Message from the Director - GROW YOUR ROOTS DEEP

Many of you know that in addition to working as your director, I grew cranberries up until 2011 on 120 acres of Ocean County, NJ wetlands. Like so many of Ocean Spray’s grower families, I was one of three members of a family farm along with my dad and older brother. When my father passed in 1998, it was up to my brother Jeff and I to carry on the family tradition which began in 1951 when Dad proudly bought his first bog in Toms River, NJ and joined the Ocean Spray Co-operative. I need not tell you how difficult growing cranberries can be; you are working in an equally challenging industry of growing turf for recreational purposes, but I digress.

Throughout my entire life, as I now approach 65, I learned that growing well-rooted cranberry plants is one key to high yields. Plants of good varieties, well-tended to and sanded regularly, will outlive all of us, and so my family grew deep-roots on cranberry vines planted well before the start of the 20th century. It is truly remarkable how long plants can live when properly tended to. Clearly there are enough “century” plus golf courses in the U.S. to prove that observation.

Who appreciates many of life’s real mysteries when they are 30 years old? But now, 35 years later, I get it – grow deep roots. Fact is my grandfather came to Rutgers back in 1894, and boy, did he leave his mark on the university landscape, for the roots he set live on today as healthy as ever (but that is another story). My father sustained the family tradition of serving Rutgers for his entire adult life, spanning 87 years. What I learned from each of these loyal Rutgers sons is to always set deep roots whatever you do, and I followed their lead here at Rutgers for the past 35 plus years. Growing a good business or a great golf course requires a persistent application of a set of guiding principles and core values. Here are some of mine.

Be of humble spirit. C.L. Lewis said it best on humility. “Humility is not thinking less of yourself, it’s thinking of yourself less.” Also, leading by serving others bears continuous rewards. My tenure as the administrator for our golf turf management school has taught me that serving others is the secret to a happy life. The successes of our graduates have brought me a genuine sense of fulfillment and self-worth. Your enduring friendships and reciprocal acts of generosity, philanthropy and brotherhood/sisterhood fill me with pride and appreciation. Your personal achievements have added to the legend of our turf school, now well over 50 years old and counting.

Yet another core value of mine is hire the best people you can find and help them succeed at what they do best. Cheerfully provide the resources they need and consistently remove the workplace barriers which occasionally frustrate them. Coach others to know and embrace your guiding values. Recognize their successes in all ways and accommodate their shortcomings and missteps.

When I arrived at Rutgers, the turf school faculty in place were among the finest educators and scientists anywhere. They had already set deep roots, embraced me warmly and taught me much about growing fine turf and about life. Faculty like our founder Ralph Engel, and others including Henry Indyk, Reed Funk, Spencer Davis, Phil Halisky, Louis Vasuary, Dick Ilnicki, Bob Hanna, Ray Korbobo, Bruce Hamilton, Joe Peterson, Roy Flannery, John Meade, Martin Decker, and Arnie Zucker each brought their love of turfgrass or related topics into our classrooms and built a strong and credible foundation from which I could (continued on page 9)
Superintendents welcome techniques that improve the efficiency of operations on the golf course. The incorporation of topdressing sand into a turfgrass canopy is one of those practices where a gain in efficiency is beneficial. Significant time and other resources can be spent on managing the sand particles left on the putting surface after most of the topdressing is incorporated. These remnant particles are typically large (fine gravel, very coarse, or coarse particles, depending on the quality of the sand) and interfere with mowing and potentially play if not removed. Blowers can be used to remove these particles but at the cost of more labor and fuel. Daily mowing eventually removes these large particles but at the cost of increased mower maintenance through more frequent sharpening and replacement of bedknives and reels.

The incorporation of topdressing sand is more difficult on turf maintained at lower mowing heights and with plant growth regulation that increases shoot density, calculated as the number of turfgrass shoots per square inch. Additionally, newer cultivars developed for putting greens have much greater shoot density compared to older cultivars. Topdressing sand increases the firmness of a putting green surface due to the “bridging” of sand particles within the turf canopy and layer of mat or thatch. However, the bridging among sand particles and with plant material also contributes to the difficulty of incorporating sand.

Movement of sand particles into the turf canopy and mat of a putting surface is inhibited by moisture, regardless of whether the water is within the sand or turf itself. Water acts like glue causing the sand particles to stick to each other (bridge) and to the leaves (and other parts) of the grass plants as well. This bridging effect impedes the movement of sand deep into the turf. Practices such as grooming and verticutting are done to open the turf canopy and reduce the amount of bridging, allowing more of the sand particles to fall deeper into the turf canopy and thatch. Topdressing at lower rates also serves to reduce the bridging of sand particles because particles are not as close together, thus improving incorporation. It is essential, however, that lower rates of topdressing be applied more frequently to achieve the same total rate of topdressing, otherwise the objective for topdressing will not be realized.

Many have adopted the strategy of selecting sand that contains no fine gravel (2 to 3.4 mm particle size diameter) or very coarse sand (1 to 2 mm) to improve incorporation of topdressing. More recently, some are selecting sands that do not contain coarse sand (0.5 to 1 mm), which further improves the ability to incorporate the topdressing, especially when it is dry. While these “cleaner” sands greatly improve incorporation, there is concern that sand less than 0.5 mm in size has the potential to negatively change the physical properties of the developing mat (thatch) layer of a putting green.

**POTENTIAL ISSUES**

Eliminating the larger particles results in more of the particles being similar in size, and this is referred to as poorly or uniformly graded. Uniformly graded sands are more susceptible to instability problems, meaning that the sand particles may shift under traffic. Additionally, finer sand can retain more water and slow its movement. The extent to which these concerns are actually a problem in the context of topdressing is not fully understood. For example, some finer sands, despite being uniformly graded, can pack together and be more stable than coarser sand. Moreover, what we know about the behavior of sands is typically drawn from studies of sand-based rootzones rather than topdressing sand applied to an accumulating mat (thatch) layer.

