The fields are out of play only in January and February. Off-season workouts begin in March and mini-camps run from April through June. Morrow has developed a good working relationship with the team's strength coach. "He needs the fields to strengthen the players and he understands that I need to strengthen the fields," he says.

Morrow is a one-man operation, which means there's no time to do something over if it's not done correctly. In a letter to the STMA Awards Committee, Dallas owner and general manager Jerry Jones wrote: "Chris has done an outstanding job getting our fields in top condition. I believe they are some of the best in professional sports, and despite the daily wear and tear, the practice surfaces are always ready for the next assignment we throw at them. I know our players and coaches respect the job Chris does with getting our fields in this condition. It is of vital importance that they know they can trust the surfaces on which they are working." **ST**

Dallas Cowboy Practice Facility Maintenance Schedule

January-February: Field at rest.

March: Mowing/foliar feeding as needed.

April: Mowing 3-5 times/week. Foliar feeding continues.

May: As temperatures start to rise, mowing height is lowered to start stressing overseed. Mow 6 times a week. Aerification, verticutting, and grooming used to initiate Bermudagrass growth. Topdressing after each process. Foliar feeding continues.

June-July: Same as in May, with the addition of KNO3 or CaNO3. Increase fertilization as required.

August: As in June and July, with painting added as team returns from camp.

September: As August with foliar adjustment as needed.

October: As September, with overseeding late in the month.

November: Mowing down to 5 times/week. Pre-germination of rye seed to fill in high traffic areas.

December: Same as November.

Keep your machines running right

SPORTSTURF asked three veteran turf technicians to lend their expertise on keeping your mowers and other equipment running throughout the summer (and beyond). Many thanks to Armando Garcia, Peoria (AZ) Sports Complex mechanic, Kelly Nelson, Sylvania (OH) Facilities and Maintenance, and David Livingston from the Valentine Turfgrass Research Center at Penn State, for their time.

ST: What are three important "Do's" and three important "Don'ts" in maintaining mowers for turf managers who don't have a dedicated mechanic/technician?

Garcia: Do lube the machine every time you use it, especially the reels and rollers. Use a pistol grease gun, not air grease gun. When you wash the mowers, clean the radiator as well. Always check the hydraulic hoses, looking for leaks or loose fittings, as well as walk around the mower before you go out, checking for leaks.

Do not let more than one or two people operate or work on your mowers. Let them become familiar with that one piece. If the mower does not start, don't keep cranking it, you can damage the starter and the ignition switch. Do not wash off the reels and engine while it is hot.

Nelson: Do keep fluid levels correct; grease machines as needed; keep everything clean, especially the air filters. Dirty air filters are the biggest culprits in carb problems.

Don't clean and not grease, neglect preventative maintenance services, or bypass safety switches—they are there for a reason!

Livingston: It is very difficult to try to say what a do and don't is for the turf manager. Unless I would know what his or her mechanical ability is, I cannot say. Some turf managers are very mechanically inclined where as others are not. Most people today do not like to read service manuals, which are critical. You should purchase a service manual for each piece of equipment you use. Other do's are preventative maintenance and operator training to help prevent breakdowns due to operator error.

Don'ts are: Unless you are really comfortable doing something leave it to professionals. (Don't just try it to save money because most often that will cost you more.) If you are not qualified or certified to do some things, remember the liability issues. If you work on something and it breaks because you did not fix it properly and someone gets hurt, you will be responsible.

Don't try to do too much. If you are the turf manager you will be putting in a lot of hours, so don't spread yourself too thin by being the mechanic too. This can cause burn out, family problems, and poor health. Keep your priorities straight.

ST: Please provide several examples of work, for example carburetor work, that turf managers can handle themselves vs. work that best is left to a professional.

Nelson: Cleaning carbs is easy, anyone can do it, but rebuilding them is best left to a professional. Check wheel bearings by shaking wheel top to bottom, and leave rebuilding them to someone with the proper tools. Learn how to read schematics; most electrical problems are traceable if you know how with a multi-tester. Otherwise leave electrical work to those who can read schematics.

