to catch one to three fish a day. A breeding male, who must fish for two or three babies and a mate, has to catch six to eight fish a day.

Ospreys have special adaptations that make them better fish-hunters. For one thing, the bottoms of their feet have many short spines that help them to hang onto a slimy fish. Many birds have three toes and a thumb, but the osprey can turn his third toe around, so he can have an extra-strong grip with two fingers and two thumbs. Ospreys have extremely sharp talons and a strong hooked beak for tearing fish into bite-sized pieces. They also have very oily feathers that help keep them dry when they splash into the water.

Nesting and raising young birds

Ospreys like to make their nests in dead trees because there are no leaves to get in the way of their wings. It is also harder for predators to climb a dead tree without the osprey seeing it. Many ospreys

build nests on power poles when there aren't enough dead trees around.

Ospreys are able to mate at 3 years old. When a male is ready to court a female, he performs the "sky dance" by flying around with a newly-caught fish or nesting material. Ospreys mate for life, and mated pairs come back to the same nest year after year.

If the pair has no nest, they both collect materials, like sticks and grass. Sometimes they also pick up plastic bags and fishing wire (which can kill the young). Year after year, the ospreys make these nests bigger and stronger so they won't get knocked down by high winds. An osprey nest can weigh up to 1,000 pounds, but it is not very deep inside and probably could not hold a person. Florida ospreys stay in Florida year round and lay their eggs between December and February. North of Florida, ospreys migrate south each year.

The eggs are about the same size as a chicken egg. They are cream-colored with spots. Both parents sit on the eggs. The mother does most of the sitting, and the father feeds her. Ospreys usually lay three eggs. When there isn't much food, the larger babies will peck at the smallest baby so they can get first chance at the food. There is a good chance this runt will die of starvation.

Young ospreys will practice flapping their wings 10-15 days before fledging (flying). They jump up and down on the nest until a wind gust carries them over the edge on their first flight. Osprey parents will fly past the nest with a fish and drop it into the water to help the babies catch their first fish. The babies can usually catch their own fish two or three days after fledging, but the parents will still bring food for a few weeks.

These fish hawks are a threatened species and protected by law in Florida.

References

Poole, Allen. Ospreys: A Natural and Unnatural History. Cambridge: Cambridge University Press. 1989.

Terres, John K., The Audubon Society Encyclopedia of N. American Birds. New York: Alfred A. Knopf, Inc., 1987.

Information provided by the E. Dale Joyner Nature Preserve at Pelotes Island near Jacksonville, 904-665-8856, <http://pelotes.jea.com>.



The ideal location of purple martin apartment houses is near water, close to a house or building and more than 40 feet from tall trees. Photo by George McBath.

death by an owl's talon or crow's beak comes through the entrance hole. They want to nest as far back from the hole as possible. Typical apartment units are 6"x6"x6", which is effective but small. By removing the back panel of back to back units the depth can be increased. Given the opportunity, martins always choose the deeper units.

3. Since female martins have a need for calcium during egg formation, some martin landlords mount a small tray of dried, crushed chicken egg shells on the colony support pole. Because Florida has lots of limestone deposits near the surface, I think there is plenty of calcium in the food web that martins feed from. Calcium supplements have never been necessary to attract purple martins in my experience.

Yearly Cycle of the Purple Martins

For Florida residents, a year in the lives of purple martins might be as follows. Almost all martins winter in southeastern Brazil where they fly

the coffee, sugar and citrus plantations feeding on insects. They migrate north to Florida by one of two routes. They leave the coast of northeast South America and island hop via the Lesser Antilles, Greater Antilles and the Bahamas to Florida; or they migrate north through Central America and congregate up on the northern tip of the Yucatan Peninsula and wait for a southwestern wind called the "Yucatan Express" to help push them in a 12-14 hour period across the Gulf of Mexico to Florida's shores.

South Florida purple martin enthusiasts eagerly anticipate, communicate via the internet, the first martin sighting, which often occurs in the first or second week in January. However, the majority of martins arrive sometime in late February and throughout March. Late stragglers, mostly first-year birds, may arrive through the month of April.

Most martins start nesting in late March and early April. It takes them 7-10 days to build a nest, mostly of pine needles and mud. Young birds lay two to four eggs, while older adults lay four to

six. Eggs are incubated for 14-16 days. Hatchlings leave the nest on average after 28 days.