The incorporation of topdressing sand is more difficult on turf maintained at lower mowing heights and with plant growth regulation that increases shoot density, calculated as the number of turfgrass shoots per square inch.
In an attempt to offset any potential negative impacts of finer topdressing sand, some superintendents are using two sand sizes. This approach uses a coarser sand for the backfill after core aeration, and a finer sand is used for surface topdressing applications. Thus, the concept is to manage any potentially negative effects by coring out the mat layer containing finer sand and replacing it with coarse sand backfill. It is not clear whether this “dualsand” concept will be sufficient to offset any negative effects of the finer sand, presuming that negative effects actually occur.

**RESEARCH AT RUTGERS**

Two research trials were recently initiated at Rutgers University to evaluate the effects of topdressing sand varying in particle size distribution on turfgrass quality and surface firmness. Our trials compared the use of coarse-medium and medium-fine sands on turf with different thatching tendencies.

Our first field trial was initiated in 2010 on Greenwich velvet bentgrass putting green turf, which has a great thatching tendency. The plots were mowed daily at 0.11 inch with a triplex mower. Irrigation was applied to these plots but only enough to relieve the initial signs of wilt stress, which serves as the indicator to apply water. Either coarse-medium or medium-fine sand was applied every two weeks at 50 or 100 pounds per 1,000 square feet. The amount of sand left on the turf surface after topdressing events was different among the sands. As expected, it took more time for the turf surface to become clear of sand when topdressing was done with the coarse-medium sand topdressing. As the particle size of the sand was reduced, less sand was removed by mowing. The critical issue that must be evaluated is, will the use of a finer topdressing sand applied over coarser-textured soils that topdressing sand needed to be applied at the rate of 100 pounds per 1,000 square feet to observe differences between these two sand sizes.

The amount of sand left on the turf surface after topdressing events was different among the sands. As expected, it took more time for the turf surface to become clear of sand when topdressing was done with the coarse-medium sand topdressing. The amount of sand harvested during mowing was affected by topdressing. As the particle size of the sand was reduced, less sand was removed by mowing. The critical issue that must be evaluated is, will the use of a finer topdressing sand applied over coarser-textured soils have any long-term ramifications? Will infiltration be affected negatively, and/or will free drainage within the profile be unaffected? These issues will be evaluated as research continues.

A second field trial was initiated in late June 2011 on annual bluegrass putting green turf. Three sand sizes are being used in this trial: a medium-coarse sand, a medium sand (the medium-coarse sand sieved to remove coarse sand with a #35 sieve, 500-µm screen), and a medium-fine sand. Topdressing was applied at 50 pounds per 1,000 square feet every 14 days during the summer months. Data collection in this trial was similar to the velvet bentgrass trial. Additionally, anthracnose severity was evaluated every seven to 10 days.

All topdressing treatments had as good or better turfgrass quality than the non-topdressed plots. As expected, more anthracnose disease was observed on the non-topdressed plots compared to all of the plots receiving topdressing sand. No differences among sand sizes were observed in the first year of this trial.

**SUMMARY POINTS**

Sand topdressing, regardless of sand size, has yet to provide consistent effects on surface firmness or volumetric water content in either trial. More differences may emerge as cumulative amounts of sand topdressing increase throughout subsequent years of these trials. A drum roller equipped with golf shoe spikes is being designed and constructed to simulate foot traffic on these plots in 2012. Surface firmness across treatments may become more apparent once traffic is implemented. On velvet bentgrass turf, topdressing sand applied every two weeks, particularly at 100 pounds per 1,000 square feet, provided better turf quality compared to the non-topdressed plots. With repeated treatment, plots topdressed with medium-fine sand eventually had better turf quality than plots topdressed with medium-coarse sand.

Regardless of sand size, topdressing annual bluegrass every two weeks improved turf quality compared to the non-topdressed plots. In addition, anthracnose disease symptoms were less severe in all topdressed plots by late summer. To date, we have not observed any negative effects of topdressing with finer sand on either velvet bentgrass or annual bluegrass maintained as putting green turf. Please note that the finer sands being used in these trials were dominated by medium sand with less than three percent very fine sand content and essentially no silt or clay content. We will continue these topdressing treatments and observations during 2012.

**JAMES A. MURPHY, Ph.D. (murphy@aesop.rutgers.edu) is an extension turf specialist in the Department of Plant Biology and Pathology at Rutgers University, New Brunswick, N.J. He instructs in the Professional Golf Turf Management School. Look for his segment on HouseSmarts “Green with Envy” - [http://youtu.be/p7IYvB-oFaQ](http://youtu.be/p7IYvB-oFaQ).**
Hyatt Hills Golf Complex Appoints New Superintendent

After more than ten years of nurturing Hyatt Hills Golf Course in Clark, Joe Flaherty turned over the reins to a new head greenskeeper on April 1st, Scott Kussmaul.

Kussmaul, who graduated from the Professional Golf Turf Management School in 2007, has been working closely with Flaherty dating back to 2003. Raised in Roselle Park, he worked at Hyatt Hills for several years before Flaherty influenced him to enroll in the Rutgers program.

Flaherty, 70, who hails from a long family history of golf course superintendents, worked at Baltusrol Golf Club for more than 30 years before coming to the nine-hole Brian Ault-designed golf course at Hyatt Hills when it opened in 2002.

“Probably my biggest challenge will be handling paperwork and monitoring of the golf course,” says Kussmaul, of the property once owned by General Motors. He is proud of the latest improvements to the course including adding two miles of drainage and the recent upgrade of the course’s slope rating. He will lead a crew of seven employees, and two interns.

Congratulations to Rob and Robyn Dreesen on their marriage

Thank you to the Winter 2013 Professional Golf Turf Management II class who donated a Rutgers Hybrid Dogwood that was planted on the patio of the Geiger Center.

In Memoriam

Stephen A. Baldasare - Class of 1979

Henry Hepner - Class of 1952
Welcome New Additions

From left (top) to right --
Sophia Grace De Salvia, Graham Edward Matthews, Liam McAleer, Mike Robertson, Todd Saganiec, Tristan Swiney, and Camden and Gavin Wignall

Learn more about our Golf Turf Management School instructors by visiting their websites!

