



The Florida Green

Summer 2005



Number 6
The Club at Eaglebrooke
Lakeland
Photo by Daniel Zelazek



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10



68



14

4

SPOTLIGHT: HIGH HONORS

The FGCSA's two highest awards were presented during festivities at the Poa Annua Weekend in Naples. David Court, CGCS, director of grounds and greens at the Boca Lago CC in Boca Raton and a past president of the association, was honored with the Distinguished Service Award. Marie Roberts, association manager, was honored with the inaugural Lifetime Achievement Award for service to the association by a nonmember. The award henceforth will be named in her honor.

16

COVER STORY: EAGLEBROOKE

The Club at Eaglebrooke lies about six to eight miles due south of the heart of Lakeland and borders the newly dedicated 550-acre Lakeland Highlands Scrub Jay Preserve. Five years ago, Alan Pucket returned to his home town as superintendent at Eaglebrooke.

30

HANDS ON: ULTRADWARF MANAGEMENT

Believe it or not, we are rapidly completing a decade of ultradwarf turf management. And no sooner are some superintendents getting comfortable in the new routines and requirements for this variety than seashore paspalum breaks onto the scene..

40

INDUSTRY NEWS: PASPALUM MANAGEMENT

As alternative non-potable water is increasingly being used for irrigation on golf courses, water-quality challenges increase, either from escalating salinity and/or from nutrient load in effluent. Is seashore paspalum the answer to all our problems?.

48

OFFICIAL BUSINESS: BMP MANUAL

With only one abstaining vote, the Florida House and Senate overwhelmingly approved Senate Bill 444 which calls for "Best Management Practice Mandatory Use and Enforcement" with regard to protecting "Total Maximum Daily Loading (TMDL) by Non Point Source Pollution."

DEPARTMENTS

President's Message	2	Plants of the Year	46
Chapter Roundup	4	Stewardship Notes	50
Course Facts	18	ACSP Update	56
Superintendent Facts	22	WildSide	58
Fun Facts	27	Photo Contest	64
Super Tips	38	As it Lies	66
USGA Report	46	Green Side Up	58

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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...

Fall 2005 - **Bunker Design and Maintenance**

Winter 2006 - **The role of the Second Assistant Superintendent**

Spring 2006 - **Tree Management**

Summer 2006 - **Managing Vertebrate Pests: Alligators to Moles**

Fall 2006 - **GPS: Bell, Whistle or Tool?**

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.

Digital photos must be a minimum of 5 inches wide at 300 dpi for publication-quality reproduction.

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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ADVERTISER INDEX

Aerification Plus	48	Liquid Ag Systems	24
Almar Turf Supply	20	Nu-Gro Technologies	65
Aquatrols	28	Parkway Research	43
Beeman's Nursery	61	Phoenix Environmental Services	33
Blue Pearl Sponsors	9	Pike Creek Turf Farms	20
Classic Greens	25	Planet Air	63
Coastal Equipment Systems, Inc.	41	Poa Annua Sponsors	7
Country Club Services	8	Ragan Technical	62
Disbrow Enterprises	55	Regal Chemical Co.	57
Eaglebrooke Suppliers	29	Seasile One Growers	45
Emerald Tree	42	Show Turf	Back Cover
Envirotron Classic Sponsors	5	Sod Solutions	37
ER Jahna Industries	21	South Florida Expo Sponsors	15
Future of Golf Sponsors	13	South Florida Grassing	19
Golf Agronomics Supply	27	Spread-Rite	62
Golf Ventures	59	Syngenta	53
Gowan Company	49	Tampa Bay Turf	47
Green-Way	52	TifEagle Growers Association	31
Hackmeadow Farms	51	Tifton Physical Lab	54
Harper Industries	36	TMI Turf Merchants	Inside Back Cover
Harrell's	11	Tom Burrows Turfgrass Service	18
Howard Fertilizer & Chemical Co.	39	Toro Dealers of Florida	34
Kincaid Inc.	1	Turfline	23
Laserturf Leveling	18	Upstart Products	62
Lawn Doctor	25	Valent USA	67
Lesco, Inc	3		

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It has been a tremendous privilege to serve as your president for the past year! The year got off with a real bang, experiencing such an unusual and crippling amount of hurricane activity throughout the entire state.

Early on, I said to myself, "How in the world are we going to get anything accomplished with so many of our members having to focus on their own personal and facility clean-up

Strategic Plan is Key to Future

and rebuilding processes?" As expected, we got off to a very slow start to the year. But, like any great organization, the members help assure great success. After a few

expected board member changes during the stormy season, we settled down and made a very productive year of it after all.

I am very proud of all of your board members and their committees! They have all withstood the rocky start to the year, participated well, all culminating with our hosting of this year's Golf Industry Show in Orlando. It was a tremendous privilege to represent our industry and show them how valuable golf is in Florida.

When reviewing the performance objectives for the year, we made nice strides forward and I am sure that future leaders will further enhance these objectives. While all of the objectives were important: 1) Increase turf research funding; 2) Improve communication/coordination throughout chapters, GCSAA and allied associations; and 3) Improve and coordinate educational opportunities throughout the state, it wasn't until just recently at the Poa Annuu weekend that we addressed our final goal of 4) Ensuring our association is functioning efficiently and directed appropriately to the future.

PRESIDENT'S MESSAGE



Joe Pantaleo
FGCSA President

We have talked a great deal during the year, pondering our future as an association. We dealt with our issues head-on by enlisting Hannes Combest from GCSAA to lead us through a half-day strategic planning session recently. Hannes was a wonderful facilitator with plenty of experience to draw on especially as it relates to similar associations around the country.

One of the underlying goals of this session was geared to the eventual retirement and replacement of our most valuable staff assets – Marie Roberts and Joel Jackson. Their tireless efforts are appreciated by all every day, but their imminent replacement could cause much uneasiness if we don't think ahead. Hannes began by allowing us to redefine our mission, which will be to promote golf course management as it pertains to golf course superintendents and to further unify superintendents in Florida.

The next portion of the session was to identify a 5- to 10-year vision of what our ideal association will look like. With input from all of your current and past leaders, we have tried to describe your association for future years to come.

- We will represent the interests of our members in the

legislative and regulatory areas and with help from allied organizations, elevate the professionalism of golf and our members.

- Communicate effectively with our members and other appropriate stakeholders in an effort to enhance our image as superintendents.
- Provide support to our local chapters, enabling them to grow and serve their own members.
- Provide quality education to our members and their staff, ensuring they continue to provide quality golf conditions in an environmentally safe manner.

Like any good vision, a plan to activate it is the real challenge for the future. Hannes helped us establish a set of goals to begin realizing our vision for the future. These immediate goals will be broken up into individual task groups made up of current board members, past presidents, staff members or any persons interested in growing our association stronger for years to come. The goals we have identified are:

- Develop an infrastructure to support the long-term vision of our association. Some of the discussions will center on what the responsibilities of the state and local chapters will be and how they integrate in the future.
- Develop a publications plan to lead the FGCSA into the future.
- Develop an educational plan that addresses leadership training, as well as regional turf related experiences.
- Develop a representation plan that will encompass advocacy, allied organization relations and public relations.
- Develop a membership plan and structure for the future.

There will certainly be a lot of soul searching during the next year, as we want to have this plan in motion by the spring of 2007. We will begin to make strategic planning a part of our regular board meetings, enlisting current and past leaders for their ideas and support.

While all of the objectives were important: 1) Increase turf research funding; 2) Improve communication/coordination throughout chapters, GCSAA and allied associations; and 3) Improve and coordinate educational opportunities throughout the state, it wasn't until just recently at the Poa Annuu weekend that we addressed our final goal of 4) Ensuring our association is functioning efficiently and directed appropriately to the future.



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Chapter Round Up

Calusa

In May we held our annual Cayman Ball Tournament at President Nancy Miller's Maple Leaf G.C.. Our speaker was Bill Schmidt from Golf Ventures who talked about the O. J. Noer Research Foundation. Our annual meeting and election of



By virtue of taking first place in the Poa Annua Classic, Steve Fox from the Harbor Course at the Ocean Reef Club, earned a spot on the 2006 FGCSA Golf Team. Photo by Joel Jackson.

Superintendent Steve Keller and General Manager Kurt Kuebler were kind enough to host our May chapter golf championship at the Isleworth Golf & Country Club, home course to several PGA Tour notables including Tiger Woods. The course underwent a major redesign last year by architect Steve Smyers.



Chuck "Net" Rogers, aided and abetted by his wife Sharon, won the two-person scramble event at this year's Poa Annua Classic in Naples. Photo by Joel Jackson.

of the Poa Annua Classic in May, both held at the Naples Beach Club, we are having our Vendor Appreciation Day at the Bear's Paw C.C. Thanks to everyone who attended and supported these events.

This year's Poa had a different golf format with the "serious" golfers teeing it up over at Billy

many years, and it was our pleasure to recognize him for his time and efforts for our chapter and the industry.

In addition and in keeping with the original intent of this event, we are happy to announce that Hugh Wheat, a senior at Lake City Community College was the recipient of this year's Mike Richards



Golf Ventures' Don Delaney and Cary Lewis pose with the Champion Sponsor check to the Jeff Hayden Envirotron Classic.



With her rubber chicken in tow, Dr. Patt Schwab prepares to deliver her "fun-based" leadership training seminar in Naples at the Poa Annua Classic. Photo by Joel Jackson.



Special guests. Some of the founders of the Palm Beach GCSA's Future of Golf Tournament pose for a photo. From left: Mark Jarrell, CGCS; Fred Klauk, host Steve Pearson, CGCS; Gary Grump, Kevin Downing, CGCS and Glen Klauk. Photo by Ted Owen.

officers was slated for June 22 following a morning golf outing at Leonard Doyle's Cypress Lake C.C. Heron's Creek will host our July meeting and in August we will have a golf and fishing weekend in Clewiston on Lake Okeechobee.

Samantha Kriesch, Association Manager

Central Florida

Golf Course

Just when we wondered if we could top that outing, BASF will help us host the first regional "People vs. the Pros" qualifying tournament in Florida at our June meeting at Harmony Preserve G.C. in St. Cloud. Winners get to vie for a spot to play against Ben Crenshaw and Justin Leonard in a competition to be held later in the year in Texas.

Coastal Plains

We are sending our best wishes to Jeff Heggen on his recovery from his neck surgery. Jeff is at the Hilaman G.C. in Tallahassee and has been unselfishly serving as our external vice president for many terms, keeping us organized and involved in FGCSA projects and programs. Shane Bass at St. James Bay G.C. has agreed to step in and fill Jeff's shoes while he recuperates.

Everglades

After another successful spring season which included a standing-room-only Spring Symposium in April and the 30th anniversary edition

Davidson's Naples Grande course. Steven Fox from the Ocean Reef Club on Key Largo shot a 73 to win low medalist honors. Meanwhile the "hackers" played a two-person team scramble and the husband-and-wife duo of Chuck and Sharon Rogers, from the Saddlebrook Resort near Tampa won the low net title.

In the "did you know?" trivia category, EGCSA President Mark Black, CGCS, just happened to mention that 12 EGCSA superintendents have their boat captain's licenses. Now there's a new statistic for GCSAA to track. How many superintendents want to become general managers or boat captains? Sounds like a future article.

North Florida

We presented our 2005 Keeper of the Green award to Jay McCord of ProSource One at our 13th Annual Mike Richards Memorial Scholarship Tournament at the Jacksonville G&CC in April. Jay has been active in our chapter and the Florida Turfgrass Association for

Scholarship. Hugh is on the staff at the St. Johns G&CC.

Palm Beach

Our members got another look and feel of paspalum turf at our May meeting at Turtle Creek as host superintendent James Sprankle, CGCS had the course in great shape for the superintendent-supplier match-play tournament.

The Silver Anniversary Future of Golf Tournament was held June 4 at the Falls CC with Steve Pearson serving as host superintendent for the seventh year.

To celebrate the silver anniversary, the PBGCSA board invited several past board members who were responsible for the inaugural tournament in 1980. Kevin Downing (the "father" of the Future of Golf Tournament) as well as Gary Grump, host superintendent for that first event, and past board members Fred Klauk, Glen Klauk and Mark Jarrell were special guests this year.

The weather has always played a major role in this tournament



13th Annual Seven Rivers Jeff Hayden Envirotron Classic

Thank you to the following sponsors that made the 2005 event a success

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and the 25th annual was no exception. Eight straight days of rain would have been enough to dishearten any golf course maintenance crew but Steve and his crew were up to the task once again. Play went off as scheduled at 9 a.m. but that does not mean it was an easy task!

Competition was tight again this year with only four strokes separating first place and sixth place. The team from the Fountains CC took first place while second place was decided by a tie breaker won by the team from Adios GC. Longest drive was won by GCSAA champion Seth Strickland, and closest to the line was won by Dale Mitchell. Kelly Cragin, SFGCSA president, took one of the closest-to-the-pin competitions just 3 inches short of a hole in one.

The event brought in more than \$40,000. After expenses, the profit will go towards turfgrass research, junior golf and scholarship programs.

June will also be busy with our annual superintendent/assistant superintendent meeting at the Deerfield C.C. and our 4th Annual PBGCSA Fishing Tournament.

In July we will meet at Polo Trace for our annual meeting and elections. President Steve Bernard reminds everyone to consider hosting a meeting and to submit ideas for education topics for our meetings.

Ridge

Our chapter has been very involved with a First Tee project in Lakeland. The community has come together behind this project and of course our chapter has played a prominent role and earned a lot of respect for our efforts. We encourage each chapter to consider supporting this effort as part of superintendents' efforts to help grow the game and ensure the future of our industry.

Seven Rivers

After a busy few months of preparation for the Jeff Hayden Memorial Envirotron Golf Classic, the SRGCSA is looking forward to a smooth transition and hurricane-free summer. Once again, the Envirotron Tournament was a huge success. On behalf of the chapter, I would like to extend our sincere gratitude to everyone who contributed this year.

Our May meeting was held at West End Golf Club in Gainesville. Our guest speaker for the day was Dr. Grady Miller from the University of Florida. Dr. Miller gave us an update on his research being conducted throughout the state concerning water use on golf courses. He also gave us an update on the construction of the new horticultural unit at Pine Acres. Once completed, it should be one of the most impressive turfgrass facilities of its kind.

Our June meeting will be at Ocala Municipal GC, July will be at Silverthorn GC, followed by Meadow Oaks G&CC in August. *Submitted by Mark G. Kann, External VP.*

South Florida

Congratulations to Steven Fox, superintendent of the Harbour Course at Ocean Reef on Key Largo, for winning the Poa Annu Classic and a spot on the FGCSA Golf Team next February at the GCSAA Golf Championship in New Orleans.

Thanks to our sponsors and attendees, the 2005 Turf Expo in Ft. Lauderdale raised \$31,000 to help pay for the maintenance of the FGCSA Research Green at the IFAS Research and Education Center. Chapter president Kelly Cragin presented a check in that amount to the FGCSA Research Account at the spring board meeting in Naples. See Jim Walker's article on the Turf Expo elsewhere in the Spotlight section.

Suncoast

Many thanks to Mike McCulloch and Jacranda West for hosting our 2005 Suncoast Scramble.

It was a great time and super success. Thanks also to Robby Robertson for all his efforts at the Scramble.

Our annual meeting and golf championship in May was at the historic Sara Bay Club and hosted by President Bob Gwodz. Officers elected for 2005-06 were Chip Copeman, president, Lemon Bay GC; Adam Wright, vice president, Laurel Oak CC; Bob Wagner, treasurer, Coral Creek Club; and Bill Tyde, secretary, Mission Valley CC. The golf tournament is one of three qualifiers to send a superintendent to the GCSAA Championships. Robby Robertson of the Bird Bay GC was the winner. Our guest speaker at this meeting was Jeffrey Kommick, an investment counselor.