A chick's first flight is a grand and important moment. Frequently five or six adults will fly with the chick urging it on to the nearest tree or telephone wire. If the fledgling falls short of the target and falls to the ground, it is abandoned. Outside of collecting nesting materials, purple martins rarely land on the ground.

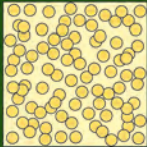
Once successfully fledged, the martins may return to their apartments for a few nights, but for the most part, nights are spent roosting in trees. Adults feed the young another 7-14 days after fledging, but from then on the young must catch their own insect food.

In south Florida, purple martins are seen accumulating in evening roosts on the coast as early as July. One evening a magic stimulus will set them off across the Gulf heading for Central or South America. Martins seen in Florida in October or November are most likely northern nesting birds passing through on their fall migration. In south

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Florida, February through July are the prime purple martin months.

Martins and Mosquitos

Much has been claimed about purple martin diets. One manufacturer of the aluminum apartments (in a display of questionable business ethics) claims purple martins can eat 2,000 mosquitoes a day. However, since martins are a diurnal creature and mosquitoes are crepuscular to nocturnal, martins do not eat that many mosquitoes.

Purple martins are the largest of seven U.S. nesting swallows and tend to feed on larger insects like bees, wasps, moths, locust, damsel and dragonflies. A conservative estimate of 3 to 6 percent of a martin diet might be mosquitoes. In areas of the more diurnal salt marsh mosquitoes, the percentage may be higher.

Dragonflies are one of the martin's favorite preys. Occasionally a dead, dried skeletal baby martin with a huge dragonfly stuffed in its throat will be found in an old nest, attesting to their excessive enthusiasm for these insects.

Landlord Duties

As a golf course superintendent or pur-

ple martin landlord, what responsibilities do you have? Duties can range from almost nothing to very extensive; it's your choice. They can be delegated to staff members, an interested resident or club member or a hired outside consultant like me. I don't recommend doing nothing but putting up the martin house. However, I do know of a couple of courses where the landlord effort is nil, but the martin colonies seem abuzz with activity during the nesting season.

It used to be an absolute rule that every fall apartments should be cleaned of old nests, and fresh nesting material and insect control be provided. When the Purple Martin Conservation Association did some research, they found that returning martins chose nest compartments that were not cleaned of old nest material over those that were cleaned out. Come to think of it, who emptied out the old nests before the advent of human-supplied housing? Nevertheless landlords who supply fresh nesting material and parasite control also seem to provide other needed activities.

Occasionally English sparrows and European starlings may monopolize martin housing. If so, housing must be lowered and be rid of the invaders' nests. Aside from displacing martins from

nesting, these sparrows and starlings often destroy martin eggs and kill martin young. Additionally, sparrows and starling young produced at these apartments will then go on to displace bluebirds, great crested flycatchers and woodpeckers from natural tree cavities. Better yet, eastern sparrows and European starlings are not protected by law and can be eliminated judiciously by pellet gun or traps available from the PMCA.

Some landlords may lower the housing every 5-7 days to check for egg theft, parasite problems, and predation. However, when the oldest young of the colony are 24 days old, apartment inspection should be discontinued in order to prevent premature fledging which can be tragic as mentioned earlier.

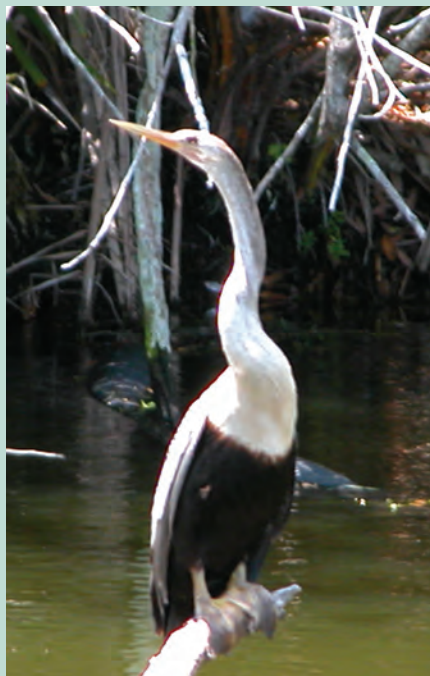
Lice and botfly are usually controlled by sprinkling or blowing diatomaceous earth into the nest material at winter cleaning. This natural product controls the parasites physically not chemically by the numerous silica spicules which scratch and penetrate the soft body of the lice and botfly larvae. If fire ant parasitism occurs, it is usually deadly, so if fire ant nests are nearby they should be controlled.