Garcia: Turf managers can change the oil every 100 hours; replace the hydraulic filter every 500 hours; check and clean the air filter weekly; and check and keep the right tire pressure. Have a professional give you an orientation and he will be able to save you time and dollars.

Livingston: If a person is fairly mechanically minded and reads the service manual he should be able to do things such as rebuild a carburetor. The key is reading the specs. Things change rapidly in the equipment industry and we can only keep up by reading how things work and are put together. I would guess that most turf managers though would be better suited to just buy a new carburetor and install it. Things such as rebuilding a hydraulic pump or motor should be left to a pro, or you should just buy a new one. Hydraulics work under such high pressures that just a small piece of dirt or dust can ruin a rebuild job. On top of that there is the liability issue. If a high-pressure hydraulic pump or motor comes apart after you rebuilt it and hurts someone, guess who would be responsible (especially if you are not certified to work on those types of things)?

ST: How and where do you buy parts? Do you keep an inventory or can you get what you need quickly when necessary?

Garcia: I buy my parts from NAPA. A phone call away and they deliver from 9:00 am-4: 30 PM. They usually will work with you and let you pay all invoices at the end of the month. I keep the smaller price stuff on hand, such as oil, filters etc.

Livingston: I like to try to buy original parts, especially for reel type mowers. Reels and bedknives are engineered to match steel hardness to get the best performance and cut. If you start mixing other brands and aftermarket parts, many times things don't match up and reels wear quicker or bedknives wear more because they are not the same hardness as the factory ones that were engineered for that machine. Sometimes it can jeopardize the quality of cut.

Other parts such as rotary mower blades, filters, and tines I can save money by buying them at aftermarket suppliers and keeping them on hand. Parts that are not wear parts are ordered as needed. Most of the major turf equipment companies are great at getting parts to me quickly so I don't have to tie a lot of money up in inventory.

Nelson: Use only dealer-approved parts because many aftermarket parts do not conform to manufacturer quality. Keep an inventory of commonly used parts, such as tires, belts, pulleys, any part that gets replaced often. Build a rapport with your parts department and not just the sales person.

ST: What is your budget for maintaining your fleet of mowers (and other equipment)? What do you suggest a turf manager do to come up with his own numbers?

Livingston: I have a unique situation in that all the major equipment companies lend equipment to us to maintain our turfgrass research facility. I teach with this equipment, so students often are the operators. These companies maintain things under warranty for breakdowns but we maintain all wear items such as reels and bedknives. Each year they bring the new models in and take the old ones back so we can keep teaching students on state of the art equipment. Even with all these things donated, I spent $16,000 in student mechanic labor and $20,000 in parts last year.

I keep track of all parts and labor so I can project to some degree what I will need in my budget. The only thing I can't keep track of is Murphy-You know, Murphy's law that says if anything can break it will, and at the most inconvenient time.

A person can get an idea of some costs during the winter as they go over equipment. Things such as hydraulic hoses should be replaced if you see cracks, etc.

Nelson: Budgets vary widely between municipalities. The best you can do is to start your own tracking system for parts used and cost. Most boards and bosses want to see facts before they will authorize the money that is needed, especially for preventive maintenance. Show them where the money goes on parts and explain how PM will minimize equipment breakdowns and most importantly, down time for equipment.

Garcia: Keeping track of every dime you spend to come up with a track history is the first thing you need to do. You will be able to forecast what months you spend the most labor and money. For my 40 piece (all included) inventory it is close to $1000 a month.

ST: What's the protocol to follow when a machine won't start, that is, what do you look for, and in what order?

Garcia: Always look for the easiest thing first (and make sure the parking brake is on). Check fuel and make sure fuel valve is not closed, and then check the battery and connections, then the starter and ignition switch, then the relays.

Livingston: The first thing I check is to see if the switch is on. Next I check the fuel. Then I check to see if attachment switches are turned off. On most of today's equipment if these things are left on the equipment won't start. I then start checking for things such as spark on a gasoline machine and if no spark then I start tracing things back to where the spark comes from. Many times it is the safety switches, e.g., seat switch, traction petal switch or attachment engage switch.