In July we will charter a bus for a trip across the Skyway Bridge to St. Petersburg for a Devil Rays game against the World Champion Boston Red Sox.

Treasure Coast

President Roy MacDonald reports that this year's Blue Pearl Charity Tournament at The Medalist Club raised close to \$18,000 to support environmental and turf research activities. Kudos to our sponsors and the Blue Pearl committee for their support and hard work. You can thank Barbara Tierney, Tim Cann, Kevin Downing, John Morsut, John Curran, Harry Hanson and Bill Lanthier for making the event a success. Special thanks to host superintendent Tim Rappach who had the course in wonderful shape - firm and fast.

Our next event will be a June pro/superintendent tournament at the Indian River Club in Vero Beach. Two-man teams of a pro and superintendent from the same club will play nine holes of alternate shot on the front nine and best ball on the back nine. It should be a fun way for two of the key people at a club to spend some quality time together away from the daily grind.

West Coast

The team of Clark Webb, Brian Mortillaro, Scott Scamerhorn

and Bob Solms from the Ridge Chapter captured first place in our 2nd Annual Chapter Challenge held at Kevin Baldwin's Diamond Players Club. This event is a three-way competition among teams from the West Coast, Ridge and Central Florida Chapters.

Congratulations to Alan Brissenden, CGCS at the Dunedin C.C. for earning three GCSAA Environmental Management Specialist certificates in Employee Safety and Right to Know; Storage, Disposal and Recycling; and Integrated Pest Management. Previously Alan became certified in Golf Course Development and in Water Quality and Application.

Our next meeting will be our chapter golf championship, annual meeting and election of officers to be held at Cheval. We will also be having a vote on a by-laws change. We are also pleased to announce that our annual Bud Quandt Charity Tournament is now classified as a 501(c)3 entity and will be tax exempt for donors and supporters.

Florida GCSA

Our spring board meeting was a full-day event this year as Hannes Combest from GCSAA joined us to facilitate a half-day strategic planning session to help us take a critical look and our current and future operations and goals. A new mission statement and long-range vision and goals were discussed to position the FGCSA to better serve its members today and in the ever-changing future. Paramount in the planning is to make sure we have a smooth transition in staff positions when Marie and Joel implement their retirement plans.

Also at the Poa Annu Classic, the FGCSA hosted a half-day seminar on Situational Leadership with the "guru of guffaw", Dr. Patt Schwab, who is known for her copious use of humor to drive home the serious business of leadership training. Dr. Schwab is the president of "Fun"damentially Speaking and is a

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favorite presenter of GCSAA seminars.

FGCSA Vice President Craig Weyandt, Polo Trace G&TC Superintendent Frank McKee, Association Manager Marie Roberts and Director of Communications Joel Jackson attended the first Chapter Leaders and Executives Symposium held in Lawrence, Kan. The goal was to find ways for paid staff members and volunteer chapter leaders to build more effective relationships and working strategies.

We will be hosting the second in a series of Assistant Superintendent Seminars on Professional Development Skills in the southeast region of the state in late summer or early fall. Stay tuned to the FGCSA Web site and Green Sheet newsletter for the final date and location.

Darren Davis and Joel Jackson were part of the GCSAA Strategic Communications Committee that met in Kansas City in late April. This committee is charged with helping the board of directors and GCSAA staff in defining and evaluating key messages that are consistent with mission, vision and strategic goals of the GCSAA to key audiences — primarily the members, but also including industry, owners and influential golfers, media, policy makers and others.

Our director of communications, Joel Jackson, completed the hat trick by making a third trip to Kansas in June to serve on the Publications and Online Use and Positioning Task Group. This group is just one of many task groups that will deal in specifics brought up in the strategic planning sessions. This governance model applies to all parts of GCSAA, not just communications, so that rank-and-file members will be identifying key issues and solutions to send to the board of directors for consideration and adoption into practice.

FGCSA Honors David Court CGCS With 2005 Distinguished Service Award

During the 2005 FGCSA Past President's Dinner May 12 in conjunction with the Poa Annua Classic in Naples, President Joe Pantaleo named David Court, CGCS, director of grounds and greens at the Boca Lago CC in Boca Raton as the 2005 Distinguished Service Award honoree. Court's wife Janet was on hand to witness the ceremony.

Court, not unlike many of the former DSA recipients, is a past president of the FGCSA. He served as leader of the organization in 2002, and he is no stranger to handling a gavel as he served two complete tours of duty on the board of directors of the Palm Beach GCSA, culminating in the presidency twice — in 1988 and 2000. In between those years, he also served as the FGCSA education chairman from 1992 to 1995. Three years after his presidency, Court is serving on the FGCSA BMP Committee and is the chairman of the Irrigation section of the statewide Golf BMP Steering Committee.

But man does not live by association service alone; Court has been at the Boca Lago CC for 24 years, which speaks volumes about his approach to the business. Being at one of the few remaining courses that provides housing for the superintendent has its perks, as Janet also serves as his administrative assistant in his office.

Former Lake City Community College classmate Mark Henderson, now at the Gulfstream Golf Club in Delray Beach, speaks to Court's longevity, "Dave's a great listener and more patient than Job. I guess that leads to longevity in this business and probably in any other pursuit. Dave has influenced many in this business and hopefully many more to come." Henderson also

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David Court, CGCS, left, recipient of the 2005 FGCSA Distinguished Service Award with FGCSA President Joe Pantaleo. Photo by Joel Jackson.

commented on Court's service to the Palm Beach Chapter, "I'm proud to say I graduated with David at Lake City. Dave was always trying to find a way to get more superintendents to attend meetings. It was not easy, as you well know."

One of those people influenced by Court was current South Florida GCSA president, Kelly Cragin, who had this to say about his former boss and mentor, "I worked for David Court as his assistant at Boca Lago C. C. for about three and a half years and one of the many things I learned and admired about David was his ability to give the membership what they wanted. David was able to put his own ego in check, which can be a challenge for many people, and find a way to make their requests a reality.

"I know that many superintendents understand the ability that they possess to bring knowledge and experience to a club has to be joined with the desires of the membership. I realize that this is a simple idea we should learn early in this profession and obviously some of us are better at it than others. I believe David has a firm grasp of this concept and contin-

ues to put it in practice. David's capabilities are rewarded with support for him from the members and the proof is his employment at the same club for over 20 years."

Court is also an avid golfer, who plays his own course three times a month and on the fourth week he plays somewhere else to check out the competition. A couple of his memorable golfing highlights include playing in the John Deere Classic Pro-Am in 2000 and the LPGA's 50th Anniversary Founders Tournament. Court recalled, "The Pro-Am was just a small part of the overall event, but it was great being inside the ropes and I even matched birdies with the golf pro on the first hole. Then I got to play with LPGA pro Shelly Furlong and actor Jamie (Klinger) Farr from the hit TV show M.A.S.H. at the Palm Beach Par 3 course.

Paul Crawford, also a past president of the FGCSA and fellow Palm Beach Chapter member, praised Court, not just for his service, but for his overall demeanor as a person, "David court is one of the most deserving people for the DSA. He is a true gentleman, a great golfer and one of the nicest men I know. You must

also mention Janet his wife, as she is always at David's side, and they are a great couple, a real partnership. Janet actually knows the business because she works with David during the day. I cannot say enough about David Court. He is pleasure to serve on boards with, to play golf with or just to have a talk with, I am honored to call him my friend."

Court had this to say about receiving the DSA award: "I am truly honored to be selected this year and to join the list of outstanding persons who have been named before me. There are so many others among us that also deserve this honor that I am truly humbled to be selected. Thank you so very much to those who nominated me for this honor. I couldn't accept this award, this honor, without acknowledging the love, support and assistance from my family, especially Janet, who has been there with me every step of the way."

Court has two sons: Tibe (32) is married to Christina (three years now) and teaches speech and communications at Kyser and Everglades Colleges in the Fort Lauderdale area. Son Chris (30) is following in dad's footsteps in the golf business and is currently working under the tutelage of Bob Randquist, CGCS at the Boca Rio Golf Club in Boca Raton. "That's nice that Chris wants to be in the business," Court says, "but I'm happy as long as they are both doing what they enjoy the most."

Current FGCSA President Joe Pantaleo has acknowledged on several occasions how the thoughtful approach Court took to his presidency and in dealing with the issues helped prepare him for his tenure as president. Their styles are not too dissimilar, and Pantaleo has been grateful for Court's input and continued committee service as a valuable resource to the association.

Thus it was with great delight that the FGCSA accepted and approved the nomination of David Court, CGCS for the 2005 Distinguished Service Award.

Marie Roberts Lifetime Achievement Award

Association Manager First Recipient of Award Named in Her Honor

FGCSA President Joe Pantaleo stood up at the Past President's Dinner at Zoe's Restaurant in Naples this past spring and asked the group for their attention. Everyone assumed it was time to honor the past presidents with a toast and thanks for their past and current leadership in the



Marie Roberts, FGCSA association manager, with FGCSA President Joe Pantaleo, definitely had no idea "her boys" planned to honor her with a Lifetime Achievement Award for her two decades of service. Photo by Joel Jackson.

industry and the association.

But he went on to announce that as of this night, the FGCSA was going award from time to time a Lifetime Achievement Award to persons who were not superintendents but who have had a meaningful and long lasting effect on the association and industry. Joe then turned the floor over to Tim Hiers, the first FGCSA president to make the presentation. It wasn't until Hiers was well into his speech at the Naples that Marie Roberts began to catch on,



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when unavoidable words and clues were spoken. I could see her face in a reflection on the mirrored wall and watched her slowly realize in amazement that it was she he was talking about.

She accepted the award graciously as those who know her would expect and thanked the board and the past presidents and recounted how these were “all my boys” through the years. Marie’s first reaction after receiving the Lifetime Achievement Award was to wonder, how did they find out where I got all those plaques for them? Several of the past presidents gave short anecdotes about how Marie was their right hand when they had the gavel and how she kept the FGCSA moving forward by taking care of the administrative details while we did all the talking.

It all began in 1984 when FGCSA President Tom Burrows called on his neighbor, Marie, two doors down in the North River Shores neighborhood in Stuart and asked if she would do him a favor and type a letter needed for his association. He knew she had a background as an administrative assistant and likely could type. Well, one letter led to

another and then there were some board meeting minutes to be done, and when the FGCSA decided they needed to do a newsletter and a membership directory, somebody said, “Who the heck is going to do all this?” Tom suggested the FGCSA hire Marie permanently. The motion passed and the rest is history.

While she has watched “her boys” and their families grow up, she has a brood of her own who have staked their claim in the medical field and have given her grandchildren to boot. Her oldest daughter Colleen Patterson, a registered nurse, is currently being a full time mom to her three kids: Shannon (15), Taylor (12) and Michael (4). They live just a little way down the street. Marie’s son Mark is a pediatric respiratory therapist and recently moved back to Stuart from Colorado. Mark is a master wake boarder and mountain bike aficionado. Her youngest daughter, Suzanne Turner, lives in Ft. Myers with her hubby and two kids Jackson (6) and Hayden (5 months). Suzanne is a clinical pharmacist.

But Marie has an even larger family that she tries to keep tabs on and with over 1,100 members mem-

bership renewal and directory time get pretty hectic. She really appreciates those volunteers at the chapters who take the time to get information and reports to her on time and she knows it can be tough when you have a full-time job as a golf course superintendent. But when the deadlines to IRS and the State of Florida and GCSAA come due, they’re due. It’s not nice to stall the IRS.

“This is a great job,” Marie said. “I could never have imagined the scope and changes that have occurred over 21 years. Meeting the people and traveling to conference and show and now GCSAA chapter executives meetings and comparing notes with my peers who do similar work from New York to California. It’s been a great experience. It’s not an 8 to 5 type of job, although I have to admit during those first five years, I would get phone calls from superintendents who just naturally assumed that since they were in their offices at 5:00 am so was I. Thankfully, they got over that. My days can be flexible and that’s a nice aspect to this job. I can play tennis with my girl friends in the morning and then work the rest of the day as needed. It really has been a

fun job.”

Marie observed how association life has changed across the state and nation. She said, “I am amazed at the chapters locally and nationally that still expect or think a full-time superintendent will be willing to do his full time job all day and then come home and conduct chapter business into the night, or that he or she even has the time. While a lot of chapters have wives of superintendents acting as administrative assistants or even executive directors, some chapters have hired professional association executives to help the various boards of directors to achieve their goals. One of these days Joel and I will be retiring, I wonder what route the FGCSA will take.”

I can tell you as a former president of the FGCSA and now as a staff member of the association, there is no way we would be where we are without the continuity, experience, dedication and determination that Marie has put into her job over the past two decades. All of us owe her a debt of thanks, and we tried to pay that debt by establishing the Marie Roberts Lifetime Achievement Award in her honor. Thank you, Marie.

The Little Expo That Thought It Could

By Jim Walker

It was Wednesday, March 23 in the afternoon. All the hard work was done. The tents were up for lunch and the booth displays. Other tents were in place for the equipment distributors and Dr. John Cisar and his staff were all set for the big day on Thursday. Only problem is they forgot to tell Mother Nature. A thunderstorm driven by a cold front came roaring through the Fort Lauderdale Research Center and wreaked havoc on the whole shebang.

This is the same front that almost kept the Players Championship in Jacksonville from taking place. When Susi and I arrived at the center at 7 a.m. Thursday, South Florida President Kelly Cragin told us about the small tornado which had come through the previous afternoon. He and a small army of people from the South Florida chapter went to work trying to reassemble the display area.

The vendor who supplied the tents had a crew on site by 8 a.m. and they began to try to set the tents

back up. As I walked from the registration tables up front where 500 people were being processed to the research green in the back, I recalled the children’s story about the little engine trying to pull a train up a steep hill. “I think I can, I think I can.” it said to itself as it chugged up the grade. Finally as it neared the top the “think I can” was replaced with, “I know I can, I know I can” and it rolled over the top!

The tent for the booth suppliers was righted as were all the other

small tents, but the big top which was to house the lunch crowd was damaged beyond repair. The twisted metal frame was hopelessly mangled. Alternative arrangements would have to be made for lunch. Our little Expo train was almost there but not quite yet.

8:30 a.m., it was time for the field trials to begin. Dr. George Snyder presented research findings on the interactive effects of potassium and sodium on bermudagrass. Dr. Billy Crow discussed nematode control programs with Dr. Robin Giblin-Davis. Drs. Ron Cherry and Russell Nagata talked about new chinch bug-resistant St. Augustinegrass. Dr. Greg Nuessly reported on the control and biology of the recently observed greenbug aphids on seashore paspalum. Dr. Raymond Snyder discussed his work on soil



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South Florida GCSA President Kelly Cragin, left, presents a check for \$31,000 raised at the 2005 South Florida Turf Expo to FGCSA President Joe Pantaleo at the FGCSA spring board meeting in Naples. Photo by Joel Jackson



Turf Expo Coordinator Dr. John Cisar (left) and South Florida GCSA President Kelly Cragin survey the remains of the tents blown down the night before the 2005 Turf Expo. Photo by Dara Park.

amendments and their effect on turfgrass establishment and management.

A new feature at the Expo was project updates by graduate students Dara Park, Matt Brecht, Paucic McGroary and Claudia Arrieta. Subjects discussed: new technologies for documenting water stress and turf quality; ultradwarf bermudagrass disease programs on curvularia and bipolaris; nematode dynamics and application timing; and impact of compaction on goosegrass competition with turf.

Also, Dr. Kimberly Moore hosted a tour of the annuals trial gardens. Dr. Bill Howard led a discussion on insect pests of palms; and Dr. Bill Kern talked about animal problems in the landscape and demonstrated methods to ward off these pests.

At 10 a.m. the booth displays opened – 33 strong, and the air was alive with the sounds of all kinds of bright new equipment that was to die for. Zooming over the research green spraying, mowing, aerifying,

topdressing, rolling – performing all the wonderful things we call “cultural practices.”