Some times rat snakes or black racers will climb the support poles and attack the

Pasadena Wildlife



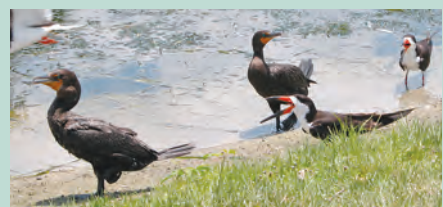
This great white heron is one of many shorebirds at Pasadena.



Anhinga roosting among the mangroves.



A large flock of skimmers resting on a fairway.



A pair of cormorants wanders into skimmer territory and they hear about it.

Space limitations forced us to omit some photos of the abundant wildlife at Pasadena Yacht & Country Club, cover story of the Fall 2004 issue of the Florida Green. This avian collection is a bright addition to the Stewardship section.

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presented live from the education conference in Orlando

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young. Additionally they may cause the adults to abandon the colony. I have only had snake predation twice in eight years among all the colonies that I monitor. In both cases I found the snakes early. They were sleeping off their meal of martin young. Normally, I promote snakes on golf courses and I go out of my way not to kill them, but when they are actively eating their way through a colony I will dispatch them. An alternative is to remove and relocate them far away from the colony in an appropriate habitat.

Crows and owls are major predators of purple martin colonies. Literature suggests that almost all martin colonies have some crow and owl predation. Unless you regularly check your apartments you probably will never know this is occurring. It is very important to use crow and owl guards on apartment houses that have front porches. These porches make it easy for these predators to pluck martin young from their compartments. For the 12 aluminum apartments I use, a gridwork is available that permits martins to pass through but not the larger birds. Prior to gridwork installation, increasing crow populations on Naples Bay almost wiped out the bay's purple martin colonies. Gourds, especially the oversized plastic ones that are now available, make it very difficult for these predators. No guards are needed on the gourds.

Children and Purple Martins

Not only do golf courses and purple martins go together, so do children and purple martins. Getting children and martins together on a golf course is a win-win situation.

A while back, Olde Florida Golf Club sponsored one of my purple martin apartments for the Laurel Oak Elementary School. For a couple of springs, the students helped me get the apartment ready for returning birds. During the outings I would present a short program on martins in the field. In early May I would lower the apartment for the students to see the eggs and young. We would then return to the classroom for a brief slide show. Both the teachers and students were extremely positive about these activities.

When teaching bird watching to fifth graders, I found purple martins to be good subjects for beginning birders to observe and practice binocular skills. Student powers of observation are heightened while determining the difference between males and female martins and between first-year and older breeding adults. Because martins are "in your face" birds they provide an outstanding opportunity to discuss many aspects of bird behavior and biology while at the colony location.

Once a golf course has three or four



Martin houses with porches might need protective grillwork to protect young martins from crow and owl predation. Author and biologist George McBath is shown here with the type of aluminum apartment house he uses on golf courses.



School children can learn a lot about purple martins and environmental stewardship on golf course by helping to install and monitor colonies on golf courses. Photo by George McBath.

colonies going, it should be possible, for a period of six or so weeks, to have four or five students weekly lower the apartments and take egg and young data. In the classroom, students can present their data and follow and compare each colony for the study period. Mathematical skills can be practiced by determining means, modes and averages for each colony and the entire golf course. Also there would be an opportunity for students to relate field observations of martin behavior (and golf course stewardship) to the rest of the class.

Rewards and Satisfaction

One of the best rewards a superintendent can receive after putting up a purple martin apartment comes when the residents and golfers

see what wonderful entertainment martins can provide and ask to put up their own apartments. In the Naples area this has occurred at Pelican Bay, Marco Island, Bonita Bay West and Pelican Marsh country clubs. Both Stonebridge and Windstar now have more than seven colonies on each of their courses. Resident interest provides an opportunity for superintendents to ask residents for help in caring for and monitoring the course colonies.

