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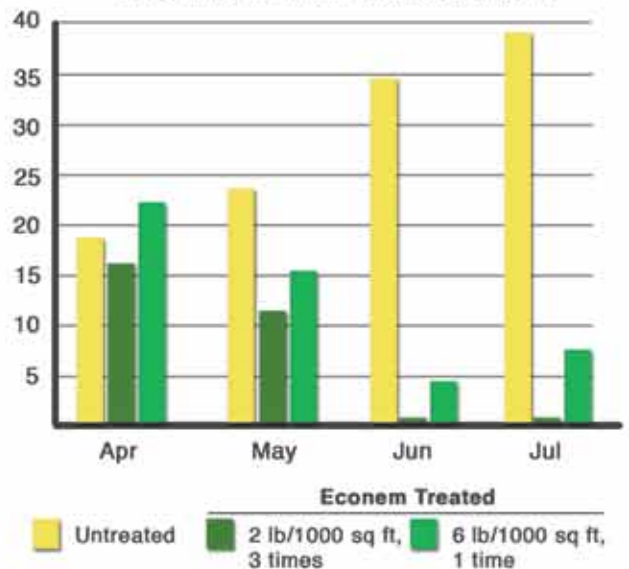
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2009 Field Trial, Palm Beach Gardens, FL



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FTGA Foundation Presented Four Scholarships at 2010 Conference



Bradley Williams



Douglas Faller



Steven Denvir



Bradley Quakenbush

By Heather Russo,
FTGA Director of Marketing

At the October 2010 FTGA Conference in Show in Orlando the Florida Turfgrass Research Foundation (FTRF) presented four Florida students with scholarships for the 2010-2011 academic year. All recipients attend either the University of Florida or Florida Gateway College (formerly Lake City Community College) and are preparing for careers as a golf course superintendent or in turfgrass management. These students were selected based on their academic record, leadership capabilities and extra-curricular activities.

University of Florida: Bradley Thomas Williams received the Col. Frank Ward Memorial Scholarship for \$1,500. A 2009 recipient of the FTGA's Max J.

McQuade Scholarship, we are once again enthusiastic to award Bradley Thomas Williams an FTGA Scholarship. Bradley is working toward his Masters Degree in Environmental Horticulture. His Master's Thesis examines traffic tolerance and recovery rate of eight bermudagrass

cultivars, under the guidance of Assistant Professor Jason Kruse. He has taught turfgrass labs to undergraduate students at UF, delivered several guest lectures and is an active member of the Turf Club. Bradley earned a Bachelor's degree in soil science from the University of

Wisconsin. He has spent seven summers working on golf courses, has interned with the USGA Green Section, and upon graduation, he intends to pursue a career in golf course management in Florida.

Florida Gateway College:

Douglas Faller received the James L. Blackledge Memorial Scholarship for \$1,500. Douglas was born in Winter Haven and is studying turf management with the intention of becoming a Florida-based golf course superintendent. During the school year, he works in golf course maintenance at Haile Plantation Golf & Country Club.



From left: FTGA President Mac Carroway, FTGA Past President Greg Pheneger, U. of Florida student Bradley Williams and FTGA Scholarship Chairman Stacie Zinn at the FTGA Conference Awards Breakfast. Photos by Leading Edge Communications.

His summer internship this year was at Cardsound Golf Club on Key Largo. He also participated in prep work for Jack Nicklaus' Memorial Tournament at Murifield Village in Ohio. Douglas is an active member of Gateway's FTGA Student Chapter.

Stephen Denvir received the Hans Schmeisser Memorial Scholarship for \$1,500. Stephen was born in New Jersey and grew up in Florida. He is studying to become a golf course superintendent and has a special interest in grow-in renovations in Florida. Stephen is an avid golfer and serves as Secretary of the College's Turf Club. He worked at Riviera Country Club in Coral Gables, Spessard Holland Country Club in Melbourne Beach and this summer interned at Trump National in Bedminster, New Jersey. The youngest of seven children of a retired firefighter's and his wife, Stephen said in his application that he was trying to win this scholarship as a gift for his parents for all of their financial support.

Bradley Quackenbush received a General Scholarship for \$1,000. Bradley was born in Winter Haven and is studying turf management at Gateway to pursue a career as a golf course superintendent in Florida. During the school year he is employed at Haile Plantation. He has worked in turf maintenance at Champions Gate, near Orlando, and at highly ranked Winged Foot Golf Club in Mamaroneck, New York. This summer his internship was at Arnold's Palmer's Bay Hill Club & Lodge in Orlando.