While all this was going on, it was time to get our Expo train over the hill. Twenty or more people began moving tables and chairs 200 yards south to the Courtyard lawn for 500 diners.

At high noon, Wiley and Nancy McCall and their staff began ferrying a Bar-B-Que rib lunch with all the trimmings to the hastily arranged lunch site. The McCalls from Environmental Turf get the South Florida chapter’s standing ovation each year for their generous and gracious gesture in coming from Ft. Pierce with their Texas-sized grill and providing the wonderful lunch. To the McCalls,

techs and equipment managers and in the main auditorium an address by Dr. Phil Harmon centered on turf diseases and control options for the turf manager. Matt Brecht followed with a research program update, and then a panel discussion moderated by Dr. Monica Elliot, and consisting of Dr. Lawrence Datnoff, Dr. Carol Stiles, Dr. Phil Harmon, and Matt Brecht, focused on preventive programs, recent trends in turf disease and the use of disease ID labs. It was a most informative and interesting afternoon!

The little Expo train is over the hill, as is this article. Everyone is off to get their CEU forms and be on their way, but before we go, we need to pass out the thank-

you’s: first to Dr. John Cisar and the staff at the FLREC; to Wiley and Nancy McCall, and their wonderful lunch; to all the booth vendors, and equipment suppliers; to Kelly Cragin and the South Florida GCSA board; to Marie Roberts, our association manager who keeps us going in the right direction, making sure all the t’s are crossed and the i’s are dotted and most of all, to all of you who attended and supported the Expo. Thank you one and all. See you next year.

People are visiting while eating lunch and relaxing after a very busy morning. You need a little nourishment and rest, because the afternoon sessions begin at 1:00 pm.

There were concurrent sessions for spray techs, irrigation

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*Par-3, 208-yard
14th Hole
The Club at Eaglebrooke
Photo by Daniel Zelazek*



The Club at Eaglebrooke

Sometimes You CAN Go Home Again

By Joel Jackson, CGCS

The Club at Eaglebrooke lies about six to eight miles due south of the heart of Lakeland and borders the newly dedicated 550-acre Lakeland Highlands Scrub Jay Preserve. The land at one time was part of the vast phosphate mining enterprises that encompassed much of Polk County. Since 1996, Eaglebrooke, a Ron

Garl-designed golf course, has been the semi-private centerpiece for a growing and thriving residential community.

Five years ago, Alan Puckett returned to his hometown to take over the maintenance reins at this challenging 7005-yard golf course and he continues to live out his lifelong dream of

just being a good golf course superintendent. As Puckett noted, “I’ve done the association thing; now it’s time to give back to the community.”

Puckett ascribes to the philosophy of “work hard – play hard,” something he learned at the elbow of University of Florida’s golf turf legend, Dr. G. C. Horn back in Puckett’s days at the

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Course Facts



Eaglebrooke Golf Course Maintenance Staff. Eaglebrooke photo.

The Club at Eaglebrooke

Location: Lakeland

Ownership: Paul McDonald, owner and Dale Jacobs, managing partner

Playing policy: Semi-private

Number of holes: 18; 7005 yards; par 72; six teeing areas per hole.

Rating/Slope: 74.0/136 from the tips.

Designed by: Ron Garl

Opened: 1996

Management: Club Manager Cyndi Clark; Head Golf Professional John Greiner; Chef David Dunn; Superintendent Alan Puckett.

Renovation project: Redesign of the par-5, 17th hole into a double dogleg with a more user-friendly landing area. Construction by Highland Golf.

Total acreage under maintenance: 130 acres

Greens: TifDwarf; avg. size 5,800 sq. ft.; total 3.5 acres; HOC.110 in.; overseeding: Poa trivialis and Red Top fescue blend; green speed goals: 10.0 - 11.0.

Tees: GN1 bermudagrass; total 3.0 acres; HOC: .400 in.; overseeding: Derby Supreme ryegrass.

Fairways: GN1 bermudagrass; total 45 acres; no overseeding.

Roughs: GN1 bermudagrass; total 68 acres; no overseeding

Bunkers: 52. 37M sand; machine-raked with Toro Sand Pro.

Native areas: Waste areas on holes 5, 7, 17; accent plantings of cordgrass; machine-raked twice weekly; cordgrass maintained by manual cultivation and over-the-top spraying as needed.

Waterways/Lakes: 7 interconnected lakes; edges and banks maintained by outside contractor.

Irrigation: Source – surface water supplemented by reuse storage; Controls – Toro Osmac; fertigation system; head spacing 76 ft.; no watering restrictions currently in effect.

Water management/conservation: Daily check of pump house, system check for leaks; Adjust ET rate daily based on weather and turf conditions.

Staff: 15 full time including superintendent and 1 part-time student working his way through school; scheduled 40 hrs straight time with 7 hrs overtime biweekly.

Leadership: Assistant Superintendent Rick Fountaine, Equipment Technician Brian Sargent, Spray Tech and weekend foreman Bob Cody.

Communications: Daily crew operations meeting; weekly club department head staff meeting; biweekly crew/safety meetings; biannual meeting with the members.

Cultural Programs: Aerification – greens, tees and fairways 3x per year; Aerification Plus does greens, we do tees and fairways in house. Fairway nutrition – four bulk applications of 15-5-15 per year; spring and fall applications have preemergent herbicides sparged on the fertilizer; supplement with fertigation (24-0-0, 8-0-8 or 6-0-12) monthly depending on time of year. Greens nutrition – alternate granular 13-4-13 with a minors foliar spray biweekly.

Pest Control: Apply Chipco Choice annually for mole cricket control; All other insect, weed and disease control is done only as needed except for the two pre-emergent herbicide applications in the spring and fall.

Management Challenges: This site is reclaimed phosphate mining land. The heavy soils can get sloppy wet, so we tend to keep the course on the dry side.

Environment: We have done a wildlife inventory that includes 114 species of critters and 68 species of birds.

Special events: Annual Member-Guest and Club Championship tournaments. We hosted an LPGA Futures Tour event for five years and in October of this year we will host a PGA Championship Tour qualifying event.

Grenelefe Resort in Haines City. Puckett said, "A lot of the industry people owe a lot to Dr. Horn when he was a turf consultant in the booming days of golf course development in Florida. He was a good buffer between the superintendent and the members and explained the agronomy needed to groom golf courses."

(Editors note: A personal tip of the hat to Dr. Horn: while we didn't have members at Disney World, riding along with him on his consultant visits at the Lake Buena Vista course was my crash course in turf management after majoring in geology. I was better able to understand and communicate to my corporate chain of command because of him.)

Puckett's 24-year career since graduating from Lake City Community College in 1981 has been spent largely in Polk County. Right out of Lake City he spent two years at the World of Palm Aire in Pompano as a spray-tech/assistant before moving to Walden Lake in Hillsborough County for two years as an assistant. After a five-year stint at Grenelefe as an assistant superintendent, he spent 10 years at the

golf course maintenance helm of the Lake Region Yacht & Country Club in Winter Haven. Puckett had been working himself closer to home with every move. Now he is home.

The lessons learned from Dr. Horn went beyond sound, basic turf management. They included things like, "Work hard every day. That's what they pay you for, but when day is done go home and have a life. Come back tomorrow and work hard again."

Puckett says he feels too many of his peers don't get it and they are burning out too quickly these days.

But people get into the superintendent profession in many ways, and for Puckett it was a matter of connecting with his father Ron who held two jobs each day: English professor in the mornings and club tennis pro in the afternoons. Puckett took a job in the club's cart barn just so he could spend more time around his dad. In the process he fell in love with the golf industry. By the time kids in high school were wondering what the future held in store for them, Puckett knew he wanted to be a golf course superintendent and he has been living his dream ever since.

Eaglebrooke gave Puckett the chance

to come home and he takes that opportunity seriously as he has spent time learning to work the land placed under his command. There is always a learning curve when a new superintendent takes over and one of the biggest for Puckett was getting used to having homes bordering the golf course.

"It was a big adjustment for me to have homes on the course. Scheduling work took on a new meaning when I had to consider noise levels and dusty operations like bulk fertilizer applications and aerification-core clean-up on fairways."

Getting to know the course and how it responds to nutrient and cultural practices is also an important piece of the management puzzle and one that members often don't consider when making superintendent changes. In Puckett's case, irrigation management is critical for Eaglebrooke's playability and customer satisfaction. He explained, "Much of this property is reclaimed phosphate mining land and the soil is fine textured and readily holds moisture, so I have learned to keep it on the dry side to allow for rainfall or a necessary heavy irrigation. It can get a little sloppy out there if it gets too wet."

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The par-3, third hole borders one of seven interconnected lakes on the course. Note the guy ropes on the trees behind the green - necessary reminders of the 2004 hurricane season. Photo by Daniel Zelazek.

To the club's credit they replaced the old equipment when Puckett came on board so

he had some good tools to work with to give them the best course that he could. It wasn't long

before Puckett discovered some of the problems revolved around pH issues, which he controls

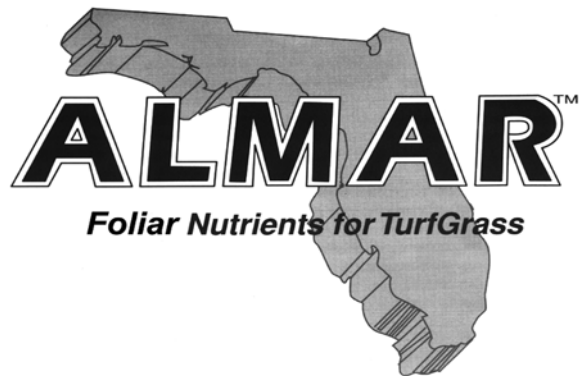
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The 526-yard fifth hole plays along one of the three large waste areas on the course. Photo by Daniel Zelazek.

with regular soil sampling and custom fertilizer applications. Another big issue is the irrigation

water source. The primary source is surface water pumped from the seven interconnected

lakes on the property. This source is supplemented by reclaimed water from the county and the



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Superintendent Facts



Alan Puckett. Photo by Joel Jackson

Alan Puckett

Originally from: Lakeland

Family: Parents Edith and Ron Puckett; two sisters and three nephews

Education: A.S. in Golf Course Operations from Lake City Community College, 1981.

Employment history: 2000-present The Club at Eaglebrooke, superintendent; 1990-2000 Lake Region Yacht & Country Club, superintendent; 1985-90 Grenlefe G.C., assistant superintendent; 1983-85 Walden Lakes G.C., assistant superintendent; 1981-83 World of Palm Aire,

Professional affiliations and awards: Member of GCSAA, FGCSA, FTGA and Ridge GCSA. Served as president of the Ridge GCSA and the Florida Turfgrass Association and on the FGCSA board of directors, Polk County Water Policy Board.

How did you get into the business? My dad worked as a tennis pro at a golf club and I got a job in the cart barn so I could see him more often. Fell in love with the golf business.

Mentors: Dr. G. C. Horn – learned a lot of turf

management riding around Grenlefe with him. Mike McGloulin, David Barnes, Mark Jarrell, and Joel Jackson.

Goals and accomplishments: I've become a fairly successful golf course superintendent and that's all I wanted to be. My best accomplishments are finding out that home is where the heart and satisfaction are. I take care of Little League fields, the church soccer field, help with the Lakeland First Tee project, work with the Lakeland Boys and Girls Club, serve on the Ridge GCSA board and sit on the Community Development District for Eaglebrooke.

Work philosophy: A professional is supposed to be dedicated, work hard and be loyal. Give it your all each day, but when you go home, leave it all at work, and have a life of your own. Your work is not who you are. Work is what you do to pay the bills.

Memorable moments: Being president of the FTGA and the Ridge Chapter. Being part of the Lakeland First Tee project.

Hobbies/Interests: Fishing, golf, stock car racing, community involvement.

course currently has one well as an emergency source if the reclaimed water can't meet the needs of the course. In the beginning the county loved having Eaglebrooke as a logical distribution and disposal site on the south side of town. With the growth of the use of effluent as a residential landscape irrigation source, it has become a finite resource and a couple of courses including Eaglebrooke have been hit with user fees that others don't have to pay.

This is not the first time that inconsistency has crept into the use of effluent water in the golf industry. Around the state, utilities make unilateral and often uninformed decisions about water quantities and rates for golf courses and don't seem to balance the fact that while courses need the water, the counties also need the disposal site, which planners and policymakers should value more highly.

But Puckett is not complaining, in fact he and the owners work closely with the county water regulators and the homes in the development have electronic metering to monitor residential irrigation use. The county has even recommended that Eaglebrooke install a second back-up well to make sure an emergency source is available if needed.

But the bottom line is producing a pleasing golf course, and Puckett takes the old school approach of watching the plant and giving it what it needs. The greens are TifDwarf and his tees, fairways and roughs are GN-1 bermudagrass.

"You hear lots of comments about GN-1, good and bad," Puckett said, "but in my travels I have found the performance tends to be site specific. It performs very well here on our finer soils, but I know on some of the sandier courses, it can seem to struggle. I guess the extra moisture and nutrient retention has an effect."

Puckett fertilizes the GN-1 four times a year, generally with a 15-5-15 blend based on soil samples, but the spring and fall applications also contain a pre-emergent herbicide to control weeds. The fairways are also slit injected annually with Chipco Choice to control mole crickets. Any other pest-control treatments are applied only when and where they are needed. Gone are the days of wall-to-wall spraying.

On the day that I visited Eaglebrooke, the course was on the last day of a three-day closing to aerify and topdress greens. Puckett uses an outside contractor, Aerification Plus to punch the greens three times a year.

"Of course we could buy and maintain the equipment," he said, "but there is so much to do when we're closed it benefits us to have Russ (Varney) and his gang come in and punch holes and pick up the cores. It is one of those curious things that members don't always get. They think we are just punching holes and spreading sand when we are closed, so lately I have been posting a list of the 24 jobs we do when we are closed, so they know there's more to it than aerifying.

"Of course people don't like us to disturb the greens, but our golf pro and our better golfers understand that the sand will help the ball roll smoother and that is the message we put out."

Besides the course closing, Puckett is working with Ron Garl and Highland Golf in the redesign of the 17th hole, a double dogleg, par 5 that needed some tweaking to make it a better-driving hole. They're also adding a large runoff retention area. The reconstructed tee complex and the widened fairway portion had been sprigged and sodded in key areas to prevent erosion with the rainy season just weeks away.

"The old layout was a narrow chute off the tee," Puckett said, "and the fairway

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A large stormwater retention area is part of the redesign of the 17th hole. The tee tops and fairways have been sprigged and erosion-prone areas are being sodded. Photo by Joel Jackson.

bunker was so close you often had to lay up, not always a good strategy move on a par 5. As it

was, the fairway bunker was penalizing the average golfers. Now the long hitters have more of a

risk-vs.-reward shot and it is a better golf hole.” As we headed back to Puckett’s office

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A scenic view from the 15th green with No. 12 in the background. Photo by Daniel Zelazek.

Fun Facts



The top dog, Roscoe, and his sidekick Alan.
Photo by Joel Jackson

Also known as Slim Shady, Alan Puckett, has a carefree sense of humor and a big heart

Car: Ford F-150

The last good movie I saw: The Legend of Bagger Vance

I stay home to watch: NASCAR, golf, old movies, the Discovery Channel

The book I've been reading: What's a book?

Favorite meal: Shark and shrimp on the grill with a little Crown

Favorite performers: Jimmy Buffet and Tom Hanks

Prized possessions: Family and friends

Personal Heroes: Mom and Dad

Nobody knows that I: Really care about what I do

I'm better than anyone else when it comes to: Coming up with a plan

I'd give anything to meet: Angelina Jolie

My fantasy is: To win the lottery and then really get into trouble

The one thing I can't stand: Two-faced people

If I could change one thing about myself: I don't know, I'm pretty cool now!