Other courses in the Naples area having success with purple martin apartments that I have supplied include Colliers Reserve, Old Colliers, Bonita Bay East, Tiburon, West Bay, Wildcat Run, Quail West, Twin Eagles, Naples Golf & Beach Club, Eagle Creek, Country Club of Naples and The Colony.

Additional sources for information are local experts, Web sites and the Purple Martin Conservation Association located at the Edinboro University of Pennsylvania, Edinboro, PA 16444. Phone: 814-734-4420. Web site: pmca@edinboro.edu or www.purplemartin.org. This organization is dedicated to the conservation of purple martins through scientific research, state-of-the-art wildlife management techniques and public education.

The PMCA publishes an outstanding quarterly magazine, The Purple Martin Update. This quarterly contains articles on martin biology, answers landlord questions about problems and shares landlord experiences. The magazine is known for its outstanding color photographs and representations.

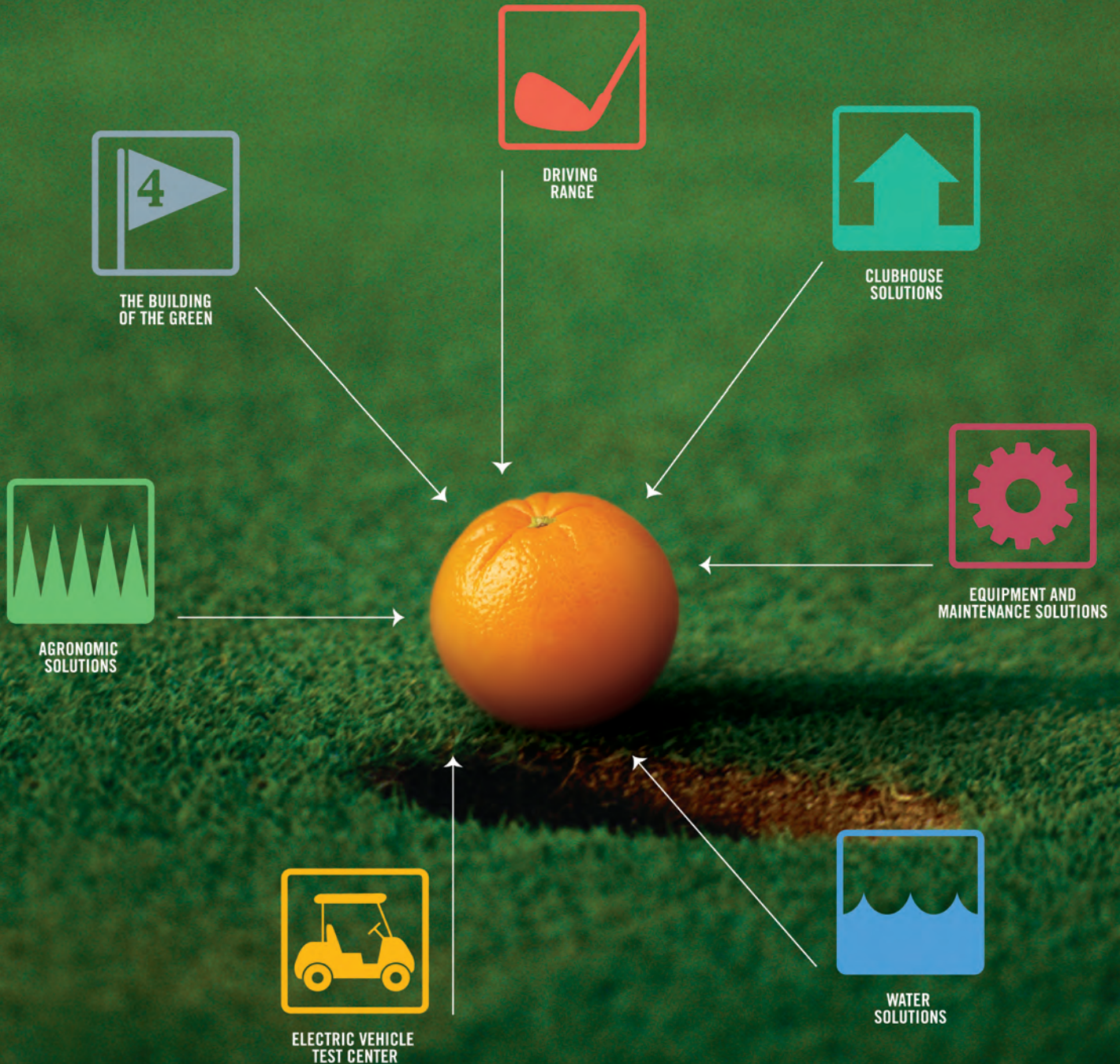


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Mini Ring Disease

Ring Around the Collars

By Brian Unruh, Ph.D.