Richard Hurley, PhD, CPAg  http://www.bentgrassdoctor.com
Steve McDonald  http://www.turfgrassdiseasesolutions.com
Gene Westmoreland  http://www.westmorelandgolf.org

Stephen Kay  http://kayandsmithdesign.com
Bruce Neary  http://bcnhorticulture.com

- Rutgers Professional Golf Turf Management School -

Two-Year Certificate Program

Fall Session - October 3 to December 13, 2013  |  Winter Session - January 6 to March 19, 2014

As an alumnus of The Rutgers Professional Golf Turf Management School, we look to you to recommend qualified applicants who can help build the reputation of our Rutgers program. If you have an employee, a co-worker or an associate who may be interested in and qualified for our program, please have them contact Fran Koppell via e-mail at koppell@rutgers.edu. Visit our website at www.golfturf.rutgers.edu for an online application!

Three-Week Golf Turf Preparatory Short Course

January 6 through January 24, 2014

Perfect for aspiring or current turf professionals looking to increase their professional value at an affordable price. Our compact course curriculum delivers essential academic turf knowledge and the practical applied training needed for success in the golf turf industry. The Three-Week Short Course provides high-quality instruction by utilizing some of the best instructors found in our Two-Year Professional Golf Turf Management Program. The program's pace and varied subject matter is most valued by applicants with at least one year of golf turf experience or an equivalent. For additional information, please contact Casey Sky Noon via email at noon@rutgers.edu.

http://golfturf.rutgers.edu
Greens
The Newsletter for Rutgers Turf Alumni

Hawks Nesting on the Back Nine?
By Sandy Crisafulli

Putting the “Green” Back in Golf: Rutgers Professional Golf Turf Management School Alumni Elevate Environmental Stewardship

For two New Jersey golf courses run by alumni of the Rutgers University Golf Turf Management School, the term “putting green” has taken on new meaning. In fact, Heron Glen Golf Course in Ringoes and Quail Brook Golf Course in Somerset are setting benchmarks for ecological stewardship.

“I’ve always been frustrated with the popular misconception that golf courses are not environmentally friendly,” noted Heron Glen Superintendent Jason Pierce, a 2000 Rutgers Turf School graduate. “I am committed to dispelling this false stereotype.”

To that end, Heron Glen recently became certified as “River-Friendly” by the New Jersey Water Supply Authority (NJWSA). The certification program focuses on enhancing water quality management and conservation techniques, wildlife and habitat preservation and growth, and education and outreach. “NJWSA customizes the program to be site specific,” Pierce said. “When we got involved, we were pleased to see that Heron Glen already was doing a lot of things right.”

For example, the course has incorporated organic products into its fertilizer program since it opened in 2002, and also uses liquid bio-stimulant products (which naturally increase nutrient efficiency and decrease disease and the need for fertilizer inputs) in treating its turf. To achieve the River-Friendly certification, Heron Glen increased the amount of acreage dedicated to natural habitat, installed bird boxes throughout the property and incorporated a naturalized wastewater treatment system. Additionally, Heron Glen, which is owned by Hunterdon County and operated by KemperSports, has hosted a series of country-organized bird walks at the course.

Pierce credits the Professional Golf Turf Management School for setting the stage for his success in creating green environments. “The integrated pest management class showed us alternatives to controlling certain issues,” Pierce said. “That led to my team establishing a good system at Heron Glen from the outset.”

Today, Pierce sits on the NJWSA’s River-Friendly Golf Course Technical Advisory Committee. “It is great to see people taking this step forward and the watershed authority doing its part to keep these programs alive. It really does make a difference.”

Thomas Grigal and Rich Evans agree. As superintendent and assistant superintendent, respectively, at Quail Brook, they spearheaded that property becoming the very first River-Friendly course in 2005 and the first to be re-certified in 2011. Quail Brook is one of five courses operated by the Somerset County Park Commission, all of which are River-Friendly certified or undergoing certification.

“This program is not just about getting certified and re-certified,” explained Grigal, a 1980 Rutgers Turf School graduate. “It involves ongoing, everyday processes that help the environment. And in addition to the rewards of being good stewards, golf courses with sustainable practices save money on machinery and fuel because they are mowing less property, on water because they are conserving it, and on fertilizer and other chemicals because they are using them minimally.”

For Grigal and Evans, their “green” aesthetic began developing in school. As Grigal noted, “even going back to my time at Rutgers, so much of the class focus and material related to being environmentally friendly. I can’t give the teachers enough credit. The knowledge you gain there is fantastic.”

Each year, more and more wildlife – from nesting hawks to deer and their fawns – can be found in the no-mow areas at Quail Brook, an indication that the course’s green efforts are working. “We are doing something right,” said Evans, who graduated from the Rutgers Turf School in 2009. “Just to look at the golf course and see the way it’s changing over the years is fantastic. This is a long process and a lot of work, but it gives such a good feeling.”

Kathy Hale, a principal watershed protection specialist with NJWSA, noted that the River-Friendly certification program advances the understanding that environmentally sound courses are quality courses.

“The certification also provides an outstanding opportunity for courses to educate their clients,” she said. “New Jersey’s golf courses can really be leaders in environmental stewardship by showing the public how they are making an effort to protect water quality and reduce their environmental impact.”

Hale noted that the NJWSA program complements several
golf courses. Other programs include:

- Groundwater Guardian Green Site - Quail Brook recently earned this certification from the Groundwater Foundation.
- Audubon Cooperative Sanctuary

- Heron Glen’s certification is in the final stages (Pierce anticipates completing it in late 2012). Another Rutgers graduate, Shawn Reynolds, recently completed recertification of his golf course, Blue Heron Pines.

As the public becomes more environmentally conscious, golf course superintendents are being required to demonstrate their knowledge of land and resource management, noted Fran Koppell, senior program coordinator with the Professional Golf Turf Management School. “They need to be proactive, and the instructors in our program are helping to support that,” she said.