GOT DIVOTS?



**Vegetatively Propagated
Bermudagrass for Divot Recovery**

Divot Recovery

Study by The University of Arkansas

Celebration was the top rated vegetatively propagated Bermudagrass for divot recovery in a study by The University of Arkansas.

Nonlinear regression results for predicting bermudagrass variety recovery from injury. Varieties are sorted by average K value (fastest to slowest recovery). 48 cultivars were evaluated in this study. The below chart only includes the 22 varieties commercially available.

Variety	Propagation ¹	2003		2004		
		K	(SE)	K	(SE)	
La Paloma	S	0.115	(0.0071)	0.96	0.201 (0.0125)	0.96
Yukon	S	0.122	(0.0078)	0.96	0.193 (0.0112)	0.97
SR 9554	S	0.130	(0.0011)	0.93	0.179 (0.0143)	0.93
Celebration	V	0.121	(0.0066)	0.97	0.177 (0.0107)	0.96
Arizona Common	S	0.119	(0.0117)	0.91	0.178 (0.0101)	0.96
Panama	S	0.122	(0.0100)	0.93	0.173 (0.0078)	0.98
NuMex Sahara	S	0.141	(0.0047)	0.99	0.152 (0.0114)	0.93
Princess 77	S	0.129	(0.0064)	0.98	0.160 (0.0155)	0.89
Sunstar	S	0.117	(0.0134)	0.88	0.170 (0.0124)	0.94
Transcontinental	S	0.114	(0.0075)	0.96	0.169 (0.0082)	0.97
Riviera	S	0.132	(0.0067)	0.96	0.151 (0.0108)	0.94
Mohawk	S	0.120	(0.0090)	0.94	0.159 (0.0091)	0.96
Sundevil	S	0.117	(0.0045)	0.99	0.148 (0.0087)	0.96
Southern Star	S	0.097	(0.0052)	0.97	0.162 (0.0074)	0.97
Aussie Green	V	0.108	(0.0049)	0.98	0.143 (0.0114)	0.91
GN-1	V	0.092	(0.0038)	0.98	0.158 (0.0101)	0.95
Patriot	V	0.125	(0.0073)	0.97	0.121 (0.0087)	0.93
Midlawn	V	0.114	(0.0059)	0.98	0.130 (0.0075)	0.95
MS-Choice (Bulbeve)	V	0.111	(0.0083)	0.95	0.131 (0.0098)	0.93
Tifway	V	0.096	(0.0062)	0.96	0.139 (0.0072)	0.96
Ashmore	V	0.093	(0.0070)	0.95	0.119 (0.0068)	0.93
TifSport	V	0.074	(0.0072)	0.91	0.128 (0.0096)	0.92

¹ S = seeded, V = vegetative
² K values determine recovery percentage according to the formula:
 $1 - \exp(-K * \text{DAI})$, where DAI = days after injury. Higher K values indicate faster recovery from injury.

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BMP's – More Important Now Than Ever Before

By Todd Lowe

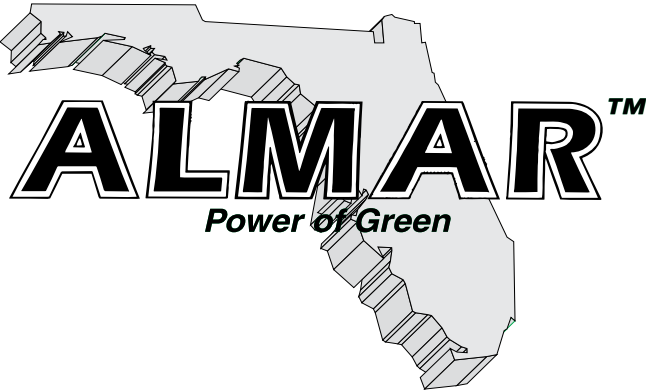
Best Management Practices have been created for many industries. For golf courses, BMP's provide a framework of practices for turf health and good playing conditions while decreasing the use of natural resources. BMP's have become more important for Florida golf courses, with several counties having become pressured by environmental activists to implement erroneous practices like fertilizer blackouts during rainy summer months. Such practices may ultimately damage the turf and have a negative impact on environmental quality, and in most cases, regulators have fallen back on the BMP's as guidelines for golf courses.