My most irrational act: Being politically correct

My most humbling experience: Working with kids who make the best of what they have

The words that best describe me: I have a need to help others

I noted the numerous osprey nests on the nearby utility poles which prompted him to mention that Eaglebrooke had documented 182 species of animals on the property, 68 of which are birds.

One animal has a special place at Eaglebrooke: "shop dog" Roscoe P. Coltrane, a black Labrador retriever who was abandoned near the course when he was less than a year old. Roscoe has since become a fixture at the shop, in Puckett's cart when he rides the course, or on the clubhouse veranda where he often spoiled by the staff with delicacies from the kitchen.

Roscoe is the shared responsibility of the whole crew and he goes home each night with a different person. I can vouch that in return Roscoe protects the home turf: he gave me rather curt greeting at the shop until Puckett vouched for me. Roscoe then graciously gave up his seat in Puckett's cart and rode in the back while we toured the course.

Perhaps it was that sense of comfort that pervaded my visit to Eaglebrooke, where Puckett has come back to his boyhood community to work and live. No less intense than ever as a professional in his work day approach to his responsibilities, but excited and energized to be part of the community with his work with the Boys and Girls Club, and a seat on the



A different view of the par-4, 431-yard 15th hole indicating why it is the number-two handicap hole. Photo by Daniel Zelazek.

Community Development District Board or working with the Ridge GCSA on the Lakeland

First Tee project which has been a great project pulling all segments of the community together

in a common cause.

Puckett concluded the visit with these

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The second half of the double-dogleg, 514-yard, 17th hole. The first half of the hole is being redesigned to enhance the playability and strategy of the tee shot. Photo by Daniel Zelazek.

remarks, “They say you can’t go home again. Well maybe you can go home with a different view. I reached a lot of my career goals at an early age, but

working with some of these kids is amazing. We take for granted what we have sometimes and it is awesome watching these kids make do with what

they have. I am the richest person in the world because of my family and friends.”
Welcome home Alan.

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Ultradwarf Management

Believe it or not, we are rapidly completing a decade of ultradwarf turf management. And no sooner are some superintendents getting comfortable in the new routines and requirements for this variety than seashore paspalum breaks onto the scene. While these newer grasses earn their spots in the sun, there



Rick Tatum

are still multitudes of courses growing the former standard, TifDwarf.

With the choices available now, it is hard to call any of those three varieties a “standard” for the industry. Golf course superintendents who are fighting greens with mutation and/or contamination spots must decide whether to remain a TifDwarf user

or to change to one of the new varieties. The key word is “change,” and it *will* be change, so be prepared to deal with and live with the requirements of these newer grasses.

Our topic is ultradwarf management for this section, but you can also take a look at some of the pros and cons of using paspalum in the Industry News section. Meanwhile, read what three of your peers have learned about these grasses. I interviewed Rick Tatum from the Grey Oaks Country Club in Naples, and Ken Glover at the Windsor Club in Vero Beach and Tim Cann of Harbour Ridge in Palm City. They have some interesting perspectives on what it takes to manage ultradwarfs.

Mr. Ultradwarf – Rick Tatum

I was looking for some victims, I mean volunteers, to do interviews for this article and Rick Tatum graciously gave up his barstool at the Naples Beach Hotel Tiki Bar to share his ultradwarf experiences. It turns out that Tatum has scored the proverbial “hat trick” having grown-in and managed three varieties: FloraDwarf, Champion and TifEagle.

He has nine years’ experience with ultradwarfs so his opinions and observations regarding their management have some credibility. Join me on the wild ride that is Tatum’s take on ultradwarf management. It began when I asked the seemingly simple question, “What variety do you manage?”

Tatum began, “Well, I’ve done three. I started with FloraDwarf at the Forest Country Club,

then I grew-in two courses at Shadow Wood planted in Champion, and currently I’m managing 54 holes of TifEagle on the Grey Oaks Palm, Pine and Estuary courses.”

“I think Champion has the best playing surface of all the ultradwarfs and oddly enough it closely resembles FloraDwarf in appearance. We had a green at The Forest that was 50-50 FloraDwarf and Champion and no one, not even the experts, could tell with the naked eye. But the problem with Champion in the summer here is that it is a 24/7 job — almost like growing bentgrass in South Florida.

“What is true about all of them is that if you make one mistake in over-fertilizing them, you may find yourself scalping greens. Then you’re dead. GR1000’s are great mowers but if the grass is too fluffy, they will dig in and scalp. On our TifEagle greens, we apply granular fertilizer (15-0-15) only after aerification in May or June to help the turf recover and we only aerify once, but we use a slightly different technique. We punch in two directions with a Toro 643 and 5/8” tines. We go 12 to 6 on the first pass and we make our second pass in the 11:30 to 5:30 direction. What I have found out is that by altering the direction by this small amount, the second pass misses most of the first holes and we end up removing more thatch material which is, after all, the

whole point to aerifying. By changing directions 90 degrees (9 to 3) or 45 degrees (10 to 4) to the first pass, you end up hitting a lot of the same holes and defeat the goal of maximum thatch removal.

“Along with the granular fertilizer we usually apply an insecticide since the worms seem to like to use the freshly punched holes to make their burrows. Full recovery usually takes two to two-and-a-half weeks. And the timing is critical as well. We go as early as we can in the growing season because when the stormy, late-summer weather picks up, the cloudy days make for slow recovery from any stress on the turf.

“If you lose control of your clippings yield, which is one of my signals, you’re done. It can affect thatch production and greens speed. I also use tissue sampling as a barometer to make sure my nutrient levels stay in line. I have learned to correlate the sample values with the appearance and performance of the grass. We tend to keep them leaner in the summer (4.0) so they don’t thatch up so fast and in the winter we monitor them at (4.7) while 4-6 is the recommendation overall ideal. We feed them with 2-5 gallons of Gary’s Green depending on tissue-sample numbers and may add some soluble N as needed. I learned this regimen on the Champion and it has worked well for me on the TifEagle.”



TifEagle ultradwarf on No. 18 green at Loblolly Pines G. C. in Hobe Sound.

The Moorings Club - Vero Beach FL
Craig Weyandt, Golf Course Superintendent



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lower mowing heights. With frequent brushing, grooming and light top dressings, TifEagle requires less verticutting to control thatch buildup than the other ultradwarfs. TifEagle also recovers more quickly from injury, has better color, and is extremely cold hardy, drought tolerant and disease resistant. So whether you're involved with the repair or restoration of your existing greens, or installing an entire new course, insist on the best. Specify TifEagle Bermudagrass by name. You can sod it, sprig it or even no-till it under the right conditions. Call for more information.



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What unfolded next was what I consider the sage advice of someone who has been there and done that.

Tatum is passionate about the golf industry, his job at Grey Oaks and his role as a superintendent. Essentially, he says that managing these new grasses takes a new approach that becomes prescription management directed at each green and what it needs. Performing the identical regimen on all 18 greens no longer applies. Each green has to be evaluated and handled individually for successful performance.

“Knock wood – I haven’t lost a square inch of TifEagle so far in five years at Grey Oaks. We have shade issues on a couple of greens and so we manage them differently. Everything you do on ultradwarfs is “as needed.” Take verticutting for example. You can’t get locked into verticutting every green once a week just because that’s “the program.” We have some greens we verticut “harder” than others and some that we only verticut portions of. Those two shady greens may not get verticut at all sometimes. The same goes for fertility. Two greens get more than others. Some greens we mow with Flex mowers and some with GR1000’s.

“Comparing nitrogen levels, I used to put 26 lbs. of nitrogen on TifDwarf per year. Now I only apply 9 lbs. of nitrogen per year on TifEagle. We maintain a 1-2 ratio of nitrogen to potassium and proper calcium levels are also important. We apply Gary’s Green on a 7-10 day schedule or about 2-4 gallons which yields around 1/8 lb of nitrogen. We will alternate Sul-Po-Mag and 0-0-28. We also apply liquid calcium carbonate to help improve our cation exchange capacity.”

We use Primo on the greens because we have to. The expectations of our members, and the competition to have the “best” greens drive up the ante. No more slow greens allowed. Done properly you can have good greens rolling 10-11 every day by balancing Primo and nitrogen applications. However, I don’t think Primo performs as well on Champion. There is more grass per square inch and the Primo tends to make it rigid and reduces ball speed. Our height of cut right now (mid May) is .095, but you really don’t need to go below .100. In fact some of this height-of-cut talk is bogus when you factor in type of mower, bedknife setting and micrometer calibration. One man’s .090 is another man’s .100.

“The reality is that most average-handicap golfers can’t really handle fast greens. You have to know your clientele and give them what they want and you can do it with double cutting, rolling, managing the fertilizer and verticutting; whatever it takes. It is a challenge to satisfy everyone when the average handicap is 25, but we certainly pull out all the stops

for the member/guest tournaments and other special event requirements.

“A superintendent is generally his own worst critic and knows when the greens aren’t up to snuff. He doesn’t need people nitpicking conditions. Sometimes you have to filter out the noise and figure out what it is they really want. The biggest challenge for us is keeping three entirely different golf courses playing consistently with one another so our members can have a seamless experience across the property.

“I’ve talked about low heights of cut and fast greens, but just as important is never going above .130. That’s the magic number, guiding light, whatever. I think if you go above .130 you will be battling them coming back down. You may think you are doing the grass a favor, but not really as far as conditioning goes. If you have to take them to .140 to .150 to survive, then something is wrong. To get back down to .110 and a good, smooth green speed is going to be a long, hard road when you let that biomass thicken up.

“I never look hard at the roots. It doesn’t matter. The game is played on the top. Sometimes people can get caught up chasing the roots and lose the top and that’s when they can get into trouble. It’s a fine line. The same thing goes for trying to ‘change the soil.’ I’m just not going to do that. If you are applying water with a pH of 8 with every irrigation, that is going to be a limiting factor. Focus on the performance and appearance of the playing surface and what you can do every day to make it as good as you can.

“We try to keep the greens between .120 and .110 in the summer to keep thatch levels lower. In addition we groom and verticut as needed, but only when the grass is growing aggressively. We do not lock ourselves into a one-size-fits-all regimen of so many times per week or month. In the summer when the weather is favorable and the grass is growing we do average a verticut every one-two weeks, but it depends on the plant, not the calendar. In the winter, I monitor the weather forecast very closely and lightly groom or verticut when the conditions are favorable.

“Top dressing is another good tool for managing the thatch. The dry, green, bagged sand is necessary in the winter and you can give them a nice dusting, but I fear over-use of the finer bagged sand could cause layering, which is a no-no on the greens profile. In the summer we use Terra-Toppers and spread No. 305 DOT sand as needed when the grass is growing aggressively. Whenever we are top dressing, we are also opening up the turf with verticutting or spiking to help get the sand into that dense turf.

“Opening up this turf is critical since the grass is so dense it can even repel water. In the winter with all the traffic, we aerify with a Hydroject month-

ly to keep breaking up that organic layer. We monitor that layer and try to keep it between 5/8 – 3/4 inches thick.

“I know there is a lot of talk about disease on ultradwarf, but my first-hand experience is some outbreaks of *helminthosporium* (leaf spot). We spray Heritage once a year for leaf spot, and if some algae pops up we treat with Fore. I can only think that if there are disease problems, they are resulting from other stresses like fertility levels, water quality, thatch, etc.”

What I learned from this interview with Rick was that ultradwarf greens need to be managed individually and the old one-size-fits-all programs just won’t work anymore.

Tim Cann, CGCS Answers a Florida Green Questionnaire

Tim couldn’t do the live interview in Naples, but he volunteered to submit answers to a questionnaire on ultradwarf management. I’ve known Tim since he had bentgrass greens seeded into TifDwarf at the Reserve Golf Club. He’s been at Harbour Ridge GC for sometime and recently he’s joined the gowing ranks of



Tim Cann, CGCS

TifEagle managers.

FG: What ultradwarf varieties are you managing and how long have you worked with it?

We have TifEagle on 36 holes. The Golden Marsh course was planted in 2001 and the River Ridge course was planted in 2003.

FG: Knowing that you were going to go to change to a new grass what did you do to prepare?

Prior to planting, I visited Jupiter Island where Rob Kloska had test plots, Johns Island West and courses in Naples to play on the Champion variety as well. I did attend some seminars after planting. There is a learning curve to understanding the growth and management characteristics of ultradwarfs.

FG: What are some of the basic differences that you have noticed?

In general I think TifDwarf is a little

more forgiving than TifEagle. TifDwarf will respond to TLC (tender loving care) while TifEagle can be slower to respond. The key is to not allow the TifEagle to get weak.

I find TifEagle tends to be shorter rooted than TifDwarf and it develops a fibrous mat (thatch, biomass) quickly. We hollow-tine (aerify) a minimum of three times in the summer to manage the mat. Sisis- or Graden-type verticut units are necessary.

Fertility requirements can be different. TifEagle fertilized to TifDwarf levels can overgrow quickly and aggravate thatch problems. The secret is finding out a fertility program that works for your location.

FG: What are some of advantages of TifEagle that you have noticed?

Well it definitely tolerates shorter heights of cut. It is a monostand with cool-weather tolerance that we don't feel we have to overseed. With no overseed it has greater density than TifDwarf and is currently very popular among our players.

FG: If there are pros there must be some cons. What are they?

As I mentioned before, it seems to be less tolerant to stress. It is a thatch producer which requires constant or special attention. Low mowing can be a problem when the turf is over fertilized. It does require more topdressing with dry sand for the winter applications. We are rolling and double cutting as often as possible to maintain desired greens speeds.

FG: Give me a quick rundown of your programs.

Mowing: HOC .110-.125 with Flex 21 hand mowers. Wintertime: single mowing and rolling while it is cool. Summer: frequent double mowing and rolling as often as crew is available. Rolling: as often as possible, can be daily

Verticutting: Weekly during the growing season in two directions typically at zero or 1/32-1/16 depth, brushing with the Flex attachment when topdressing won't be disturbed also helps.

Topdressing: Dry silo-stored sand and spread with hand spreaders in the winter and regular topdressing spread with a Terra -Topper in the summer.

Aerification: Three times minimum. This year 5/8-inch tines in May; 3/8-inch in July and 1/2-inch in August. Hydroject four times in the winter: December, January, February, March. Spiking only during the growing months as necessary.

Fertility: Light nitrogen granular

applications in the winter with 2 lbs. potassium and weekly foliar sprays. Increased nitrogen in the summer when we need to recover from renovation and 4 lbs. potassium with foliar as needed. 36 lbs. potassium and 8 lbs. nitrogen per year.

Growth regulators - Primo: Have used them on TifEagle with good response with higher nitrogen applications. Began at 1oz rate and increased to as high as 3 oz rate.

Pest control: Disease is the number-one

problem. Perhaps the higher potassium applications will help control disease outbreak. Separate rotational applications of Daconil ZN and Clearys 3336 have been in our program.

Advice: Almost everyone who is renovating is doing so because of contamination problems. It's great to get an ultradwarf and maintain a monostand. I would promote the use of these grasses with the understanding there will be a learning curve and extra time, labor and expense dealing with it.



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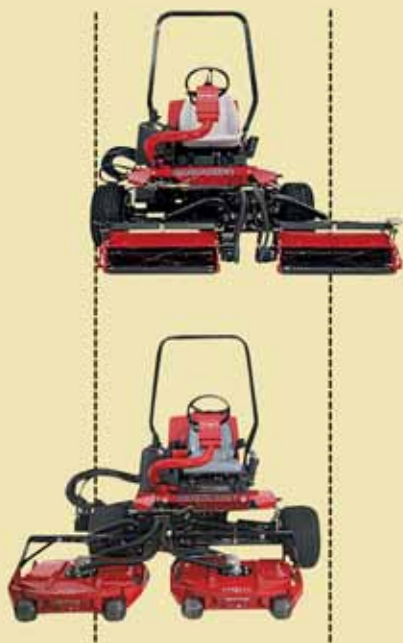
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Ken Glover Takes a Different Approach at Windsor Club

Ken is at the Windsor Club in Vero Beach. They have TifEagle greens, but this is Ken's third ultradwarf course and he knew thatch control was the key to success, so he tried a different approach and he feels that it paid off in the end. Previously he had two courses with FloraDwarf and he knew that ultradwarf grasses comprised a different breed compared with TifDwarf.