At its core, the Professional Turf Management School is dedicated to advancing green careers. The certificate program includes two 10-week sessions over two years and a 200-hour internship. The school also offers a 3-week program each January for newcomers or experienced professionals who want to quickly expand their skills. The intensive academic format concentrates on the technical knowledge and management skills required of superintendents.

Since its first graduating class in 1962, in excess of 2,200 golf turf professionals have completed the two-year program. Among currently active alumni, more than 700 are superintendents and more than 550 are assistant superintendents at courses worldwide.

For more information about the Professional Golf Turf Management School, please visit golfturf.rutgers.edu or contact:

Telephone: 732-932-9271
Fran Koppell x627
koppell@rutgers.edu

Casey Sky Noon x606
noon@rutgers.edu

And the Professional Excellence Award Winner is ...

Glenn Miller

Glenn A. Miller, CGCS, class of 1984, was presented with the Rutgers Professional Golf Turf Management School Alumni Award for Professional Excellence at the Class of 2012 Graduation Ceremony and 23rd Annual Turfgrass Student Awards Banquet in November. Even though New Jersey was still reeling from the one-two punch of Hurricane Sandy, there was a great turnout of students, staff and alumni to witness the award presentation by instructor Chris Carson.

When Miller arrived as a student at Rutgers, he had already been working at the Manasquan River Golf Club (MRGC) for a few years. He was promoted to the Club’s Superintendent position soon after earning his Rutgers certificate. He hosted the USGA Girls Junior Championship in 1991, an event that draws competitors from around the world. He left MRGC in 2011 and is now the Golf Course Superintendent at Charleston Springs Golf Course in Millstone, NJ.

But his three decades in the industry have been about more than just going to work; he has devoted himself to serving the profession, his community and our country.

An active member of the Golf Course Superintendents Association of New Jersey (GCSANJ) for over 25 years, Miller has served the organization in multiple roles, including president emeritus, treasurer, board member and founding member of the GCSANJ Foundation.

He also helped found the Alliance for Water Conservation during the drought of 1999-2000 when water restrictions were placed on “non-essential” use. The Alliance proved to the New Jersey Department of Environmental Protection that golf courses and related green industry operations were essential to the state economy and convinced them to modify the restrictions to be more flexible for these businesses. The Alliance is now part of the Green Industry Council.

A proud member of our military, Miller served two years on active duty in the Air Force and nine years in the Air Force Reserves. As a technician on large cargo jets that brought troops and supplies back and forth to Iraq, Miller flew multiple missions during Desert Storm and Operation Desert Shield – all the while remaining the head superintendent at Manasquan River Golf Club.

An active parent and community member, Miller served for 13 years on the Brielle School Board and is currently its president. His son, a sixth grader, still benefits from his work on the Board and his daughter just graduated from Rutgers University.

Along with the award from Rutgers, Miller has also been recognized as the GCSANJ 2002 Member of the Year and the GCSANJ 2011 Distinguished Service Award winner – their highest honor.

Miller enjoys the outdoors and camping, going on as many Boy Scout trips with his son as he can fit into his busy schedule. But it’s no surprise that even when he has free time, golf is his passion – “I play every chance I get!”

http://golfturf.rutgers.edu
Meet New Instructor, Patrick Burgess

A graduate teaching assistant and Ph.D. candidate in the Rutgers Department of Plant Biology and Pathology, Pat’s current research is focused on the drought physiology of creeping bentgrass. That made him a perfect fit to teach stress physiology when he joined the Professional Golf Turf Management School’s instructional line-up this past year.

Our two-year students learned about drought stress, heat stress, salinity stress, winter management, alternative water irrigation and irrigation scheduling from Burgess.

Prior to joining Rutgers as a graduate student and teacher, Pat was a Research Assistant in the Rutgers Ornamental Tree Breeding Program and the Operations Manager of Secor Farms in Mahwah, NJ, where he was born and raised as the youngest – and only boy – in the family. He earned his BS in Plant Science, Horticulture and Turf Industry from Rutgers.

Although Pat enjoys gardening and pretty much anything plant-related, his main hobby these days is work and more work! He travels to give presentations around the country and is scheduled to present in China this summer. A recently completed paper on drought tolerance in creeping bentgrass will be published this year in the International Turfgrass Society Research Journal. Pat anticipates earning his Ph.D. in May 2015.

Along with his research, teaching is a big part of his job. He’s been teaching undergraduates for three years, but he really enjoyed the experience of teaching our two-year students. “It’s way different from teaching undergrads. Mainly because they are from all over the country and they have unique issues and problems on their golf courses. With the two-year guys, you can talk to them individually, have good discussions and identify solutions that they can bring back to their courses.”

Burgess also received valuable feedback from the two-year students that will help him shape his lessons in upcoming class sessions. One major strategy he hopes to utilize involves giving the students more opportunities for hands-on learning. He plans to bring samples to class or bring the students to a campus facility where they can see and feel stressed plants firsthand.

“I give them a lot of credit for what they’re doing,” Burgess said about the two-year certificate students. “When I looked down the list of all the topics the students have to pick up in a matter of weeks – it’s impressive. They see every single aspect of what they need to know on a golf course and they do it in only 20 weeks of class. It’s a rigorous program!”

We gratefully thank the following people who have paid their alumni dues for 2013.

Harry Bahenburlg, 1978
Jeffrey Barr, 2010
Tony Bertels, 1995
Joshua Bertholf, 2002
Frank Bevelacqua, 1963
Joseph Bianco, 1962
Scott Binkley, 1997
Barry Bollinger, 1996
Eric Booth, 2002
Paul Bruni, 1978
John Buck, 1998
Michael Campbell, 2001
Frank Caravella, 1976
Michael Caravella, 1977
Les Carpenter, Jr., 1979
Jason Culver, 2008
Keith Douglass, 2013
Kenneth Duggan, 1994

Jeff Dumont, 2003
Jordan Fairweather, 2005
Jeffrey Feick, 1995
John Fenwick, 1978
Ryan Fogel, 1999
Gerald Fountain, 1978
Aaron Gagnon, 2009
Douglas George, 2008
Ryan Hull, 2013
Christopher Kastner, 2007
Clint Keller, 2012
Ken Kraus, 1986
Alex Leclair, 2012
Brian Lenick, 2012
Durbino Loreno, 1994
Michael Maney, 1997
Todd Marten, 1999
Michael McBride, 1984