The manual *Best Management Practices for the Enhancement of Environmental Quality on Florida Golf Courses* was created in 2007 with the support of University of Florida personnel and various allied associations, and funded by the Florida Department of Environmental Protection. It highlights sound principles for proper golf course construction, turfgrass cultural practices, fertilization, irrigation, and chemical handling/

application for Florida golf courses. So far, there is no certification process for golf courses, but the BMP manual is a valuable resource and includes a checklist that highlights important practices.

The checklist is an easy-to-follow outline of do's and don'ts for each chapter of the manual. Since fertilizer use is currently an important topic with local governments, this might be a good time for golf course superintendents to run through the fertilizer storage and handling section and make sure there are no issues at your course. The checklist includes:

- Are pesticides and fertilizers stored in separate buildings, or with a concrete firewall maintaining separation?
- Is bagged ammonium nitrate stored at least three feet away from any building wall?
- Are ammonium nitrate and other strongly oxidizing materials stored away from sludge products or organic materials?
- Are all unloading and loading points for fertilizers/raw materials designed to minimize accidental release and allow for easy cleanup?
- Are dry fertilizers and raw materials covered from the elements?



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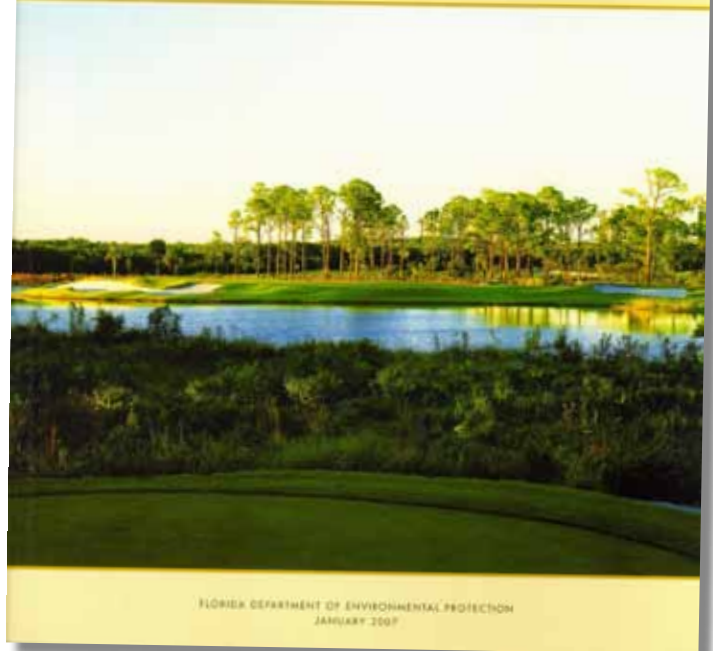
*Best Management Practices
for the
Enhancement of Environmental Quality
on
Florida Golf Courses*

- Are unloading, loading and other critical control points swept after use to further control dust and spills?
- Are all fertilizers loaded over impervious areas or over a tarp or other temporary barriers to contain spills?

The manual includes nearly 140 checklist items that cover various golf course management topics, and while no governmental agency or municipality can require adherence to them, they are certainly good principles to follow, especially if some type of pollution is detected downstream from your location.

Visit <http://www.dep.state.fl.us/WATER/nonpoint/docs/nonpoint/gfbmp07.pdf> to download the manual, or call the Nonpoint Source Management Program at 850-245-7508 for a hard copy.

The Florida GCSA in cooperation with regulators and scientisted created the Golf BMP manual published in 2007. Photo by Joel Jackson



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The Audubon Cooperative Sanctuary Program Celebrates 20 Years!

Compiled and Edited by Shelly Foy, USGA Green Section



Editor's note: This section consist of a series of articles highlighting the benefits of participating in the ACSP. They have been edited slightly to conserve space.

INTRODUCTION

By Ron Dodson, President,
Audubon International

It seems nearly impossible to believe that it has been 20 years since we launched the Audubon Cooperative Sanctuary System. What started as a new way to promote membership with an environmental organization has started a partnership-oriented approach to conservation.

We wanted to stop yelling and screaming and start listening and working with people where they lived, worked, and recreated. With the help and support of the United States Golf Association, we have been proven right!

Although we have always said that we will work with anyone, anywhere, it has been golf by far that has outpaced any other type of land use in participation in the Cooperative Sanctuary System.