"Grow-ins are stressful. You have a finite window to get the course up and operating quickly. Typically we push the grass hard to get it to fill in and cover to make opening day. But since I knew that ultradwarfs were aggressive thatch producers, I wanted to nip future problems in the bud, so I did something different that did extend the grow-in time a little but I think helped me get a head start on managing the TifEagle biomass. I grew it in "organically" and did not use any synthetic nitrogen on the greens and that decision is reaping benefits now. I use Soil Sanctuary and apply only 4-5 lbs of nitrogen per year. Potassium and calcium also are important parts of the program. Right now I'm also dealing with sodium issues brought on by the two hurricanes of last September.

"We've been mowing at .090 or since January. I do use Primo, but mainly when we aerify to help heal the holes. We put it out a few days before we punch the holes so it helps push the grass and speeds up recovery. In the winter we just mow to achieve desired greens speeds. Traditionally we are a low-play golf course in the summer, but we get lots of play in a short time in season and it is not always possible to double cut. I hate to put a spray tank on the greens unless absolutely necessary, but you do what you have to do. Still, I prefer to manage green speeds with the mowers and not Primo."

"Vero Beach is a competitive area with members belonging to several area clubs so there are always comparisons being made. That's what drives some of the programs we have to do to meet expectations. It can get a little crazy. But I have to say right now that, after four years, the greens have improved each year. Our height of cut is generally between .110 when we overseed and down to .100 — whatever the greens will take to give the desired results.

At this point Ken offered an observation that is probably on the minds of superintendents everywhere especially if there is pressure to change

to one of the newer grasses.

He said, "TifEagle is a good darn good grass, but I'm not sure it is for every course. The TifEagle greens we played today at Naples Grande were as good as any bentgrass greens I've ever played. They were great. Managing ultradwarf greens to that caliber is basically following a bentgrass playbook. And yes you do have to micromanage ultradwarf greens. If the superintendent — or more importantly, the membership — doesn't really understand the level of management that will be required to produce the desired product, then you may have some disappointed people.

"If my club and my job depended on a good overseeding program to be successful and deliver the desired results in season, then I would sure like to have a good TifDwarf surface to man-



Ken Glover

age. Or if water quality was a serious consideration, then I would have to be looking at one of the seashore paspalum varieties. I think you have to very seriously consider the qualities and requirements of all three of these grass types before jumping on a popularity bandwagon. Location, performance requirements and management resources all need to be factored in when deciding which grass to use.

"I verticut our TifEagle greens often. In the winter it's more of a grooming depth because you don't want to get aggressive with this turf unless it is actively growing so it can recover. Since it is so dense we added 30 percent more blades to our verticut reels. There are more aggressive machines, but I am never doing corrective verticutting; always only grooming depth. I have to use triplexes to verticut or groom our greens. The attachments on the walk mowers create a gap between the groomer and the reel and they will cause scalping."

Ken wasn't sitting in on Rick's interview, so his next comment really drove home the concept of individual greens management.

"We take a prescription approach to our greens-management program. We have two greens surrounded by trees, so we have to treat them separately and do only what they can tolerate. For instance, No. 7 green is my nutrient barometer, when it starts looking hungry then they all basically need feeding.

"I have definitely seen some weird things happen on the TifEagle. There have been

some blotchy patches from time to time. I've had tests run but they come back with a smorgasbord of pathogens and no one definitive cause. I think it is a reaction to a particular stress factor which gives one of the pathogens that are always present a chance to get a foothold, so managing stress factors is key to avoiding diseases.

"Toward that end, I am a big believer in using a Hydroject and I contract out 10 procedures a year. We deep-tine aerify in May and September now, thanks to the sodium levels from the hurricanes last year, and then use the Hydroject the other months. We also topdress regularly and in season — October through May — we use dry, bagged sand. There is virtually no waste and very little mower damage, so the extra cost for the sand is justified by the lack of repairs and replacement to reel parts. And you have to topdress to help control the thatch, so it's worth the cost.

"I mentioned earlier that I didn't like to put a spray rig on the greens unless absolutely necessary. I would love to use a spray hawk for accuracy but that means also using a hose man and we might spray one to two times every week to ten days depending on what's going on with our nutrient or pest-management programs. But the labor market is very tight post-hurricane and finding qualified people to handle such an important function is difficult much less the labor cost itself. We apply Green Way, foliar minors, amino acids, humic acid, urea after aerifying and a 12-0-20, which is a great product, two weeks before the member/guest tournament.

"I change cups six days a week. This is my quiet time to evaluate the course during set up and really look at the course and evaluate turf needs and diagnose problem areas. The hurricanes last September threw a lot of programs out the window as we have had to deal with high sodium levels.

"We do overseed here because we are on that temperature-dividing line from Tampa to Vero Beach that arbitrarily divides north and south Florida, and I like the insurance of having some cool-season grass growing when it gets cooler. We throw down a little bentgrass and it does what it is supposed to. Because we overseed, we do have to plan our fall renovation early enough so the holes are healed up. Aerification is the most traumatic thing we do to TifEagle and I use a roller a lot to smooth them out and firm them up. There's nothing worse than walking on a freshly punched green and get that mushy feeling underfoot."

So Ken believes that the ultradwarfs are good grasses and do take extra care, but they aren't necessarily the only choice depending on your particular situation or location.



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Sometimes Being a Drag Can Be a Good Thing

By Darren Davis

Recently my assistant, Brett Howell, approached me with an idea that resulted in the design of a terrific new tool. The tool is a “drag” that, when pulled behind a utility vehicle, does a terrific job of breaking up aerification cores. In addition to its intended use, we have found that it’s excellent at breaking up clippings after mowing, and also removing early morning dew from turf. The tool is the subject of this Super Tip. However, in order to give credit where credit is due, I need to provide you with some background information that led to the design of this new tool.

A few years back I was in search of a tool that would be used to remove early morning dew on the golf course, thus providing a finishing touch for tournaments and special events. As we are always busy on the morning of a special event, I desired something that could be operated by one person and pulled with any utility vehicle. My search led to the purchase of a “Dew Draggin’” from Miltona, which performed exactly as promised in the company’s catalog. The 25-foot wide “Dew Draggin’” is made of PVC and rope and effectively removes early morning dew over large areas in a short period of time.

Then when aerification season arrived, we began investigating alternative methods to break up aerification cores in fairways. We desired something that was less damaging to the turf than a steel drag mat and did not tie up a tractor. Our goal was to break up the cores so the thatch could be removed more quickly by our Rak-o-vac, or blower. So, we hooked up the “Dew Draggin’” and gave it a try. However, we quickly realized why breaking up aerification cores was not an advertised feature of the “Dew



Top: This heavy-duty, yet simple-to-construct, drag not only eliminates dew for special early morning events it also busts up aerification cores during renovation. Photo by Darren Davis

Inset: Four 1/2-inch bolts through the 1-1/2-inch electrical conduit pipe connect swivels to the 5/16-inch chain which does the actual dragging on the turf. Photo by Darren Davis.

Draggin’.” Unfortunately, the tool was not aggressive enough to be effective.

We liked the concept of pulling something behind a utility vehicle for this task, and we liked the design of the “Dew Draggin’.” This is what originated the development of our new “drag” which essentially is a beefed-up, homemade mini “Dew Draggin’.” The tool we designed is made of metal and chain, instead of PVC and rope. The new tool is very effective at its intended use of loosening up aerification cores, and, like the “Dew Draggin’,” it is excellent at breaking up clippings and removing early morning dew.

The tool is made from a 10-foot piece of medium-strength metal pipe. The pipe we chose is 1-1/2-inch electrical metal tubing (EMT). We found the thickness of the metal to be durable, but significantly lighter weight than

galvanized pipe. Attached to the pipe is a 22-foot section of 5/16-inch coil chain.

The chain is the part of the tool that touches the ground, and does the actual work. In order to get the necessary “movement” of the chain when pulled across turf, the chain is attached to two, 3/8-inch swivels. These swivels are then affixed to the metal pipe with two, 4-inch eye bolts.

The final step was to attach a pull harness to the metal pipe so it can be fastened to — and pulled by — a utility vehicle. The harness is an 8-foot section of 5/16-inch coil chain that is bolted to the pipe 3 feet from each end (4 feet apart), and is attached to the pipe by two, 4-inch eye bolts.

My equipment manager was able to construct the drag in less than an hour, and excluding labor, the total cost was \$115.15.

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Seashore Paspalum Management in Florida

Should you change grasses on your golf course?

By R.R. Duncan, Ph.D. and R. N. Carrow, Ph.D.

Reality Check

Since water issues (quality, quantity, conservation) are and will continue to drive the Florida golf course industry and will dictate turf management strategies in the future, understanding the entire turf ecosystem is becoming more and more important.



The Crown Colony Golf Club in Fort Myers used *SealSle1* on its tees and fairways. Photo courtesy Sam Williams Advertising.

As alternative non-potable water is increasingly being used for irrigation on golf courses, water-quality challenges increase, either from escalating salinity and/or from nutrient load in effluent. Site-specific variability and interactions among the water, the soil, the turf species/cultivar, and the climatic conditions make management both confusing and complicated. The fact that you can grow and manage a salt-tolerant turf grass does not mean that you should be using ocean water for irrigation.

Each acre-inch of irrigation water containing 500 ppm salts will deposit 113 lbs of salt over the irrigated turf area per application; an acre-foot of water at the same salt load will deposit 1352 lbs of salt over the same area with one application. For ocean

water at 34,500 ppm salinity, you would deposit 7776 lbs salt per acre-inch and 93,307 lbs salt per acre-foot of irrigation water per application.

You must manage the salts before, during, and after managing the grass; otherwise, salt loading in the soil will overwhelm the tolerance of the grass and turf performance will decrease. Managing salt buildup in the soil is expensive and time consuming.

Seashore Paspalum as a Turf Consideration

Paspalum vaginatum Swartz is the most salt-tolerant (true halophyte) warm-season turfgrass in the world, but all cultivars vary in level of salinity tolerance from hybrid bermudagrass levels to near ocean-water levels.

The grass is native to moist, saline habitats, and the turf ecotypes originated in South Africa. The grass evolved on sand dunes exposed to ocean water and rainfall for moisture and nutrients. Seashore paspalum developed a rapid rooting capability as well as an extremely efficient nutrient uptake system while evolving on those beach sands. The grass is one of, if not the most environmentally friendly turfgrasses that can be grown.

Why is it an environmental turfgrass? It possesses five major inherent abiotic stress tolerances: salinity, drought, waterlogging/low oxygen, low light intensity (not tree shade), traffic/wear/compaction. The grass has reduced nitrogen requirements (30-50 percent less) compared to hybrid bermudagrasses, and has developed very sophisticated nutrient uptake and utilization mechanisms. It harbors high populations of beneficial predator insect populations (such as wasps), especially against the worm complex; this trait can be readily utilized in integrated pest management programs.

It has tremendous flexibility in utilization of alternative and variable quality irrigation water resources, ranging from effluent or recycled water to brackish sources. The grass has excellent environmental bioremediation/land reclamation/dune stabilization capabilities. Marketed cultivars vary in their response to these traits.

The Rumors are Rampant

One of the challenges for any grass is dispelling the rumors that surround the turf. Some of the attributes are embellished and most of the limitations never seem to surface. There is no perfect grass. Seashore paspalum is not a utopian grass or a miracle grass because of its high salt tolerance. It is a good grass that, if managed properly, has tournament quality and playability.

No, turf-type seashore paspalum is not invasive. Coarse-leaf-textured ecotypes of this grass have been in Florida for centuries. The turf ecotypes have been in the state since the 1950s with no invasive tendencies. An entire herbicide arsenal is available to take the grass out of bermudagrass or other grasses quite effectively.

Yes, seashore paspalum can be grown on non-salt-affected sites and you can use fresh water for irrigation. No, it is not just another warm-season grass like the hybrid bermudagrasses or St. Augustinegrasses. Management is totally different and unique to this species. Not all cultivars are created equal.

Yes, you will use less nitrogen fertilizer, but you may use additional amendments (Ca, K, Mn)



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to effectively manage the saline irrigation water and potential salt loading in the site-specific soils. No, you cannot grow-in this grass with high salinity water unless you want a long grow-in period and want to spend extra money on grow-in management. Salt is a growth regulator even on seashore paspalum.

Yes, you can potentially conserve water (30-50 percent) with this grass compared to the hybrid bermudagrasses, but it depends on salt load in the irrigation water, the site-specific environmental (i.e., rainfall distribution and frequency) conditions, the efficiency of the irrigation system, and how much leaching of excess salts must be accomplished. Proper management is the key.

Salt Removal?

Seashore paspalum is a phytoaccumulator of heavy metals and nutrients, but not high levels of salt compared to total salinity concentrations normally found in soils. The entire root and shoot portion of the turf will hold about 9-17 percent salt (mainly sodium) on a dry-weight basis.

The grass very strictly regulates uptake of sodium and eventual movement/ compartmentalization of that sodium at sufficiency levels internally in the plant. If all clippings and total plant material (roots

and shoots) are removed from all turf areas, the total salt ion removal with harvested tissue would range from 553-3488 lbs/acre/yr, which is minimal compared to the total salt load in soils.

Attributes of the Grass

Compared with other turfgrasses, seashore paspalum has a wide soil pH adaptability range across ecotypes (3.6-10.0), depending on ecotype/cultivar, but management under precision turf conditions is still recommended between pH 5.5-8.0 to optimize turf performance because of soil-related and nutritional problems at each extreme pH.

Most alternative and variable quality irrigation water sources can be used for irrigation. The grass is primarily rhizomatous and secondarily stoloniferous, with an inherent capability to develop about twice the root volume of the hybrid bermudagrasses when managed properly. When the grass is injured from excess traffic or disease/insect infestation, seashore paspalum shifts into a rhizome/root regeneration mode, with carbohydrates allocated to below-ground turf organs and minimal carbohydrate maintenance of the shoot portion.

The grass has low mowing height tolerance (1/10-inch to 1/8-inch range, depending on culti-

var). The efficient nutrient uptake and utilization system has been mentioned. There is no "genetically inherited grain" in the greens. Seed heads may be produced but the probability of viable seed being produced is extremely low because of extremely precise temperature and genetic requirements needed for seed set.

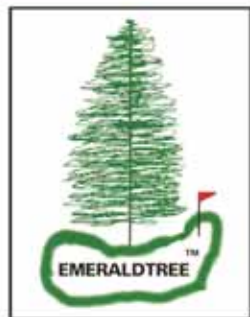
There is virtually no or minimal morning dew on the grass due to the high wax load on the leaves (the hybrid bermudagrasses have numerous small hairs that will hold water droplets). The grass has a shiny dark green hue similar to Kentucky bluegrass or perennial ryegrass.

Seashore paspalum has the capability to root into most soil types, ranging from sands, expanding and non-expanding clays, to silt, to mucks/swamps. At this point, no verified mutations (compared with the hybrid bermudagrasses) have occurred with this species. The genome apparently is very stable compared with other warm-season grasses.

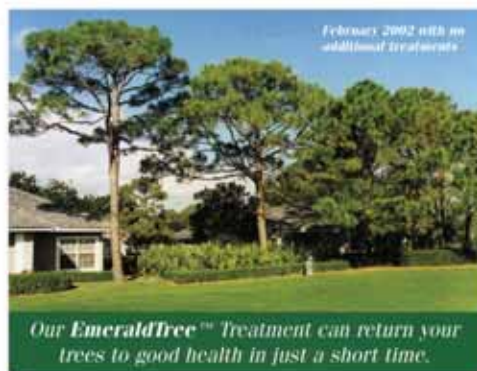
Limitations of the Grass

There are always positives and negatives with any grass. Seashore paspalum is no exception. As with any other turf species, it is important to know the specific attributes inherent in each individual cultivar,

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rather than generalized attributes of the grass based on where it may have originated. Significant variations occur across cultivars for salinity tolerance, traffic tolerance, low light intensity tolerance, mowing height response characteristics, and other traits. Thus, one area of confusion is the tendency to claim attributes for a cultivar that has not been documented by scientific-based research data followed by multiple on-course evaluations and involving several years.