Marc McGuire, 2004
Jason McPhail, 2005
Brian Moore, 2007
Thomas Murphy, 1973
Fran Owsik, 1980
Tyler Parone, 2012
Vincent Pavonneti, 1992
Jason Pierce, 2000
David Renk, 1993
Ray Rippet, 1995
Thom Ritchie, 1976
Ron Ruppert, 1979
Kevin Seibel, 1996
Jesse Shannon, 2007
Anthony Sherman, 2012
Phil Shoemaker, 1980
Kevin Shue, 2006
James Stauring, Jr., 1992

Fred Steiger, 2013
Steve Stephens, 1996
Paul Stokes, 2005
Adam Suellflow, 2012
Michael Tardogno, 2007
George Taylor, 1978
Kevin Thielke, 2007
Frank Tichenor, 1995
Thomas Tucci, 1995
Michael Vacchiano, 1986
James Vogel, 1996
Wally Waltsak, 1977
Jeffrey Wetterling, 1975
Henry Wetzel, 1972
Todd Work, 2009
John Zimmers, 1993
After 44 years of service to Rutgers University, dedicated turfgrass researcher, Bill Dickson, has retired.

After earning a bachelor’s degree in botany from Rutgers, Dickson was hired by Professor C. Reed Funk in 1968 for a laboratory technician position on the turfgrass research farm. He was eventually promoted to the position of Head Soils & Plants Technician. He earned his MS in turfgrass science from Rutgers in 1978 and went on to become the Supervisor of the turf farm in 1986. He held that position until his retirement in January 2013.

Throughout his career at Rutgers, Bill assisted in turfgrass research, teaching and extension programs and was considered the backbone of Rutgers prestigious turfgrass program, which developed nearly half of the cool season grass varieties in the United States. He was primarily responsible for the breeding and development of Sabre rough bluegrass in 1986.

Dickson’s forty-plus year career at Rutgers allowed him to stay connected to the world of agriculture even in an era of unprecedented technological advancement. “To me, there is nothing like sitting on a tractor and plowing a field,” Dickson said. “There is just something about it.”

In honor of his significant contributions to the turfgrass industry, Bill was presented the 2012 Rutgers Turfgrass Alumni Association Achievement Award at the Class of 2012 Graduation Ceremony and 23rd Annual Turfgrass Student Awards Banquet in November. Along with instructor Rich Buckley, Dickson was also the recipient of the New Jersey Turfgrass Association’s Recognition Award in 2012.

Bill is enjoying his retirement but hardly slowing down. He’s finally working on projects around the house and yard that he never had time for in the past and, for the pure fun of it, he’s been doing a lot of saltwater fishing out of Belmar, New Jersey. But one of the primary reasons for his departure from Rutgers was his kids. Now he has the time to enjoy his two teenagers before they fly the coop. Whether it’s shuttling them around to activities or watching them play sports, this proud father is appreciating every precious minute.

Directors’ Message - GROW YOUR ROOTS DEEP (continued)

grow the market value of the Professional Golf Turf Management School. Without their vision and selfless focus on the learning needs of men and women seeking careers on the golf course or the native landscape, there would be no story here to tell. As each of these legends retired, another instructor of equal or greater passion was hired to take their place and these seasoned educators have for so long been among my best friends. Their love of teaching is infectious, and we have helped each other grow personally while building the reputation of your golf turf school collectively. Faculty and R.U. staff including Bruce Clarke, Bill Meyer, Jim Morris, Jim Murphy, Rick Buckley, Stacy Bonos, Joe Clark, Tom Gianfagna, Josh Honig, Sabrina Tirpak, and Pat Burgess and industry specialists like Bob Dobson, Chris Carson, Rich Hurley, Bill Jamison, Steven Kay, Steve Kristoph, Steve Langlois, Bruce Neary, Karen Plumley, Marie Pompei, Gene Westmoreland, and Steve McDonald have brought their knowledge, experience and passion into our classrooms and the rest is history. OCPE program coordinators for our turf school like Deena Amont, Missy Marcante, Linda McAttee, Susan Wohl, Ruby Hill and today, Fran Koppell have all contributed their special talents to support our students, faculty and instructors as well. Industry supporters like Dennis DeSanctis, Dick Caton, Joe Bianco, Thom Ritchie, and New Jersey Turfgrass Association leadership too numerous to mention also have been of immense value throughout the years. And finally, and most importantly, are the hundreds of you who have shown your support to our program in so many extraordinary ways over the years. I cannot begin to cite them. Your belief in our mission and the goodwill you have conveyed to others about us has meant the world to me and all of us here at Rutgers and to the abiding strength of our roots.

And so, like with cranberries and turfgrass, growing deep roots with people has been of great value to me personally, and more importantly, to the ever building “value” of the Rutgers Professional Golf Turf Management School. Now my service is just about complete. By the time you read this article, my August 1, 2013 retirement date will have quietly come and gone, and like all the other great contributors before me, I will “root” for the future success of our graduates both past and present, the talented men and women who educate them, and members of a grand and noble family tradition here at Rutgers, the State University of New Jersey. We all truly have embraced the university’s mantra “Jersey Roots, Global Reach.” Thanks to you all, named and unnamed, for believing in our vision and feeding the roots of success one golf course, one superintendent, one successful professional at a time.