The program works because golf course superintendents want to work outdoors, they understand plant management, they don't want to spend any more money than necessary to meet golfer expectations. I would hazard to guess that the majority have found that managing bird nesting boxes, watching bald eagle nestlings, taking pictures of the

occasional fox on the course – and even the deer that made tracks across the green – was actually a very pleasant addition to the work week.

As states go, Florida has been the leader of the pack. There are more golf courses in Florida than any other state, but even on a percentage basis, Florida is a leader.

The recent economy has been tough on everyone; but Florida seems to be especially hard hit. The management of Audubon worried about the state of the economy and what sort of drop-off rate we were going to see in our membership ranks.

But a drop-off didn't occur, and this includes the hard-hit courses of Florida. I like to think most golf course superintendents understand that conservation starts with the word "conserve" and that doesn't only mean environmental conservation, but it also includes economic conservation.

Doing good for the environment means doing good for the budget. Courses embedded with a conservation ethic embedded in the fabric of the way the course operates, the way the course management thinks, and the way the course membership acts, are the least likely to close up shop.

Those courses that were built on the foun-

dation of over-use, hard-to-maintain and unrealistic expectations are the first ones to face the economic realities we have all read about in the newspapers. While it is sad to hear about a course closing and friends and neighbors losing jobs, the situation was brought about by previous, unsustainable decisions.

Florida is in a tough position, but those courses that come out of this downturn will be the strong, conservation-oriented courses, and they will be even stronger. Walking the walk is much more important than just talking the talk.

Thanks for sticking with us these past 20 years and I look forward to the next 20!

Estero Country Club: The 100th Certified Audubon Cooperative Sanctuary in Florida

By Shelly Foy

I had the pleasure of touring Estero Country Club very early on a recent cool, foggy Monday morning when the course was closed for maintenance. Even though the course is totally surrounded by urban sprawl, I felt I was in a nature preserve. I now understand why superintendents say their favorite time on the golf course is very



Estero Country Club is the 100th Florida Course Certified in the ACSP Program. Photo by Shelly Foy.

early in the morning when no golfers are in sight.

Superintendent Bruce Bach had invited me to speak to the members about the Audubon Cooperative Sanctuary Program, and to present the club with its certificate signifying it was the 100th golf course in Florida and the 796th in the world to be certified in the program!

Estero CC was built in 1985 on 167 acres of former pasture. This club with 350 golfing members beautifully illustrates how a course, completely surrounded by residential area, can offer great habitat for a variety of wildlife. It has an outstanding ACSP in place, and the keys to its success have been member support and commitment, naturalizing out-of-play areas, and replacing a 22-year old irrigation system.

Bruce said members had been interested in the ACSP for a long time, and knew replacing the irrigation system would yield successful results. In June 2008, the course underwent a five-month irrigation replacement project.

Management also wanted to reduce turf, so the original designer, Gordon Lewis, developed naturalized areas to replace 7 acres of turf. The goal was to reduce water use

by 15 percent with the new system and an additional 10 percent by replacing turf with natural areas. The club now saves \$50,000 annually on repairs to the irrigation system, and anticipates significant savings with its 20-year contract with Lee County to provide the club with reclaimed water; their sole water source.

Jim Sluiter, staff ecologist with Audubon International, noted that “Estero Country Club’s water conservation on the golf course is exceptional. The new irrigation system provides outstanding reliability and flexibility in their watering program. Uniform and responsible irrigation has resulted in reduced fungicide applications as well. . . I am learning that the certification submissions delivered by a course are often a great reflection of their dedication to their stewardship efforts. Estero C. did an exceptional job submitting all materials. The comprehensive water quality testing was very good, and their formal documentation of all efforts speaks highly of their work ethic.”

Estero Country Club’s outreach and education program keeps members updated on the ACSP, and reaches out to include the surrounding community in environmental programs and projects.

Estero hosts an annual Golf Maintenance Facility Open House for members and neighbors. It recently worked with Boy Scout Troop 119 to install 20 nestboxes to be monitored by club members.

The club’s Resource Advisory Committee includes members, staff, Lee County officials, experts on horticulture, landscape, and irrigation, as well as a local superintendent who is very active in the ACSP. The committee meets regularly to discuss ongoing and planned environmental efforts. Club members strongly support ACSP, and plan continued outreach and education programs to improve and expand the club’s environmental stewardship efforts as well as its standing in the larger community.