The grass has minimal tree shade tolerance, similar to the hybrid bermudagrasses. The rule of thumb is that if you have tree-shade problems with bermudagrass, then you will have tree-shade problems with seashore paspalum. The primary problem is the excessive tree shade, and not the turf species (zoysiagrass or St. Augustinegrass are usually better turf choices under heavy tree shade).

However, seashore paspalum does a better job of utilizing ultraviolet wavelengths coming through cloud cover, smog, or fog compared to the hybrid bermudagrasses with SeaIsle1 exhibiting the best low-light-intensity tolerance found in research studies to date. Seashore paspalum seems to utilize deflected or reflected light better than the hybrid bermudagrasses.

Cold hardiness is similar to the hybrid

bermudagrasses. The grass cannot be established with highly saline water (greater than 5000 ppm total dissolved salts; recommended salinity load for grow-in is less than 2000 ppm) without delaying grow-in for any of the currently marketed cultivars. Seed head persistence as a cosmetic problem varies by cultivar, but plant growth regulators are available to suppress seed heads when warranted. There are very few pesticide labels that include seashore paspalum, but this problem is slowly improving.

The grass absolutely should not be scalped. The authors have noted one university publication that states that seashore paspalum does not mow cleanly — early research at the University of Georgia documented that ‘Adalayd’ and some of its derivatives were difficult to mow properly, but the improved university-researched cultivars do not have this problem. Overall worm complex (fall armyworm, sod webworm, grubs) resistance is, at best, low to medium low compared with bermudagrasses and this insect response goes across all paspalum cultivars on the market. The number-one problem with the grass is the lack of understanding on how to effectively manage this turfgrass and how to continuously manage the salt load in the irrigation water.

Infrastructure Improvements for Effective Salt Management

As water quality decreases and salinity challenges increase, spending money on golf course infrastructure can effectively reduce long-term maintenance budgets and improve grass management that will be easier to reach the performance expectation levels for the grass on the golf course. The best money can be spent on the irrigation system to enhance water distribution efficiency, either as a retrofit or upgrade, or installation of a more modern system. This is the best water conservation decision that any golf course can make — being able to apply the water exactly where it is needed, when it is needed, and at the quantity needed to efficiently manage the salts in the water and the soil.

Install drainage, especially in low fairway areas and on the low edges of greens to effectively pull salts away from the turf root system. Utilize soil profiles that are conducive to salt and water movement (continuous infiltration/percolation at effective rates); for example, utilizing sands in the greens that range between 0.25-1.00 mm, with less than 10-15 percent total combined clays, silt, fine sands and organic matter (peat), and percolation rates greater than 10 in./hr.

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SeaDwarf, which was used on the Crown Colony Golf Club shown here, is another of the popular paspalum cultivars being used on golf courses. Photo by Joel Jackson.

as possible, depending on the various sources that can be blended. Install chemigation equipment on the irrigation system to have the flexibility to apply liquid fertilizers, amendments such as flowable lime or gypsum, wetting agents, or other chemicals.

Install moisture- and salinity-monitoring equipment on the course to improve salinity and water-use management. On coastal sites, get a geohydrology assessment completed to determine tidal influences on subsurface soil profile (i.e., acid sulfate conditions) and salt water inundation potential into on-site water resources.

Availability of Cultivars

Since cultivars are not created equal, selection of golf course friendly cultivars can be a critical decision. Two cultivars from the University of Georgia USA – Seaisle1 (www.seaisle1.com) for fairways, tees, roughs and occasionally for greens, and Seaisle 2000 (www.seaisle2000.com) for greens and now being grassed on entire golf courses are available. Seaisle1 and 2000 are the only patented, certified, and university-researched seashore paspalum cultivars available globally. Extensive research on these two cultivars has been published and is available from the authors.

At the present time, there are 17 total seashore paspalum cultivars available in the world. A new cultivar – experimental SI98 or OC03 (formal name is pending) was released from the University of Georgia in November 2004 and should be available for grassing late this year. This new cultivar is suitable for course-wide planting from greens to roughs. Other proprietary cultivars available for grassing in Florida include Seadwarf and Salam.

Seashore Paspalum Playability Factors

Several factors are contributing to the

acceptance of seashore paspalum for use on golf courses. The high salinity tolerance and flexibility in using alternative poor quality irrigation water, the cosmetic appearance resembling Kentucky bluegrass, the tournament-quality playability — putting quality under close mowing heights and the ball “set up,” and the environmental attributes are all contributing to this acceptance.

The positive playability factors include ball set up, color — shiny dark green hue, ball striking control, no “grain” in the greens, density of putting surface, and trueness of ball roll.

The negative playability factors include a “sticky” surface, slow greens, greens that are difficult to read, bumpiness or “chatter” in the ball roll, and the trueness of ball roll: all of these negative complaints are directly attributable to the overall management program and understanding how to effectively manage the grass under greens heights.

*AUTHORS' NOTE: The authors invite questions on comprehensive and correct management protocols, assessing the salinity impact on your golf course, and long-term performance of the grass. A comprehensive list of published seashore paspalum articles can be sent via email attachment if requested. The contact information for all authors is listed on the inside front cover. At Florida Green presstime, two articles by Drs. Duncan and Carrow were scheduled to be published in **Golf Course Management** regarding comprehensive greens management details for seashore paspalum).*

EDITOR'S NOTE: We are not promoting this turf variety over any others, but there may be growing sentiment for using this grass among regulatory agencies, and we want you to know as much as possible about the pros and cons of these new turf varieties.

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Recycled water usually varies by location, season, quality and nutrient content. Depending on the uniformity of your source, you may need to monitor water quality daily, weekly or monthly. SeaIsle will do quite well with up to 4, 5, even 8 thousand TDS.



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Spring Growth is in Full Gear

By Todd Lowe

Bermudagrass growth has sprung into action throughout the Florida Region. The rains that occurred over the past few months flushed salts from the rootzone and, with the recent increase in soil temperatures, bermudagrass growth has increased significantly. The increased growth provides a welcomed improvement on tees, fairways, and roughs that became beaten down over the winter season from continual play. These areas are now actively growing and recovering from stress.

Putting greens have become slower and less consistent with the recent growth flush. Surface grooming, brushing, light verticutting

and sand topdressing can be implemented on a more frequent basis to improve playing conditions on putting greens at this time.

Also, plant growth regulators can be applied to curb bermudagrass growth and improve overall turf quality. These chemicals suppress a growth hormone within the grass, decreasing vertical growth and encouraging turf density. On putting greens, PGRs improve turf density and consistency when applied on a continual basis.



Todd Lowe

Recent research from Clemson University also reveals that the PGR Primo (trinexapac-ethyl) improves turf quality on shaded bermudagrass putting greens as well. PGRs are also applied to fairways from late spring through the fall to reduce clipping production,

thereby reducing mowing frequency and clipping removal.

Golf courses that overseeded this past

winter are experiencing a slower transition back to the bermudagrass base. Cool spring temperatures favored overseeding growth over bermudagrass and this may encourage additional turf thinning when the overseeding finally dies off.

Smoother transitions generally occur when cultural practices are implemented throughout late winter and spring. Such practices include frequent grooming, brushing or light verticutting in winter, when the overseed is healthy. Then, as temperatures increase in spring, mowing heights should be lowered to increase sunlight penetration to the base bermudagrass. When temperatures warm substantially and sustained bermudagrass growth occurs, the turf should be fertilized more frequently with readily-available nitrogen to encourage bermudagrass recovery.

Some clubs are experimenting with herbicides to remove the overseeding and encourage bermudagrass recovery. These chemicals are effective, and can completely remove the overseeding in a few weeks. So, it is important to apply them during periods of active bermudagrass recovery and to communicate the possibility of unsightliness to the membership.

Plants of the Year

The Florida Nursery Growers and Lawn Care Association has announced the 2005 Plants of the Year. The plants selected for this program have been found to be good performers in the Florida environment and require less maintenance and fewer inputs. Here are two specimens for your consideration.



Nun's Orchid

Common name: Nun's Orchid
Botanical name: *Phaius tankervilleiae*
Hardiness: Zones 8-11
Mature height and spread: 3 ft. x 1.5 ft.
Classification: Orchid-ground cover
Landscape use: Perennial for mass use or as specimen in part shade. It is also good used as a potted plant
Characteristics: Sword-shaped leaves develop as the tall inflorescence of white, rose and brown flowers reaches full bloom in the late spring. The Nun's Orchid goes dormant in North Florida.



'Mona Lavender' Plectranthus

Common name: 'Mona Lavender' Plectranthus
Botanical name: *Plectranthus 'Mona Lavender'*
Hardiness: Zones 9-11
Mature height and spread: 2 ft. x 2 ft.
Classification: Perennial, annual in North Florida
Landscape use: Massed for color in a low border in full sun to part shade
Characteristics: The 'Mona Lavender' is compact, everblooming with handsome purple-backed leaves and produces multitudes of short stalks of lavender flowers.

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- Calcium causes the release of the sodium to soil bond reducing salt content of soils.

Calcium plays a large part in the respiratory and cell wall development of the plant. With soil temperatures on ultra dwarfs rising as high as they do, the plant will use large amounts of calcium from the soil. *Mega Cal II* will go directly into soil solutions making it readily available to the plant, keeping the plant healthy from disease and heat stress.

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Florida Legislature Makes Water-Quality BMPs Mandatory

With only one abstaining vote, the Florida House and Senate overwhelmingly approved Senate Bill 444 which calls for “Best Management Practice Mandatory Use and Enforcement” with regard to protecting “Total Maximum Daily Loading (TMDL) by Non Point Source Pollution.”

In an effort to put some teeth into the 1999 Water Restoration Act, the Legislature gave the Department of Environmental Protection a law which will require all entities located within a particular watershed to abide by BMPs to reduce their input of potential pollutants to bodies of water that have been deemed to be impaired or of low quality.

This law applies to all sectors of society and is not specific to the golf-course industry. Everyone who lives or operates within a designated watershed is affected, including residents, businesses, industries and municipalities.

Based on Basin Management Plans, the DEP will adopt by rule BMPs that, when practiced, will ideally help all sectors reduce their inputs that affect water quality. These BMPs will be mandatory and will be enforced by DEP, counties and/or water management districts depending on the locale and resources available.

The FGCSA voluntarily began to write a revision to existing golf turf management BMPs that was based on a 1991 manual produced by IFAS. This process had advanced to the stage where regulators and environmental groups were given a draft copy to read, discuss, edit and approve. Just as this process was beginning, the

legislature passed SB444, making the BMPs no longer a voluntary program, but rather a mandatory process for protecting the state’s water quality.

In the photo below is just a handful of BMP type manuals dealing with springs protection, agricultural chemical handling and storage, silviculture (forestry), green industries (primarily lawn care) and the old IFAS manual for BMPs which was focused on growing turfgrass primarily and not necessarily on environmental impacts. There are other BMP manuals out there for



Some of the Best Management Practice manuals written when BMPs were voluntary. Photo by Joel Jackson

Indian River citrus growers, dairy cattlemen and poultry farmers. All of these were done on a voluntary basis and several have been adopted by rule. Some of them may have to be revised to comply with the intent and requirements of future basin management plans written under the authority of SB444.

With that in mind, each subcommittee on the Golf BMP Steering Committee — an ad hoc group of scientists, regulators, educators and superintendents — is reviewing its section (siting, design & construction; irrigation; pest control; nutrients; cultural practices; maintenance facilities and wildlife habitat management), to

identify and highlight practices that will affect water quality. Ideally from this list of BMPs that are practical, technically and economically feasible, and obtainable by all golf courses, a checklist will be developed that each course can complete to be in compliance.

Once the BMPs have been adopted by rule and a facility is following them, it will be deemed to be in compliance and have protection under the law. If the BMPs do not prove to reduce non-point source pollution target goals for your facility, then the BMPs will be revised, but the facility will not be held responsible since it was following the recognized best management practices. This assumes that the facility can demonstrate and document adherence to the BMPs.

For a complete copy of Senate Bill 444, log on to www.gcsaa.org and go to the Government Relations section and then to the Advocacy Resources, then click on Bill Tracking, and then on the link titled Search for Current State Bills. Then scroll down to Florida and click on SB444.

This law, like all well-intended statutes, tries to get everyone living and operating in a watershed or basin to act responsibly with regard to environmental impacts from their daily routines. The people who are already responsible may learn some new ways to lessen their impacts, but those who don’t care will continue to take short cuts. My concern is that regulators will once again focus on the most visible entities (business, industry and golf courses) and the general public will continue to avoid scrutiny. Businesses will jump through more costly hoops, and the largest, most ill-equipped and poorly trained sector, the homeowner, will continue to pollute at will or out of ignorance.

Joel Jackson



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Road Trip

Three days in Naples were not nearly enough to see all that we would have liked to see

By Shelly Foy

In the past I have had many opportunities to travel the state, giving talks and checking out environmental projects on golf courses. I call those days BT (before Thomas). I just never realized how much I missed getting out and about until my recent road trip to Naples. I received two phone calls about coming over and doing Audubon recertification site visits to Royal Poinciana and Foxfire. What followed those phone calls were three of the most

enjoyable days I have had in a long time.

Todd Lowe and I are both Audubon Stewards, so I called Todd and asked him if he would like to meet me for both site visits and a few stop-by's. Todd, the ever agreeable person that he is, said "Sure, just tell me when."

Foxfire Country Club, Naples

Superintendent Jon Vingson, General Manager Brian Heidel, and Audubon Coordinator Harold Dowell took us on a tour of the golf course. Foxfire has been a member of the Audubon Cooperative Sanctuary Program since 1993 and fully certified since 1998. The members have a group called the "Nature Group," headed by Dowell,

and they host several fundraisers each year to help support their Audubon-related projects. Their motto: "Just nice folks having fun – nature's way – at Foxfire!" These are definitely my kind of people!

Foxfire leadership takes its ACSP very seriously and everyone works hard at maintaining the environmental integrity of the property. The club has some exciting projects under way, and in particular I am sure the members are looking forward to the new clubhouse that was under construction at the time of our visit. The highlight for me, however, was the bald eagle that swooped down over the lake, picked up a fish, flew right over our heads and landed in a nearby tree to have lunch! I'm still not quite sure how they arranged for the eagle to perform on



A serious amount of wildlife can get through this corridor! I know it looks small in this picture, but my guess would be that it is about 20 ft. wide. Photo by Shelly Foy.

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If you look closely at the picture, perhaps you can see the fish that this eagle caught for lunch! Photo by Shelly Foy.

cue like that, but it was very impressive! Foxfire has had nesting eagles on its course for several years now. The golfers at this course seem to take these eagles in stride, but for me it was splendid!

Royal Poinciana Golf Club, Naples

Superintendent Matt Taylor is one lucky guy. Not only does he get to work at such a beautiful place every day, but I hope he knows how fortunate he is to have built such a great team around him. Office Manager Jean Mears, and Assistant Superintendent Kirsten Conover are both knowledgeable and helpful with all of the Audubon projects that are going on at RP, and they are numerous. A lot of courses are including nature walks in their yearly program, and RP even has one for grandchildren! Other highlights:

- Since 2000, the club has converted more than 20 acres of maintained turfgrass to naturalized areas. It has eliminated at least 24 sprinkler heads and converted more than 140 full-circle heads to part-circle heads, resulting in an annual reduction of more than 2 million gallons of water. All sprinkler-head nozzles around greens have been reduced to smaller sizes, resulting in a further reduction of approximately 4 million gallons of water each year.