Over the past several years, superintendents from Memphis to West Palm Beach have

observed small, ring-like symptoms on their bermudagrass putting greens (Fig. 2). Symptoms typically begin to show up in the springtime, with small rings and/or patches of damaged turf. As the

season progresses, the rings and patches slowly grow in size or disappear completely, or disappear and then reappear later in the season. At the onset of bermudagrass dormancy, the rings and patches become most pronounced and superintendents and golfers are forced to live with the unsightliness through the busy winter season. Because of the nature of the small rings, Dr. Mike Healy of Healy and Associates, Inc., has dubbed the phenomenon “Mini-Ring disease.”

Although ultradwarf bermudagrass varieties are the most common hosts of the unwanted rings, the 2004 season revealed that Tifdwarf and possibly Tifgreen are susceptible as well. Similarly, ring symptoms were thought to be found mainly on high sand content, low cation-exchange-capacity (CEC) putting greens. However, rings have been



Fig. 1. Mini rings seem more pronounced in surface drainage areas and height of cut doesn't seem to matter. Photo by Brian Unruh.



Fig.2. Superintendents begin to see small rings in the spring. They subside during growing season reappear during fall dormancy. Photo by Brian Unruh



Fig. 3. Water droplets are absorbed in non-damaged areas but not in the damaged areas. Photo by Brian Unruh.



Fig. 4. In the spring the overseeding seems to be stimulated within the ring. Photo by Brian Unruh.

sighted on native soil, push-up greens which have higher CECs and higher organic matter content. These conditions suggest that the soil's water-holding and/or nutrient-holding capacity may somehow be involved in the development of this condition.

Larry Stowell, of PACE Turfgrass Research Institute in San Diego, has noted the hydrophobic nature of the mycelium growing over the surface of a sample of TifEagle from Mississippi. In non-damaged areas of the turf, water droplets are immediately absorbed into the thatch, but in damaged areas, the water droplet remains on the turf surface without being absorbed (Fig. 3). In some cases — but not all — superintendents observing the rings on their putting greens regularly use wetting agents.

Superintendents have racked their brains trying to find common denominators but have found exceptions to most hypotheses. Observations that tend to recur are:

- Rings are worse in surface drainage areas (Fig. 1).
- Increased mowing height (collar) does not appear to relieve symptoms (Fig. 1).
- Subtle rings can be masked by increased nitrogen fertility.
- In the spring, the overseed is stimulated in the ring (Fig. 4).

Dr. Stowell states: "The cause of the condition remains a mystery at this point. Although several different fungi have been identified from turf samples (including Rhizoctonia, Curvularia, fairy ring and ectotrophic root-infecting fungi, spring dead spot), no one fungus stands out as the culprit. In some cases, the damaged areas are hydrophobic (water repellent), a condition that can develop due to the growth of a large number of bacteria and/or fungi."

In extensive fungicide research and demonstration trials, the symptoms are not easily relieved via fungicide applications alone. Minimal to no control has been achieved from applications of major turf fungicides including the SI, QoI, benza-midazole, dicarboximide, and multi-site products. To date, the only treatments that appear to alleviate the symptoms are various combinations of nitrogen, peat, zeolite and the humus/manure-based products.

A team of turf scientists, plant pathologists, and industry leaders including Dr. Stowell; Dr. Phil Colbaugh, Texas A&M University; Dr. Phil Harmon, University of Florida; Dr. Healy; Dr. Henry Wetzel, Syngenta Crop Protection, Inc.; Mr. Steve Davis, Bayer Environmental Sciences; and the author are diligently working on this serious turf problem. When more information is learned, it will be made available.