If I have spark I see if I am getting fuel and if not, trace it back to see why I don't have any. If I have spark and fuel, that leaves compression to check. If I don't have compression then I have major problems such as valve problems, perhaps leakage somewhere such as gaskets or worn parts such as cylinders and piston and rings.

Nelson: Simple things to check if an engine won't start: Is the fuel tank full? Is fuel getting to the cylinder? Is the air filter clean? Does the spark plug have any

spark? For newer equipment, check the diagnostic boards.

ST: Any other advice you think is important to share with turf managers regarding keeping their fleet running well?

Garcia: Keep the equipment clean! Wash it every time it is used. Keep your shop clean and organized, so that when you need something, you're not spending hours looking for it.

Nelson: Preventive maintenance is the most important thing you can do to reduce or eliminate down time. You can't control terrain, operators, or weather but you do have control over equipment maintenance.

Livingston: I think that preventive maintenance is the key to making equipment last. Things like checking oil daily, changing oil filters and oil, and air cleaners at the factory-scheduled intervals is critical. People tend to change oil at the proper intervals but let the air filters get really dirty before they change them. Do you realize that to burn 1 gallon of gasoline that about 10,000 gallons of air that needs to filtered? That is a lot of air.

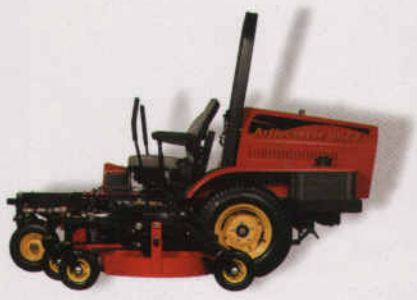
Here is something else to think about: Let's say you have an engine that usually operates about 8 hours a day 5 days a week at about 3,600 rpm. Six months use equals approximately 1,000 hours. The average automobile with the engine operating at 3,600 rpm would be traveling at 90 mph. Therefore you have the equivalent of driving your mower 90,000 miles in 6 months! Remember that many small engines are not water-cooled, have no oil filter, and frequently operate in a dirty environment.

Other things that can help a turf manager are record keeping and making sure that operators know exactly how the equipment is to be used to minimize abuse. Another thing to help make equipment last longer is to keep reels and rotary blades sharp. I built a little device to show our students just how much more force it takes to cut grass with dull blades compared to sharp blades. It is amazing. It takes about 16 times more force or horsepower to cut grass with dull blades than with very sharp ones. **ST**

DEERE UTILITY MOWER

The 2653A Professional Utility Mower is designed to meet the needs of turf grass professionals who put a high value on durability, performance and quality of cut. The standard configuration of the 2653A includes an 18-hp, liquid-cooled diesel engine; Micro-Lap backlapping; 3WD; power steering; and hydraulic weight transfer. The 18-hp, 3-cylinder, liquid-cooled diesel John Deere Series 220 engine is designed to reduce internal noise; provide efficient, clean operation; and provide the high torque necessary for heavy loading conditions. Available with 5- or 8-blade reels and grooved, spiraled or smooth front rollers, the 2653A's cutting heads can be operated in a fixed or floating position.

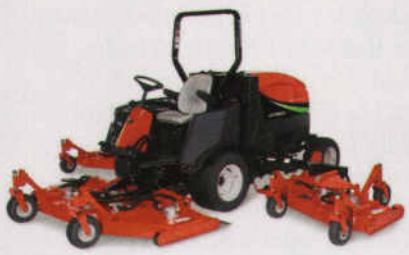
John Deere/800-537-8233
For information, circle 072 or
see http://www.oners.ims.ca/5062-072



LASTEC ARTICULATOR

Lastec Articulator riding mowers with the patented articulating decks offer a width of cut from 72-96 in. and are powered by water-cooled Kubota engines. The 2861 and 2552 mowers are powered by air-cooled gas engines and come with a 61- and 52-in. fixed decks. These deck designs use a unique reverse "V" deck configuration that creates a special air tunnel through which grass can travel, resulting in less buildup and requiring less horsepower.