This particular mat at Twin Eagles had broken away from its anchor and Sean graciously left it where it was so that Todd and I could get a first-hand look at how it was put together. Photo by Shelly Foy.

- The club has removed close to 5 acres of noxious, exotic plant material and planted more than 400 native trees. More than 25,000 native grass plants have replaced bermudagrass, more than 22,000 aquatic plants have been added to the lakes and common grounds, and 15,000 sq. ft. of wildflowers have been planted in test plots around the golf course.

- Royal Poinciana renovated the front nine of the Cypress Course last year and is renovating the back nine this summer. Granted, the main reason for renovation was playability but the side benefits definitely included some very nice environmental enhancements. Matthew has a great love and respect for the environment and it shows in the renovation of the Cypress front nine, and it also shows in his vision for the entire property.

Wyndemere Country Club, Naples

Superintendent Peter Metcalf has to be one of the nicest people in the golf industry. He is so down to earth, practical and hard working, and I had a great time visiting Wyndemere. Pete has two really neat projects that I was anxious to see; an under-



The cup holes for the plants are precut and you can chose from a variety of aquatic plants. Photo by Shelly Foy.

planting program and a Native Orchid Restoration Project.

According to the Native Orchid Restoration Project, a 501(c)3 non-profit organization, Collier County is the orchid capital of the nation and has more orchid species than any other place in the country, including Hawaii. Pete happens to be fortunate enough to have a member, Tom Coffey, who is involved with this project. Coffey has helped educate Pete and his staff about the native orchid species, and whenever Wyndemere removes trees, any native orchids found are moved to visible areas on the golf course. The result is not only saving these threatened or endangered orchid species, but education of the membership as well.

Peter also has a great underplanting program. Every year he buys a supply of small "Densa" pine trees and many other native understory plants and raises them in the club's nursery. Once the trees are large enough, they are transplanted onto the golf course. Not only is the club saving a lot of money, but since it has been doing this for many years, the varying tree height is visually appealing as well.

The Old Collier Golf Club, Naples

I am always at a loss on what to say

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about Tim Hiers. I will just leave it at this: It is my opinion that the golf industry of not just Florida, but the entire country, should say a prayer of thanks every day for this man.

I have visited The Old Collier Golf Club before, but had only been to the maintenance facility. I was really looking forward to seeing the golf course. On the morning of our visit, the sky opened up and it was raining like crazy. Tim wisely decided to stay inside, but Todd and I ventured out with a map that Tim had given us of all the lightning shel-

ters. After touring a few golf holes I remember thinking how far this industry has come (big thanks to Tim), that golfers now are willing to accept such a “natural” look rather than a wall-to-wall manicured look. The Old Collier Golf Club is one of a kind, and it is spectacular!

The Club at Twin Eagles, Naples

I had been hoping to visit Twin Eagles again, and for two reasons. One was because I had recently heard a talk by Susan Watts, senior vice-

president of development with the Bonita Bay Group. Susan mentioned that Collier County was enlarging Immokelee Road, the major highway in front of the club, to four lanes, and that the Bonita Bay Group was building a wildlife corridor beneath this major road expansion. They also own the property across the street, and now wildlife will have a corridor to pass between both properties. I really did not get into the specifics of who paid for what, and how much it cost. I was just thrilled that it was being done, whatever the reason.

Environmental Education

Black Diamond Ranch’s Cunningham Develops Insect-ID Program for Students

John Cunningham, CGCS, golf course superintendent at Black Diamond Ranch in Lecanto, recently organized and held a two-day event designed to teach sixth-grade students about insects. He taught classes in insect physiology and identification at a local school on the first day, and invited 150 students and their teachers to his golf course the second day.

Cunningham’s goal is eventually to involve schools statewide in studying insect life cycles as part of their science classes so they learn biology and provide information that golf courses can use to effectively and efficiently apply pesticides for the least impact on the environment. He says his plan is a real win-win situation that will let the kids make a real contribution in helping the environment and help superintendents be better stewards also.



Cunningham, center, shows students how he uses light traps to capture beetles and determine threshold levels for timely pesticide applications. Light traps were provided by Bayer Environmental Science to help facilitate applications of Merit insecticide.

Cunningham hopes to grow the program locally, then spread it to the county level and then take it statewide. He hopes to develop a

simple hands-on template that any golf course superintendent or association can follow and implement in his or her own community.

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Secondly, Superintendent Sean Duffy had convinced Steve Beeman of Beeman's Nursery, an expert in aquatic plants among other things, to install his new "Floating Plant Mat," which is basically a floating aquatic island, complete with plants. For those of you who struggle with fluctuating water tables and not being able to maintain plants around lakes, it is not hard to visualize the benefit.

Steve believes that the value of aquatic plants to lakes is that they:

- Provide Habitat
- Produce Oxygen
- Take Up Nutrients

These floating mats come in 2-ft. sections, and are linked and attached to make whatever size you want. The mat is anchored far enough off-shore that the roots cannot reach the lake bottom; therefore water table fluctuations don't affect it. Steve has seen small alligators climb up onto these mats, so you know birds would have no problem perching on them. We were amazed at the root system on these plants, and the amount of bait fish under this mat was unbelievable! We saw an alligator swimming close by, and you can only imagine how happy the frogs and salamanders were.

This particular mat was glued together, but Steve tells me he is working with a company to develop a nylon staple for future use. He has been working on this concept for a while now, and his

first container load of stapled matting, one acre's worth, is expected in July. A half-acre of this product has already been spoken for by The Villages. I always thought Steve Beeman was a pretty clever guy, and I can't wait to see what he comes up with next.

Once we left Twin Eagles, it was seriously raining, but I couldn't leave Naples without stopping by to see Mark Black. Mark, John and I are very good friends and Mark and I even share the same birthday! He is the one person that will call five times a day during hurricanes to yell at us for not leaving and coming to his house, and also to check on us to make sure we are okay. He is a classic worrier, and I love him dearly. Anyway, we stopped by the Taj Mahal that he calls his office and wiled away a lovely rainy day hour catching up with Mark and being serenaded by Charlie Riger and his guitar. The perfect end to our trip!

More Road Trips Planned

I was very impressed with all of the golf courses that we visited on our road trip. The EGCSA as a whole, appears to be committed to environmental issues and its member golf courses have been proactive in that arena. I believe that something like 70 percent or more of EGCSA-member golf courses are enrolled in the ACSP. The bottom-line message for the rest of the state is that

we can't depend on one group to carry the load for everyone. If you think that environmental issues are going to go away, then you really need to get out more.

There are a couple of things that dawned on me while in Naples that I really want to follow up on. I was astounded at the amount of money golf courses are spending on noxious exotic plant removal. I'm really curious about the reasons for this commitment. Is it mandated? Are you doing it because it is the right thing to do, etc? Give me a call or send me an e-mail on this topic because I am definitely going to write about this in the future.

Secondly, I really think there is a need to talk more about master planning, particularly for the landscape of golf courses. Superintendents change, general managers change, committees change, and usually each person has a unique opinion of what the landscape should look like. A well-developed plan can save so many headaches down the road, so I am planning to address this issue in the future. You are welcome to go ahead and pick up the phone and call me before I call you. It earns you brownie points.

Anyway, three days in Naples were not nearly enough to see all that I would like to see. Todd and I are planning more "road trips" around the state, so if you want us to stop by your golf course, give us a call.

ACSP Update

Recertified courses in the Audubon Cooperative Sanctuary System or courses achieving certification in one or more of the six areas: Environmental Planning, Integrated Pest Management, Outreach & Education, Wildlife Habitat Management, Water Quality Management and Resource Conservation.

Courses attaining recertification in 2005

- Amelia Island Plantation
- Foxfire Golf and Country Club
- Harbour Ridge Yacht & Country Club
- Naples Lakes Country Club
- Royal Poinciana Golf Club,
- The Dunes Golf & Tennis Club
- The Moorings Country Club
- TPC at Eagle Trace
- TPC at Sawgrass
- Windstar Country Club
- World Woods Golf Club,

Courses attaining certification in several areas in 2005

- Lakewood Ranch G&CC, Bradenton: Environmental Planning and Wildlife Habitat Management
- Ritz-Carlton Golf Club & Spa, Jupiter: Environmental Planning and Resource Conservation

Welcome and congratulations to these new ACSP members

- Bald Peak Colony Club, Ralph Beckett, Naples
- Beachview Golf Club, Ken Noble, Sanibel Island
- Cedar Hammock Golf and Country Club, Paul Mollburg, Naples
- Country Creek Golf Club, Dayton Simpson, Estero
- Crandon Golf Course, Carlos Mcleon, Key Biscayne
- Summerfield Crossing Golf Club, James Sharpe, Riverview

"It is quite fascinating to watch such small bird species prevail as the loggerhead shrike as it hunts for its food, flying from one tree or shrub to another looking either for an insect of some sort or a lizard, which might be the delicatessen to



them. As time permits, watch these little guys catch their insects and where they may take them to eat. Most of the time with its sharp bill you may find a shrike impaling his meal on a small spike or branch on a limb in a tree. This particular one was fluttering from plant to plant in an ilex schillings bed where he continuously took his catches up into black olive trees. Once the meal has been placed, he then will enjoy it from the skewer. So if you ever wonder why that exoskeleton of and insect or skeleton from a lizard maybe hanging on a spike or small branch in a tree, remember the vigilant little shrike." Photo by Brian Beckner



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WildSide

Audubon Tour Leadership 101

By Craig Weyandt

In this article, I will tell you how I started and eventually conducted my own Audubon tours at my golf course. I cannot remember where the idea came from to conduct an Audubon tour on the golf course but it may have been from hearing about what Tim Hires and others are doing by inviting school children to come to their golf course for a tour.

I know my golfing members see the course almost every day but I want them to slow down and see things from a different point of view. These tours give me a chance to take not

only golfing members but social and tennis members as well and look at something other than tees, greens and fairways. I can talk to a captive audience about what positive benefits golf courses have on wildlife and the environment.

I hope this information will serve as a guide and inspire you to conduct your own Audubon tours at your golf course. Heck, if I can do it, anyone can do it. What you will gain is a community that is better educated on the work you do to conserve water, wildlife and enhance the environment. It will also bring a greater understanding of the plant and animal communi-



Superintendent Craig Weyandt (standing on the edge of the green) conducts periodic Audubon tours of The Moorings Club to share with his members the positive impact golf courses can have on the environment. Photo by K. Leah Stephens.

ties in which you work every day.

As with most superintendents, I have always had a love for nature. This love for nature only increased after I starting working at The Moorings Club in 2001. Each day, as I would go out onto the golf course, I was greeted by many coastal birds, butterflies and other small mammals and reptiles. I already knew the names of



A cooperative osprey perches with a freshly caught fish for a photo op during one of The Moorings Club's Audubon Tours. Photo by Ullin W. Leavell Jr.

Quail Hollow Club, Charlotte, NC.



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most of the mammals before I started working at the club, but I don't think I could name but a handful of the birds and none of the butterflies.

With the world's largest library online and a variety of Audubon books at my fingertips, I researched the identity of the birds I saw on the course that day. One of my favorite and most used books is the "National Audubon Society Field Guide to Florida." It is a regional guide for birds, animals, trees, wildflowers, insects, weather, nature preserves, and more.

It seemed the more research I did, the more my interest was piqued. Finding the name of what I saw was definitely the hardest part, but getting more information about a correctly identified bird or mammal was easy. I mainly use books for identification and I use the Internet for more detailed information. I sort through all of the information I have gathered and condense it into a short article for the club's newsletter.

Wildlife articles are a great way for members and guests to associate wildlife with golf courses in a positive light. Members have told me that the nature section of the newsletter is their favorite part and they always look forward to reading it.

I always write something positive in the club's newsletter even, if it's just a small turf fact. If there is a problem on the course, the newsletter may not be the best place to air dirty laundry. By the time the newsletter makes it to print, the information may not be timely and I'm sure a tennis player could care less about turf problems. I figure all members (golf, social, tennis, etc.) are going to receive the newsletter, so let's make the articles either positive about turf or nature. So just by writing the articles for the club newsletter, I learned about the local birds and animals. You may not remember everything about a particular bird you have researched but try to remember a key fact or two to talk about on an Audubon Tour. If you can't remember, then take a book or "cheat" cards with you. Trust me, no one will mind.

Even after you have researched and gathered all of the information for your tour, you may not feel comfortable speaking in front of a group or doing the tour by yourself. No problem. All you have to do is call an expert. Just about everywhere in the state of Florida, you can find someone from an environmental learning center or from the local Audubon society who would be more than glad to come to your course and help you conduct the tour.

On my last tour, I invited someone from the local Environmental Learning Center

not because I felt uncomfortable but just to help add something to the tour. It was perfect! We conducted the tour together and both learned a lot about each other's area of expertise.

For example, I learned that Ospreys are either right-taloned or left-taloned just like we are either left-handed or right-handed. I also learned that butterflies don't like mulch and would prefer a rock to sun on. When you give

Plan on having someone from your staff or another department take pictures while conducting the tour. They make great photos for your club newsletter or bulletin board.

these little facts to your members and guests, you hear the "ooh"s and "aw"s that rival those to fireworks on the 4th of July. Well, maybe not quite as much as the 4th of July, but you got the idea.

Planning a route for your tour is very important. You should know how long it will take to complete your Audubon tour. When I walk nine holes at my golf course, it typically takes around an hour and 15 minutes with stopping and talking. Take your planned route and practice with someone to see how long it will take you. Discuss the wildlife that you see while you are walking. Remember, there is always the chance that you may not see much wildlife on your Audubon tour. This may be because of bad weather or just the large group of people walking around, but seeing wildlife is never a guarantee. You should plan on other things to talk about.

I always make it a point to talk about the Florida state tree (sabal palm) and correct pruning practices. By leaving the boots on the sabal palm, you leave a nesting site for mourning doves; and by leaving the seed pods on, you help feed migratory and overwintering birds. After all, the tree is self-pruning and brown leaves naturally fall off in time.

I also like to stop at the irrigation system's weather station and talk about what it does for the golf course. When we speak of irrigation, I tell the group that I'm not a water user but a water purifier. I explain how we use effluent

water for irrigation and the turf filters out nutrients and returns the water cleaner to the surficial aquifer. If you think about it, I bet your course has many interesting facts that you would just love share and never had the chance.

All you need to do now is pick a date for the Audubon tour. Make sure this date does not conflict with any other departments at your facility. Communication as always is the key to success. Once a date has been chosen, I will advertise the tour in the club's newsletter and make other flyers for around the club. If your club has a website you can also advertise on it.

The information on our flyer includes the date, time of the tour (6:45 coffee, 7 start walking), place to meet, where we plan to walk and what to bring. My office manager does a terrific job of making the flyer for our club. It includes pictures of birds and animals, which makes people stop and take a look to see what the flyer is all about. I suggest you include a contact number for more information.