Sincerely,

http://golfturf.rutgers.edu
2012 Scholarship Recipients

Cleary Chemical Scholarship
Alex Kleckner

Dr. Paul Sartoretto Memorial Scholarship
William O’Brien

Duke Polidor Memorial Scholarships
Steven Benally  Grant Harvey  Adam Imirie
Josh Knapp  Adam Pearl  Brian Wanta
Thomas Woodward

Golf Course Builders Association Scholarship
Erik Taylor

Golf Course Superintendents Association of New Jersey Scholarships
Gregory Benz  Jay Ewan  Erik Taylor

Henry Indyk Graduate Fellowship
James Cross

New Jersey Landscape Contractors Association Scholarships
Ryan Daddio  Eric Koch  Erik Taylor

New Jersey State Golf Association and Ralph Engel Caddie Scholarships
Ryan Daddio  Jay Ewan  Kenneth MacNish
Henry Qu  Kevin Rundstrom

New Jersey Turfgrass Foundation
Hall of Fame - Charles Schmid
Challenge - Ryan Daddio
Lou Vasvary - Nicholas Delmar

Paul DesChamps Memorial Scholarships
Tyler Cole  Benjamin Mummy

Peter S. Loft Memorial Scholarships
Karen Ambrose  Lisa Beirn
Gregory Benz  Patrick Burgess
Ryan Daddio  James Hempfling
David Jespersen  Eric Koch
Priti Saxena  Charles Schmid
Trent Tate  Ruying Wang

Ralph Engel Scholarships
Steven Aspinall  Tim Hitchcock

Ralph Geiger Scholarships
Tyler Astor  Lisa Beirn
Gregory Benz  Patrick Burgess
Ryan Daddio  Nicholas Delmar
Kyle Genova  James Hempfling
David Jespersen  Eric Koch
Kenneth MacNish  Byron Nielsen
Henry Qu  Kevin Rundstrom
Priti Saxena  Charles Schmid
Erik Taylor  Ruying Wang
Patrick Welter  Michael Whalen

Rutgers Center for Turfgrass Science
James Hempfling  Kevin Rundstrom

Rutgers Turfgrass Alumni Association Scholarship
Michael Grillo

Sports Field Managers Association of New Jersey Scholarship
Kyle Genova

Woodrow C. Williams Memorial Scholarship
Michael Grillo

Gold Corporate Sponsor
Storr Tractor Company, Somerville, NJ

Silver Corporate Sponsor
Grass Roots Inc., Randolph, NJ

Graduate Sponsors
Bowling Green Golf Club, NJ - Wilton Riggs, graduate
Bridger Creek Golf Course, MT - Dan Coleman, graduate
Fairbanks Ranch Country Club, CA - Evan Waite, graduate
Paa-Ko Ridge Golf Club, NM - Ryan Davis, graduate
Rockaway River Country Club, NJ - Jeffrey Bray, graduate
Saucon Valley Country Club, PA - Zach Stimson, graduate
Superboat, Inc. CA - Evan Waite, graduate
2012 Golf Turf Banquet

Ned Lipman bidding us all a good night

William Dickson being congratulated for his Rutgers Turfgrass Alumni Association Achievement Award

Glenn Miller, Class of 1984, recipient of the Professional Golf Turf Management School Award for Professional Excellence with his family

Our 79 graduates are from all over the country

Peter S. Loft Memorial Scholarship recipients

http://golfturf.rutgers.edu
<table>
<thead>
<tr>
<th>Name</th>
<th>Club</th>
<th>City, State</th>
<th>Position</th>
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</thead>
<tbody>
<tr>
<td>Alexander, Kory</td>
<td>West Winds Golf Club</td>
<td>New Market, MD</td>
<td>2nd Assistant Superintendent</td>
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<tr>
<td>Aspinall, Steven</td>
<td>Preakness Hills Country Club</td>
<td>Wayne, NJ</td>
<td>Assistant Superintendent</td>
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<td>Baker, Timothy P.</td>
<td>Glen Oaks Club</td>
<td>Old Westbury, NY</td>
<td>2nd Assistant Superintendent</td>
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<td>Blankenship, Johnnie</td>
<td>Chariot Run Golf Course</td>
<td>Laconia, IN</td>
<td>Assistant Superintendent</td>
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<td>Boyle, Daniel</td>
<td>New Hampshire Fisher Cats</td>
<td>Manchester, NH</td>
<td>Sports Turf Manager</td>
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<td>Bray, Jeffrey</td>
<td>Apple Ridge Country Club</td>
<td>Mahwah, NJ</td>
<td>Assistant Superintendent</td>
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<td>Britsch, Jakob</td>
<td>Country Club of Rochester</td>
<td>Rochester, NY</td>
<td>Intern</td>
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<td>Brodbent, Michael</td>
<td>Spyglass Hill Golf Course</td>
<td>Pebble Beach, CA</td>
<td>Assistant in Training</td>
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<td>Brock, Joseph</td>
<td>Castle Pines Golf Club</td>
<td>Castle Rock, CO</td>
<td>Crew Leader</td>
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<td>Brooks, Joel</td>
<td>Carlisle Country Club</td>
<td>Carlisle, PA</td>
<td>2nd Assistant Superintendent</td>
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<td>Chalupnik, Mark</td>
<td>The Quarry</td>
<td>La Quinta, CA</td>
<td>Grounds Crew</td>
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<td>Chancellor, Lloyd</td>
<td>Martis Camp</td>
<td>Truckee, CA</td>
<td>Assistant in Training</td>
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<td>Cimino, Cody</td>
<td>Lake Olmstead Stadium</td>
<td>Augusta, GA</td>
<td>Head Greenskeeper</td>
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<tr>
<td>Coleman, Daniel</td>
<td>Landscape Company</td>
<td>Overland Park, KS</td>
<td>Manager</td>
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<tr>
<td>Cosgrove, Bryan</td>
<td>Pikeswood National Golf Club</td>
<td>Morgantown, WV</td>
<td>Assistant in Training</td>
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<td>Cusick, Alan</td>
<td>Turf Valley Resort</td>
<td>Ellicott, MD</td>
<td>Superintendent</td>
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<tr>
<td>Danza, Albert</td>
<td>Westchester Tree Life</td>
<td>Thornwood, NY</td>
<td>Landscapec</td>
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<td>Davis, Ryan E.</td>
<td>Quechee Golf Club</td>
<td>Quechee, VT</td>
<td>Assistant Superintendent</td>
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<td>Douglas, Andrew</td>
<td>Rivers Edge Golf Course</td>
<td>Bend, OR</td>
<td>Greenskeeper</td>
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<td>Douglass, Keith (Skip)</td>
<td>Desert Mountain Properties</td>
<td>Scottsdale, AZ</td>
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<td>Estey, Scott</td>
<td>Garrison Golf Club</td>
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<td>Eustace, Christopher</td>
<td>Deerwood Country Club</td>
<td>Mt. Holly, NJ</td>
<td>Equipment Manager</td>
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<td>Ferraro, Craig</td>
<td>Peddie School Golf Course</td>
<td>Hightstown, NJ</td>
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<td>Frederick, Jon</td>
<td>Washington National Golf Course</td>
<td>Auburn, WA</td>
<td>2nd Assistant Superintendent</td>
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<td>Harvey, Grant</td>
<td>Naples National Golf Club</td>
<td>Naples, FL</td>
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<td>Hitchcock, Tim</td>
<td>Missoula Country Club</td>
<td>Missoula, MT</td>
<td>Groundskeeper</td>
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<td>Holloway, Casey</td>
<td>Fiddler's Elbow Country Club</td>
<td>Far Hills, NJ</td>
<td>Grounds Crew</td>
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<td>Iossio, Anthony</td>
<td>Roxiticus Golf Club</td>
<td>Mendham, NJ</td>
<td>Assistant Superintendent</td>
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<td>Keller, Clint</td>
<td>Ulen Country Club</td>
<td>Lebanon, IN</td>
<td>Assistant Superintendent</td>
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<td>Kennedy Jr., Brian J.</td>
<td>Radley Run Country Club</td>
<td>West Chester, PA</td>
<td>Assistant Superintendent</td>
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<td>Kleckner, Alexander</td>
<td>Valley Country Club</td>
<td>Aurora, CO</td>
<td>2nd Assistant Superintendent</td>
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<td>Knapp, Joshua</td>
<td>Aspen Lakes Golf Club</td>
<td>Sisters, OR</td>
<td>Assistant Superintendent</td>
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<tr>
<td>Knoeferl, Kraig</td>
<td>Glenmoor Country Club</td>
<td>Cherry Hills Village, CO</td>
<td>2nd Assistant Superintendent</td>
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<tr>
<td>La Chance, Erik</td>
<td>Summerlea Golf &amp; Country Club</td>
<td>Quebec, Canada</td>
<td>Superintendent</td>
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<tr>
<td>Leclair, Alex</td>
<td>Casselview Golf and Country Club</td>
<td>Casselman, Ontario, Canada</td>
<td>Grounds Crew</td>
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<tr>
<td>Lenik, Brian</td>
<td>Manhattan Woods Golf Club</td>
<td>West Nyack, NY</td>
<td>Assistant Superintendent</td>
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<td>Levering, Christopher</td>
<td>West Shore Country Club</td>
<td>Camp Hill, PA</td>
<td>Grounds Crew</td>
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<tr>
<td>Long, James</td>
<td>Olde Homestead Golf Club</td>
<td>New Tripoli, PA</td>
<td>Assistant in Training</td>
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</tbody>
</table>
MAIERS, PETER
PRONGHORN CLUB AND RESORT
Bend, OR
Intern