Estero members are involved in every aspect of their program, including water-quality management. Staff educated homeowners about the effects of poor fertilizing practices on the health of the lake system and encouraged them to discuss the problem with their lawn-maintenance contractors.

Since joining the ACSP, the golf course now uses 90 percent slow-release fertilizer and has increased use of natural organic fertilizer to further minimize the potential for leaching and nutrient runoff. In 2007



*Recent Estero irrigation upgrades improved turf quality and helped reduce costs.
Photo by Shelly Foy.*

Estero established buffers by raising the height of cut along all lake banks from 1.25 to 6 inches.

The result has been lower maintenance requirements in lakes for control of algae and aquatic weeds, and a steady increase in the amount of wildlife. Ducks once were rare; now several species call Estero CC home. Wading birds are in abundance, and eagles and osprey regularly fish the lakes. A family of otters often visits. Estero's inventory lists 53 birds, and more than 14 species of mammals, including bobcats. Management has received nothing but positive responses from members about the increase in wildlife and the beauty of the naturalized areas.

Since joining the ACSP, Estero CC has added 20 wildlife habitat areas, and has decreased the amount of managed turfgrass by an additional 7 acres for a total of 23.9 acres of natural areas.

They restored 1.8 acres of wetlands and increased their native plant percentage from 50 to 75 percent. They have increased their naturalized shoreline from 25 to 75 percent. They regularly remove exotic plants – 90 melaleuca trees in 2009 and this year ficus trees. Member education about the problems caused by invasive trees was key to the removal program.

A unique feature of Estero CC is a railroad track that runs through the middle of the property, which is seldom used except by maintenance vehicles. The Seminole Gulf Railroad owns 65 ft. on each side of

the track and is responsible for maintaining this acreage. The roadbed creates an incredible wildlife corridor.

Estero CC also has reduced fungicide use, a move made possible by the new irrigation system and the ability to maintain healthier turf with fewer inputs. Committing to spot-spraying instead of broadcast or boom spraying, fungicide expenditures are now one-third of what they were in 2004, and insecticide expenditures have been cut in half.

The real success to Estero Country Club's environmental programs is they have made good, solid, well-conceived decisions. The members have bought into the program,

ACSP Perspectives from Long-Time Members of the Program, Tampa Palms Golf & Country Club

By Bill Kistler, CGCS

It has been almost 18 years since Tampa Palms became the first golf course in Florida to become a Certified Audubon Cooperative Sanctuary. Many things have changed over the years, but one thing has remained constant: Tampa Palms Golf & Country Club remains a great wildlife sanctuary.

Our property totals 277 acres, of which only 90 are maintained turfgrass. Only five holes have homes next to the course, and woods and wetlands make up the rest of the property. Our wildlife inventory is vast

and includes alligators, wild turkeys, deer, bobcats, otters, wild hogs, red shoulder hawks, and over 33 additional species of birds.

Water management at Tampa Palms has changed over the years. With the implementation of a computerized irrigation system, control of where and when water is used has greatly improved our usage.

It has been an honor for Tampa Palms to be a part of the 20 years of commitment by Audubon International to work with golf courses and communities to raise public awareness about water quality and water management and to help provide wildlife habitat for golfers and the public to enjoy.

Hole-in-the-Wall Golf Club

By Russ Geiger, CGCS

Nearly 17 years has elapsed since the Hole-in-the-Wall Golf Course became a certified Audubon Sanctuary. Throughout this span, vast resources have been directed toward achieving the program's goals, resulting in improved wildlife habitat, conservation, and member awareness of the importance of the certification process.

As the manager of the golf course and grounds, I have been directly involved with numerous projects and specific maintenance practices that have greatly benefited the property and native wildlife species. Over 40 acres of wetland preserves have been carefully restored to their natural state after decades of invasive, exotic vegetation. Large native trees such as cypress, palm, pine, and live oak have recovered from near destruction over time as exotics smothered and robbed the natives of required space, sunlight, and water.

Consequently, many native species of birds and other wildlife have returned to the property to thrive and reproduce such as the beautiful North American wood duck, black-crowned night heron, osprey, and bald eagle. Just 15 years ago it was rare to observe these birds on the property and today they reside in increasing numbers.

Golf course maintenance strategies have progressed by utilizing Best Management Practices centered on conservation of resources and limited impact to the immediate environment. Inputs such as controlled-release fertilizers have helped