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California Dreamin' in Southwest Florida

By Kyle D. Sweet, CGCS

(Editor's note: Stories like the one Kyle Sweet is sharing here is but one more example of the talent, imagination, creativity and adaptability of golf course superintendents everywhere. By displaying a "can do" attitude, superintendents demonstrate their value to their clubs in many unexpected ways. They just don't teach this stuff at turf school.)

Today's golf course superintendent is a far cry from the role filled many years ago. The ris-

Well, for the fun of it, let's add golfer/member relations to that laundry list. Although this may be an area that many of us shy away from, I would like to highlight one great evening at The Sanctuary Golf Club that might just change your mind.

The golf season in Southwest Florida takes place from November to April. Early in the 2003/2004 golf season, a group of five members approached me about hosting a "California Dreamin'" party for more than 200 members at my maintenance facility. Their ideas were excellent and

dred feet from the best beaches on the Gulf Coast, we needed the beach at our front door. With 20 tons of fresh bunker sand delivered, we got it. All of the equipment was removed from the shop. If it wasn't bolted down, it was removed. And we placed the sand throughout the entire equipment-storage area with a front-end loader. A dance floor was created with sand approximately 6 inches deep and, throughout many seating areas, the sand was installed at a 3-inch depth. A bunker rake was used to thoroughly smooth the surface and the result was amazing.



How to build a beach. Start with 20 tons of sand and an empty maintenance building.

ing expectations for turfgrass management, environmental safety, and ongoing labor challenges are enough to keep anyone busy.

without hesitation I began to work with them on the party that took place Feb. 29, 2004.

Although our facility is only a few hun-

That was the easy part. Now, with the sand in place, the members and an interior decorating company sprang into action and decorated both



Bunker rake. Beach rake. What's in a name? It smoothed out our indoor party beach just fine.



The members and interior decorators took over to finish the transformation to a beach scene.

the interior and exterior with palm trees, murals, ceiling coverings, food and beverage tents, bars, and seating for more than 200. Once the band set up, the preparation was complete, and the facility didn't look or feel much like the "shop" we started with earlier in the day.

Fortunately, my family and I were

invited to attend along with my two long-term assistants. We greeted many members attending the party, took photographs, and of course discussed questions or comments about the golf course. The Sanctuary food and beverage department supplied the finest food and drink for the evening and a wonderful time was had by the



From shop to shore, we were now ready to entertain 200 people at the beach party.

members and staff alike.

Now, several weeks later, our department is still hearing the compliments on our cooperative effort with our members and the use of our facility in creating a "California Dreamin'" party that everyone will remember.

2004 Photo Contest Results



First Place – “Old Hickory Main Entrance” by John Stach, Old Hickory G&CC, Ft. Myers



Second Place – “No. 16 Tee Azaleas in Bloom” by Tom Biggy, Bent Tree, Sarasota

Category 2 – Formal Landscape

Formal landscape beds add color and visual appeal to golf courses, but they also require maintenance. Congratulations to the winners:

2005 Photo Contest

Category 1 – Wildlife on the course: includes any critter on the course that walks, flies, swims, slithers or crawls.

Category 2 – Formal Landscaping: includes annuals and ornamental shrubs and trees planted in formal beds on the course or club entrance.

Category 3 – Native Areas: includes beds of native plants including trees, shrubs and grasses used in naturalized areas to reduce turf inputs and aquatic vegetation plantings used to create habitat and protect water quality.

Category 4 – Scenic Hole: includes any view of a golf hole (panoramic or close up) that demonstrates the scenic beauty of a golf course.

Easy Rules

1. Color prints or slides. Prefer prints. Only one entry per category. Digital images: Digital image entries must be taken at a resolution setting of 300 dpi or higher and saved as jpeg or tiff (tif) format images. Images taken, saved and sent at lower resolutions will not qualify for the contest. If you're not sure. Send a print instead.

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 on 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 print shall be attached to an 8.5-inch x 11-inch sheet of paper using a loop of masking tape on the back of the print. Slides should be in plastic sleeves for easy access for viewing. Digital images must be accompanied by the same information in an email or document, or on a CD.

4. A caption identifying the category, course and photographer should be typed or printed on the sheet of paper below the mounted print.