MCNAY, MICHAEL
CASTLE PINES GOLF CLUB
Castle Rock, CO
Greenskeeper

MESSNER, M. DAVID
TANGLEWOOD MANOR GOLF CLUB
Quarryville, PA
Assistant Superintendent

NELSON, CHAD
LAUREL CREEK COUNTRY CLUB
Mooresetown, NJ
Greenskeeper

O'BRIEN, WILLIAM
VILLA ROMA RESORT
Callicoon, NY
Greenskeeper

PARONE, TYLER
THE RIM GOLF CLUB
Payson, AZ
Assistant Superintendent

PENNYBAKER, MICAH
QUAIL HOLLOW GOLF COURSE
Charlotte, NC
Greenskeeper

PICCONE, STEVE
CHESTER VALLEY GOLF CLUB
Malvern, PA
Assistant Superintendent

PORTER, DOUGLAS
SUNBELT GOLF
Birmingham, AL
Foreman

QUINN, NEAL
BALLAMOR GOLF CLUB
Egg Harbor Township, NJ
Intern

RAMOS, ROLANDO (AARON)
SHORT HILLS COUNTRY CLUB
East Moline, IL
Assistant Superintendent

RIGGS, WILTON
BOWLING GREEN GOLF CLUB
Oak Ridge, NJ
Operations Manager

SAVIANO, NICHOLAS
PUTNAM NATIONAL GOLF CLUB
Mahopac, NY
Intern

SECHRIST, WILLIAM
THE COUNTRY CLUB AT CASTLE PINES
Castle Rock, CO
Irrigation Technician

SHERMAN, ANTHONY
TOURNAMENT CLUB OF IOWA
Polk City, IA
2nd Assistant Superintendent

SMITH, JR., STEVEN R.
JONATHAN’S LANDING GOLF COURSE
Mangalia, DE
Superintendent

STEIGER, FRED
EAGLE RIDGE RESORT AND SPA
Galena, IL
Assistant Superintendent

STETTLER, MARK
BUCK HILLS FALLS GOLF
Buck Hill Falls, PA
Greenskeeper

STEVENS, JARED
DOUGIE CITY COUNTRY CLUB
Dodge City, KS
Assistant Superintendent

STIMSON, ZACHARY
SAUCON VALLEY COUNTRY CLUB
Bethlehem, PA
Grounds Crew

SUELFLOW, ADAM
WOODMONT COUNTRY CLUB
Rockville, MD
Intern

SUTTON, JESSE
THE COUNTRY CLUB IN BROOKLINE
Chestnut Hill, MA
Spray Technician

TEGANO, CHRISTOPHER
SHORE HAVEN GOLF CLUB
East Norwalk, CT
Intern

TUFTS, ROBERT
SPRING LAKE GOLF CLUB
Spring Lake Heights, NJ
2nd Assistant Superintendent

VICKERS, KEVIN
GOLF CLUB OF NEWPORT
Newport, NY
Greenskeeper

VOKRACKA, DREW A.
STALION MOUNTAIN GOLF CLUB
Las Vegas, NV
Assistant Superintendent