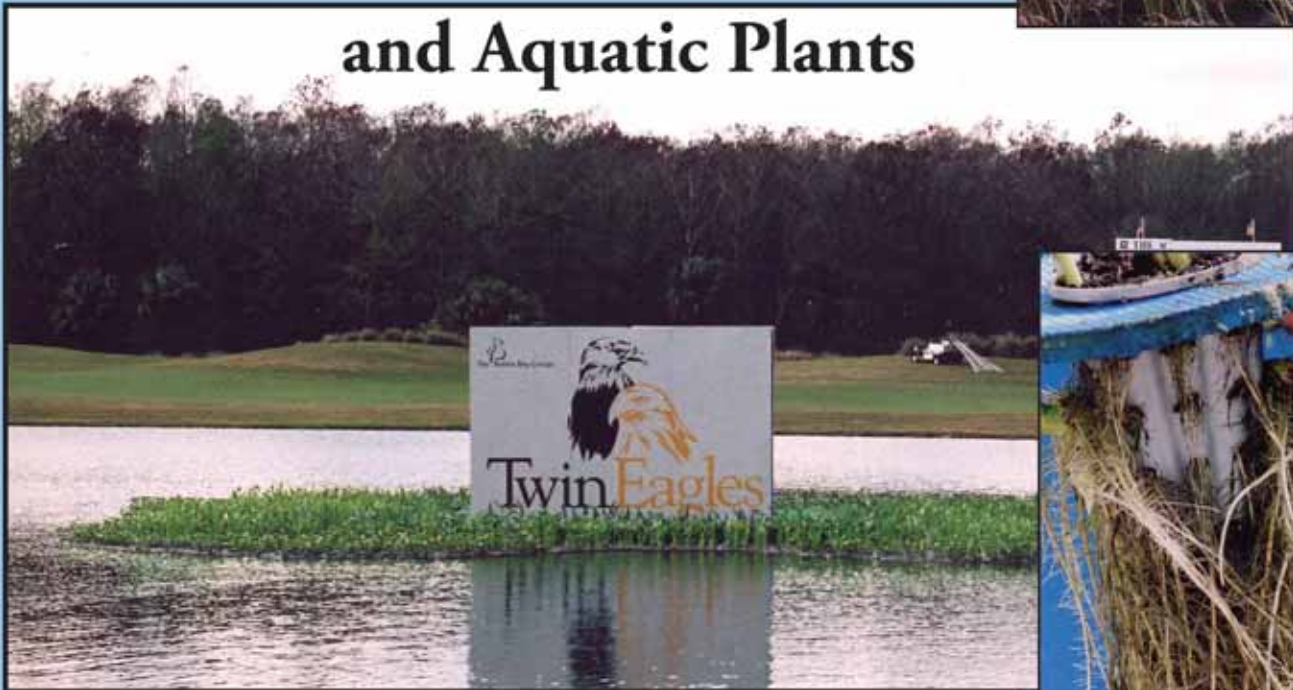
To stay together, it has been my experience that the smaller the group the better. I normally keep the tours limited to 25 people or less. If you get too many people, there tends to be a lot of chatter and people can't hear. Also with a large group, people tend to fall behind. On some tours I have stopped to talk and looked back only to see the last person in the group is a 100 yards back. While this can afford time for questions it can also really slow up the tour and affect the enjoyment for everyone.

On the day of the tour I arrive for work early so I make sure that I am the first one to the meeting spot. I like to set up a small table with reference books and photos that I have taken of wildlife on the golf course. I also may set up another table with orange juice, coffee and some pastries. Anyone who knows me would say that the food is really just for me but the members enjoy it also. As the members arrive I like to check to see if anyone is unable to walk as we will provide a golf cart if necessary. Plan on having someone from your staff or another department take pictures while conducting the tour. They make great photos for your club newsletter or bulletin board.

And that's it! You are ready to begin your tour. As I tell the members, "I'm not an Audubon expert, but I do have a love of nature and I hope to share that with you today." If you have an interest in conducting your own Audubon Tour and have further questions, please do not hesitate to contact me. My information is on the inside cover.



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In The Year 2025: What's In Your Future?



Bruce Williams,
CGCS, MG

By Bruce R. Williams,
CGCS

Time flies when you are having fun! Hard to believe that another year has passed and we are into 2005. It seems like not too many years ago I was peering into the crystal ball by reading George Orwell's "1984" or watching "2001-A Space Odyssey." What will the future hold for all of us? Nobody can be certain but I spoke with many experts that have provided me a glimpse of the future.

In the year 2025 there will be a number of pressing issues that will impact all of society and more specifically golf. These items will include:

- Economy
- Environment
- Aging population
- Population growth
- Diversity
- Energy

Baby boomers are now 40-57 years of age. In 2025 they will be 65-82 years old and prime for retirement golf. However, finding a younger work force will be much more difficult.

Life expectancy will increase, creating more seniors than ever before. The population under 45 will decline between 2010 and 2025 as the trend continues toward fewer children in most families.

Cash will be replaced by electronic currency by 2025. "Cash" flow will be as important as staying within budget. Electronic tracking of labor, parts, repairs, etc. will be commonplace. Superintendents will push more paper than ever before with increased reporting required by the employer and the government.

Our golf operations will be impacted by increased government regulations, electricity costs, fuel/oil related costs, the cost of workers' compensation, health insurance and liability insurance.

Golfers will have less expendable income. Many golf courses will struggle with competition and value for a limited number of golfers. Golfer expectations will increase. Golfers will want the best but will question the cost to provide it.

Golf facilities will need to develop strategic plans to compete in the marketplace. Golf courses will compete with other member services for budget dollars. These might include childcare, fitness centers, tennis, etc. Gender-neutral laws will be in full force, eliminating the concept of "spouses" at private clubs.

We will see more nine-hole and practice courses developed. Some people have the time to spend a few hours golfing or practicing, but not the current five to six hours to play a round that we currently experience. Virtual golf will improve and be available nationwide.

We will see the development of artificial surfaces for golf courses.

Water will be the most valuable resource on the planet. Golf will be impacted by the affordability, availability and quality of water. Irrigation systems will operate off of sensors and have the ability to adjust for wet spots and dry spots automatically. All irrigation signals will be wireless. Pump stations may run off of wind or solar power.

Pest control will be accomplished in ways never before thought of. I can envision moni-

toring pest populations with infrared and near infrared photos via satellite. Robotic sprayers would leave the docking bay in the maintenance building and spray at night. The system could be monitored at any remote computer. Precision spraying will allow superintendents to treat only the square footage or acreage necessary to eliminate certain pests vs. blanket spraying.

Equipment of the future will be powered with hydrogen cells, electric or solar power. Mowers will become robotic. Mowing equipment will carry scanners and allow diagnosis of turf areas for weeds, disease, drought, etc. and report back to a central computer... allowing the superintendent to make logical plans for the day, week and year.

Laser mowers will cut the grass uniformly using photons bounced between mirrors. Clippings will be dried immediately. The laser minimizes sites of infection as the tissue is cauterized as it is cut.

New grasses will be the standard. New Kentucky Bluegrasses with heat and drought tolerance will move into the transition zones. Bermudagrass that holds color through the winter will be developed. While I am unsure about "Roundup-resistant" grasses, I do feel that Roundup-tolerant grasses will allow us to spray greens with Roundup at appropriate levels to eliminate Poa annua and yet keep the environmental groups happy.

Government regulations will develop in the areas of fertility. Reporting requirements will be put in place regarding fertility needs and applications. Areas of concerns will be the fate of nitrogen, phosphorus and potassium.

I am sure that we could add to this list as time goes on. However, this might give you a picture of what the future holds. Many challenges lie ahead. Only the strong will survive.

I can't wait!

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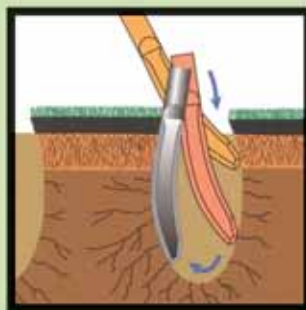
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Photo Contest Results



First Place – “Hole No. 5” by Jim Mandeville, The Bear’s Club, Jupiter



Second Place – “No. 18 in the Morning” by Tom Biggy, Bent Tree, Sarasota

These views are one of the daily benefits of working on a golf course.

Congratulations to the winners of Category 4 – Scenic Hole:

2005 Photo Contest Rules

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 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" x 11" 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 postmarked after Aug. 1, 2005 will be automatically entered in the 2006 Photo Contest.



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Sleeping Habits of Superintendents

By Jim Walker

Last week at the Poa, I was sitting under a chickee hut overlooking the pool and world-famous Tiki Bar, having my morning decaf when a member of the state board was finishing a 10-mile run. We chatted for a few minutes about man's desire



Jim Walker

to torture himself with such brutal exercise and he told me he had run a marathon once and was thinking of doing it again.

Having run some decent times in 10K races myself back in the early 80's I asked him what it was like. He replied that you think you are going to die. He told me he had asked his wife if she minded if he began training to run a marathon again and she told him in no uncertain terms that she did. When he asked why, she replied that watching him fall asleep on the sofa at 9 p.m. was bad enough that she was not going to watch him fall asleep at 8 p.m. or before.

This got me thinking about the unusual sleeping habits of superintendents who get up early and for the most part go to bed early as well. I myself am chased from the sofa

to the bedroom occasionally before a show that we enjoy watching is completed.

This topic worked its way into dinner conversation after our local chapter meeting recently and, as I sat listening and probing for more information on the subject, I decided that the sleeping habits of our occupation may make for interesting research and reading. Ground rules are no names, no reference to their clubs, cars, dogs, wives, initials, nicknames, or pesticide license numbers.

Subject one is a night owl. He stays up until 11 p.m. or later on a regular basis. I've got to take a two-hour nap to make it that late even if I'm not going in the next day. He is up by 5 a.m. each morning and takes a nap very seldom. This guy doesn't need or get much sleep.

Subject two is the complete opposite. A man after my own heart, he often takes naps in the afternoon, and no one is allowed to phone his house after 8 p.m., unless they want to suffer his wrath the next day. You won't get to speak to him if you call after 8, but his wife will take a message and you had better change your phone number PDQ.

Subject three is a total mess. He lies in bed trying to fall asleep, but all he can think of is work. Are the greens too slow or too fast? Did the greens committee chairman play today and if so, how did he shoot? Is the irrigation system running properly or are the local kids going to dig holes in one of his greens like they did a month ago? This guy is now taking medication.

Subject four goes to bed when he

feels like it, gets up when he wants, and doesn't put the toilet seat down when he is finished. He plays golf almost every day after work and comes home when he is good and ready. He drives a new sports car, owns a motorcycle, a boat and goes fishing whenever he wants. Does this guy have the greatest wife in the world, or is he single? I'm not telling, but he told me in confidence that he has the perfect woman. Who could ask for more? She is deaf and dumb, good looking, and owns a liquor store. Hey fellas! Let's drive that old Chrysler to Mexico.

Subject five is your stereotypical superintendent: mid-30's, starting to go grey above the ears, slathers himself in SP 45 sun block, has two kids, and drives a pickup truck. He parties hardy only on odd occasions and is in bed around 10 p.m. He is up between 4:30 and 5 a.m. each day, usually without the aid of an alarm clock though he sets one just the same. He works until 3 or 4 p.m. and comes home to yard work, kids' soccer, or painting a bedroom.

Here are some quick stats: 80 percent of us go to bed around 10 and seldom have trouble falling asleep. I prefer the 30-minute timer on the bedroom TV, which I seldom see or hear go off.

10 percent of us go to bed at 9 or before and 75 percent of them take regular naps. Fewer than 5 percent of us go to bed past 11, and the other 5 percent get less than 5 hours' sleep a night for one reason or another.

P.S. If you send me \$5, I'll provide you with Subject 4's girlfriend's name and phone number. She owns a bait and tackle store, marina, and motel on Lake Okeechobee.

Making Memories

My wife has a saying whenever we experience something good or bad: she'll say we're making a memory. It takes a little of the sting out of a bad situations and it enhances the good ones. One can't go through life working around the game of golf without making memories. Here are a few of mine.

Apollo Beach Golf Club

- As a high school student walking the freshly

GREEN SIDE UP



Joel Jackson, CGCS

and then walking shoulder to shoulder with a dozen men shaking the sprigs onto the ground by hand. Hand mowing, hand raking, manual irrigation everything by hand.

- Becoming friends and fishing buddies with

tilled fairways chucking limestone rocks into the dump truck that drove slowly ahead of us.

- Hand dragging chicken manure into the green surface as a preplant mix. Shredding bermudagrass sod squares into sprigs, bagging them in burlap bags

William "Bill" Dietsch, Jr. who was the construction supervisor on the job for Robert Trent Jones. Bill gave me a job as his assistant 10 years later that started me in the business.

Tamiami Golf Club

- A Czechoslovakian bulldozer operator telling me, "Nothing in life is easy."
- Digging lakes with dynamite

Pembroke Pines

- Eight to ten employees lined up across the back of the first tee during grow in and began hand-pulling weeds from tee to green down the first hole. When we got to the dogleg of the second hole a few days later, that's when the superintendent was fired.



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Flocks of turkey and herds of deer were common sights on my rides through the Magnolia Golf Course. Photos by Joel Jackson

- Being shown how to mix a pint of 2,4,D and a quart of MSMA in 100 gallons of water and spray fairways. Not being told to avoid the bahiagrass in the roughs.
- Hoof prints in the newly sprigged greens.
- Sprinkling Aldrin granules down a mole cricket burrow. Being told that the best control for mole crickets was a ball peen hammer and a flashlight.

Lake Buena Vista

- Making repairs one night by Cushman headlight to the irrigation pipe that crossed over the canal on the 13th hole and stepping back only to look up and see a young bobcat curiously watching me from the bridge overhead.
- Testing the dryness of our sand topdressing on the 15th green while my boss John McKenzie sat in the helicopter that was hovering overhead. A late Friday afternoon rain had halted our clean up of the greens and we had an 8 a.m. shotgun tournament the next day. John got permission to hire the helicopter that gave tours from International Drive to come over and help dry the last four greens so I could drag them in.
- One afternoon I had been running extra irrigation on dry spots on the 5th hole by bleeding off the brass valves controlling the two-head stations down the mainline of the fairway. A storm was coming and I began shutting down the valves. A bolt of lightning hit a pine tree on the 3rd hole and gave me a small jolt. It also caught a pine tree on fire and I had to call Disney Control to dispatch the fire department.
- Giving Bob Hope a ride from the parking lot in my golf cart one day when he was playing Lake Buena Vista. Later on, we got ahead of his group and teed up a golf ball with a big smile cut into it and labeled it "Bob's Ball." We waited around the corner and could hear him laugh when he saw it. Hey! I made Bob Hope laugh!

Preparing for the Disney Classic each October.

- Going to the Masters in 1985 with Bay Hill's Jim Ellison and his assistant.
- Going to the Masters in 1988 with half a dozen Central Florida superintendents. Sneaking under the ropes late Wednesday and checking out the stimpmeter marks on the green. Really fast.

Isleworth

- Interviewing for the superintendent's job at Isleworth in Mr. Palmer's office at Bay Hill. I had purchased a new sport coat with coordinating shirt, tie, slacks – the works. We lived nearby and when I got home I nearly passed out. On the outside of the right sleeve was the Hart, Schafner and Marx – Jack Nicklaus – Golden Bear Logo.
- Watching Mr. Palmer make a two on the par-5, 7th hole. Driver – 3 iron and shoot a 28 on the front side.
- Feeling how great a bentgrass green putted in the mornings as I walked the greens. They were great from November to May.

Osprey Ridge and Eagle Pines

- Growing in Osprey Ridge and being part of the opening team of the Bonnet Creek Club.
- Meeting Tom Fazio and working daily with the irrepressible Steve Maziak. Meeting the legendary Pete Dye. Meeting John Denver at Bryant Gumbel's Pro-Am pairings party.
- Watching the lakes get stocked with bass, bream and catfish in 1991 and a few years later catching and releasing bass in the lake on No. 16 Osprey.

Magnolia and Palm Courses

- Seeing herds of deer and flocks of wild turkey nearly every day.
- The excitement and the fatigue of hosting the Oldsmobile Scramble and the Disney Classic back to back
- Watching Tiger Woods bounce his second shots off the back of the Magnolia's par-5 holes.
- One foggy morning as I walked off No. 9 green, I hear a bagpipe. I drive toward No. 10, but can't see much. I follow the sound. Halfway down the fairway on the cart path is this guy playing the bagpipe. He wasn't bothering anyone. I knew Disney had pipers for special golf events, so I asked if he was a cast member just practicing. No, he was just a guest staying at the Grand Floridian across the street and he didn't think the other guests would appreciate his early morning piping, so he came over to the course. Did I mind? "No," I said. I'm just making a memory.

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