5. Judging will be done by a panel of FGCSA members not participating in the contest.

6. Mail entries in a bend proof package marked PHOTOS DO NOT BEND to Joel Jackson, 6780 Tamarind Circle, Orlando, 32819. Entries post-marked after August 1, 2005 will be automatically entered in the 2006 Photo Contest.

The year 2004 produced some memorable moments in sports.

The biggest was the amazing run of the Boston Red Sox, who won eight straight games to win the World Series. And how appropriate that their final victory came on the evening of a lunar eclipse. Or that's what the astronomers told us happened. I believe that in actual fact the moon disappearing was the "Bambino" looking down from on high and with a big wink said "OK, I forgive them after 86 years." The Yaz couldn't do it, Fred Lynne couldn't do it, the grounder through Bill Buckner's legs kept them from doing it, but finally the curse is over.

AS IT LIES



Jim Walker

Snuffed out by gutsy pitching, long balls and Irish Luck. The Bosox are World Champs.

How about Vijay Singh? Ten tournaments, and almost \$11 million. That's one dollar for every practice ball he hit in the last twelve months. Then there's the Tiger who slipped from number 1 to number 3.

Year Under Review

Mild distractions like a new 155-foot, \$57 million yacht, a Caribbean wedding which attracted a Who's Who from across the globe, and the Swedish beauty herself. I'm glad to see him squeezing something beside a Golf Pride grip. About time he stopped to smell the roses, the sweet fruit of his labor, to become a complete person and not just a golf machine.

And then there's his Orlando neighbor, Annika Sorenstam. Ten wins worldwide and over \$2.5 million and already a member of the Hall of Fame, I don't know how she keeps herself up mentally for the most mentally challenging game in the world. Maybe, if they have her at the Skins game again next year, they will let her hit from the tees

about 40 yards up from the guys. Having her hit from the same tees as the men is like going bear hunting with a stick.

Philly Mick ended his own curse with a Masters win. Now he is not the best player in the world without a Major victory. And how about Phil's final round in the Grand Slam of Golf: just missing a nine-footer on the 18th for 58? He joins the 59 club. He did this after taking two weeks off before the event and announced after his triumph that he was going to take the next three weeks off. Must be nice! Wouldn't you love to take a few weeks off after successfully overseeding your greens or completing a renovation project? Gee, them Tour pros got it tough.

How about those 2 and 9 (at this point) Dolphins? Who would have thunk it. At least their horrible season saw the departure of Dave Wrongstadt. The team needs a complete overhaul: new offensive line, new receivers, new quarterback, new running back (<ITAL>machts nichts</ITAL> on No. 34), a new front office and let's get Jerry Glanville out of retirement to coach. Miami needs a House of Pain and you gotta love a guy who always left two tickets at will call for Elvis.

I think the Gators made a big mistake

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dumping Ron Zook. I don't see anyone out there to replace him who could do a better job. Since "Spurs" turned them down, perhaps the school will see the error of their ways and rehire him.

The poor Hurricanes almost pulled it off despite losing seven first-round picks from last year and 12 injuries to key personnel on both sides of the ball. The next two

years could spell real trouble to the other top teams if the 'Canes can stay healthy and out of jail.

I guess I now have to say something about Florida State: I don't like Bobby Bowden. I've never liked him and am quite sure I never will!! Sorry Jeb because Tallahassee is such a pretty town. All those live oaks, Spanish moss, and chiggers.

Then there's the rest of the

state teams who also need help: Marlins, Devil Rays, Bucs, Jags. We'll say a little prayer for you, which won't help because you all need BIG TIME HELP. Let's turn up the Heat. Can they make the playoffs with an attack of the Shaq? They just lost a game to the Pistons who have two starters on suspension.

Lets close on a real high note. Ron Artest climbing into the

box seats to pummel a fan who may or may not have thrown a cup of liquid refreshment – a real class act. Six or seven others also received suspensions, including Reggie Miller who received a one-game suspension for wiping up the floor after the melee.

Wishing you all a Happy and Healthy 2005, let's hope it's not the same old jive.

While many of you were throwing down overseed to end a rough, hurricane-infested summer and sow hope for a better fall, and while sports teams were setting new all-time lows for sportsmanship in basketball and football, I was quietly becoming eligible for early Social Security at the ripe old age of 62. On the up side I may soon be able to shoot my age in golf, at least I'll keep trying and I hope you will too.