WANTA, BRIAN
PINEHURST RESORT AND COUNTRY CLUB
Pinehurst, NC
Assistant Superintendent

WOOD, LEWIS (VINCE)
COUNTRY CLUB OF GWINNETT
Snellville, GA
Assistant Superintendent

WOODWARD, THOMAS
REDLAND MESA GOLF CLUB
Grand Junction, CO
Crew Leader

WREN, CHRIS
CLIFTON HIGHLANDS GOLF CLUB
Prescott, WI
Assistant Superintendent

ZARAZA, PAUL
HOLLYWOOD GOLF CLUB
Deal, NJ
Assistant in Training

The Rutgers Plant Diagnostic Lab
The Plant Diagnostic Laboratory provides accurate and timely diagnoses of plant problems. Below is a sample of services performed:

- Disease and Insect Pest Diagnosis
- Plant and Weed Identification
- Insect Identification
- Fungus and Mold Identification
- Nematode Assays
- Screening for Neotyphodium Endophytes
- Fungicide Resistance Screening
- Other Services Available by Contract

For more information please call us at 732/932-9140 or visit the web for sample submission instructions and forms at: www.rcrue.rutgers.edu/plantdiagnosticlab.

The Rutgers Soil Testing Lab
The Rutgers Soil Testing Laboratory performs chemical and mechanical analyses of soil. The following services are routinely performed:

Landscape
Level 1 Fertility Test: Nutrients, pH, recommendations
Level 2 Problem Solver [soil/plant suitability test]
Level 3 Topsoil Evaluation

Greenhouse
Saturated (Organic) Media Extract Analysis: Nutrients, pH, electrical conductivity, organic nitrogen

Sport Turf
Level 1 Fertility Test: Nutrients, pH, recommendations
Level 2 Complete Test: Nutrients, pH, estimated CEC, cation saturation, soluble salt level, organic matter content, soil texture class
Level 3 Sand Root Zone Test

For more information please call us at 732/932-9293, or visit us on the web at: www.rcrue.rutgers.edu/soiltestinglab.
Congratulations to the many of you that have enhanced your position in the turf industry this year. Here is a sample! We wish you ALL much success!

STEVEN ASPINALL, 2012  Assistant in Training  PREAMKNESS HILLS COUNTRY CLUB, NJ
JEFFREY BRAY, 2012  Assistant Superintendent  APPLE RIDGE COUNTRY CLUB, NJ
MICHAEL BROADBENT, 2012  Assistant in Training  SPYGGLASS HILL GOLF COURSE, CA
JOEL BROOKS, 2012  2nd Assistant Superintendent  CARLISLE COUNTRY CLUB, PA
DOUGLAS BURDICK, 2008  Senior Assistant  THE GOLF CLUB AT INDIGO RUN, SC
BRIAN BUTCHER, 2010  Assistant Superintendent  WESTCHESTER HILLS GOLF CLUB, NY
ALAN CUSICK, 2012  Superintendent  TURF VALLEY RESORT, MD
ADAM FREEMAN, 2009  Superintendent  LAKE ARROWHEAD, WI
JOHN GUFFEY, 2009  Superintendent  GREENBRIER SPORTING CLUB, WV
GRANT HARVEY, 2012  2nd Assistant  NAPLES NATIONAL GOLF CLUB, FL
BRIAN HOLZ, 2007  Superintendent  CRYSTAL SPRINGS GOLF COURSE, WI
MIKE KERNS, 2009  Assistant Superintendent  TRENTON THUNDER, NJ
ERIC LEVEE, 2013  2nd Assistant  BELLA VISTA COUNTRY CLUB, NJ
PAUL LEWIS, 2007  Assistant Superintendent  THE CLIFFS AT KEOWEE VINEYARDS, SC
STEVEN LUEBBERS, 1998  Superintendent  MID RIVERS GOLF COMPLEX, MO
TIMOTHY MARS, 2010  Superintendent  THE ORCHARDS, CT
NICHOLAS NICOLOSI, 2009  Assistant Superintendent  HOLLYWOOD GOLF CLUB, NJ
JUSTIN NOWICKI, 2013  Assistant Superintendent  VILLA ROMA RESORT, NY
WILLIAM O'BRIEN, 2012  Superintendent  DALLAS NATIONAL GOLF CLUB, TX
NEIL PACKARD, 2009  Superintendent  RIVER BEND GOLF AND COUNTRY CLUB, VA
ADAM PEARL, 2013  Assistant in Training  CHESTER VALLEY GOLF CLUB, PA
STEVE PICCON, 2012  2nd Assistant Superintendent  RICH HARVEST LINKS, IL
JAMES PIERSON, 2013  2nd Assistant Superintendent  ROCK SPRING CLUB, NJ
CHAD PIRNOS, 2003  Superintendent  LANCASTER COUNTRY CLUB, NY
COREY RANDALL, 2012  1st Assistant Superintendent  VALLEY BROOK COUNTRY CLUB, NJ
BRIAN REARDON, 2006  Superintendent  RON JAWORSKI'S RIVERWINDS GOLF & TENNIS CLUB, NJ
DAVID SANTANA, 2003  Director of Golf Operations  BATH COUNTRY CLUB, ME
PAUL SEVIGNY, 2007  Superintendent  REGENTS GLEN COUNTRY CLUB, PA
KEVIN SHUE, 2006  Superintendent  CRANBURY GOLF CLUB, NJ
JONATHAN SINGER, 2008  Superintendent  STALION MOUNTAIN GOLF CLUB, NV
DREW VOKRACKA, 2012  Assistant Superintendent  GOLF SYSTEMS INTERNATIONAL, IN
JEFFREY WALLACE, 1992  Vice President  COUNTRY CLUB OF GWINNETT, GA
LEWIS (VINCE) WOOD, 2012  Assistant Superintendent  EAGLE RIDGE GOLF CLUB, NJ
TODD WORK, 2009  Assistant Superintendent  HOLLYWOOD GOLF CLUB, NJ
PAUL ZARAZA, 2012  Assistant in Training