All of us pass many milestones on the road of life, and let's be truthful, some of them can be stumbling blocks and obstacles that make us lose sight of the big picture. But most of our milestones are ceremonial, like attaining a certain age that bestows privileges like a having a driver's

license, the right to vote, consuming a cold beer legally and alas finally drawing Social Security.

Other milestones might include graduating from college, getting married, having and raising kids, surviving a serious accident or health problem and being successful in your work.

Many of these events are life defining, and the wrinkles and gray hairs earned here are more about character and responsibility than achievements earned by the mere passage of time.

Passing milestones can be like running a marathon. Sometimes you hit the wall and other times you slip into that elusive "zone" and things go smoothly. No matter where you are in the race; things can change on a dime and there are no guarantees. Well there is one; I guarantee only you can control how you react to the changes that will invariably come to you along the road of life.

In our sometimes-volatile business, superintendents find themselves holding pink slips on Friday or upon return from vacation or a conference trip and wondering, "What the heck happened?" The course never looked sharper, the crew is happy, the members seemed to be happy, the budget is in line with projections — what is the problem? The problem is that people in charge are only human and they can screw up a good thing for no apparent reason. It could be personal. It could be business. It could be political. It doesn't really matter in the end. You may or may not get justice for some bonehead decision. Life is not always

fair; it just goes on. And so must you.

I ride the roller coaster with all of you. It tickles me to hear of a superintendent celebrating his 10th, 20th, 30th year at a club. It saddens me to hear about folks with the same tenures being let go, and we never seem to know exactly why. But we have lingered long enough at the termination milestone. Too many have passed it, but thankfully most have survived and found out there is life after being fired, so you've got that going for you.

At age 40 you can start your second childhood. When you turn 50, AARP sends you an invitation to join and start getting those automatic "senior citizen" discounts. And at my age 62 you can start drawing early retirement with reduced benefits. One of my friends says he has signed up, and he has to live to 84 before contemporaries who wait till they are eligible for full retirement catch up to him; for my age group that's almost age 66. That's one of those milestones I'm trying to figure out how to handle intelligently.

Meanwhile, I'm happy doing what I do and I hope you are too. If not, then you really should be looking inward to find out what you would like to do and start moving in that direction. It makes no sense to wander aimlessly down the road of life with your shoulder to the grindstone and miss out on all the wondrous sights along the way.

The good and bad milestones on your life's journey will come automatically with or without your help. They say you only go 'round once in life, but if you do it right, once is enough. I'll drink to that.

Late breaking news....

Just when Floridians are putting their lives and property back together from four hurricanes, along comes the Indian Ocean earthquake and tsunamis that have killed more than 120,000 people (as of Dec. 31). The total devastation to the homes and infrastructure and overwhelming loss of life are almost incomprehensible.

The disruption and destruction to Floridian's lives and property is no less real, but the magnitude of the Asian Rim disaster must have us counting our blessings in retrospect. People still need help and support here at home, and so do the devastated citizens in the Far East.

The forces of nature have a way of reminding us how fragile mankind can be in the world around us. Against the backdrop of this awful natural catastrophe and its far reaching consequences, the killings and loss of life for political reasons in the mideast and else where only proves how arrogant and shallow some humans can be.

Let us resolve to live better lives in the coming year and give thanks for our blessings every day.

Handling Those Milestones

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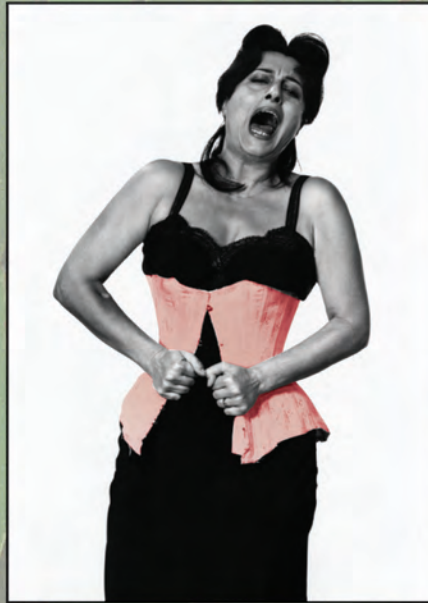
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