Lastec/317-892-4444
For information, circle 071 or
see http://www.oners.ims.ca/5062-071



JACOBSEN HR-9016 TURBO

For high productivity mowing the HR-9016 gets the job done. Its 16-foot wide cutting path delivers up to 16 1/2 acres per hour yet gets around obstacles easily with its 18-in. uncut circle turning radius. For close in trimming, the outboard cutting decks raise to 90 degrees. The 87-hp turbo diesel engine has power to spare and 4WD is standard. Operators like the fully adjustable air-ride suspension seat and fingertip controls.

Jacobsen/888-922-8873
For information, circle 070 or
see http://www.oners.ims.ca/5062-070

Retrofitting irrigation for football fields

Ask just about any irrigation consultant about retrofitting irrigation for an athletic field, and their response will be the same—if you're a dedicated professional, you're already retrofitting monthly, if not weekly.

"Every time you move a head, repair a swing joint, or replace a sprinkler nozzle, you're retrofitting your system," explains Jeff Bruce, president of Jeffrey L. Bruce & Company LLC in Kansas City, MO. Bruce, a board member of the American Society of Irrigation Consultants (ASIC), qualifies his statement with two caveats: "You preserve system integrity using parts specified in the original design; and you keep records of all activities, from replacing valves, to splicing wires, to syringing hot spots, to dealing with drainage issues, and make periodic system adjustments according to those data."

In-house retrofit

There are two primary areas of consideration when embarking on the proverbial retrofit journey: repair history, and system operational auditing. Both of these areas represent opportunities for the turf manager to make a significant difference in system performance without expending significant capital.

Tracking repair history is relatively straightforward and serves several purposes. By documenting "failures" in your irrigation system, very clear patterns emerge over time. Consider developing a spreadsheet that will track location, specific irrigation component(s), time of year, soil and turf conditions, damage to the system or turf area, and time and expense associated with repairs.

Compiling repair history information helps to identify and exploit trends on your football field, and quantify expenses associated with problem areas. What better way to justify an upgrade or retrofit expenditure than to offer a cost/savings analysis based on documented history?

Most irrigation consultants will suggest or perform an audit of your site and your system. "Even if you plan on bringing in an expert, to be effective you have to be as familiar with your system as possible; plus irrigation consultants are much more effective when you already have baseline data in hand," Bruce explains. "Nobody knows your site and system better than you."

An as-built plan is a great place to start. If you don't have one, get one. If you do have one, ensure that it's current and accurate. Then get out to the field and start taking measurements. Remember, you're assessing and refining coverage uniformity and everything that contributes to it.

Measure and chart zone-by-zone the distance between heads. At each head, measure and record pressure at the nozzle. Adjust any tilt and grade issues, then check each sprinkler nozzle for wear and damage. Ensure nozzle sizes are according to original design specification for matched precipitation rates. Throughout this process, make all changes that will quickly yield results.

Next, run a catch-can test for each zone to determine your low-quarter distribution uniformity. This will determine your minimum runtime per zone that ensures the area getting the poorest coverage still gets the minimum required irrigation for good turf health.

"Every field has its own wear patterns," says Bruce. "So while you're assessing irrigation, be sure to include information about compaction problems; sun and wind exposures; equipment traffic and so forth. Many of these issues can be resolved through a retrofitted irrigation system."

You should become intimately familiar with your control system. To complete Phase I, make a comprehensive list of functions and features you would like in a new control system, including capacity for future demands.

You've brought your existing system as close as you can to operating specifications. If you're still having operational or performance issues, consider taking it to the next level.

Bringing in a pro

If your in-house retrofit didn't yield adequate results, your coverage or performance problems may be more systemic. Serious hydraulic issues or poor turf performance may flag a system that just can't perform under changing field conditions. This would be a good time to bring in some outside expertise.

"Generally, by the time an irrigation consultant is brought in, we find that the systems are maxed out. They're undersized and the piping is stretched," admits Bruce. "Over time, demands typically change and the system rarely has the buffer to accommodate that."

Bruce says he focuses a retrofit on three areas: the heads and peripheral distribution system; the electrical system; and the piping system; and how they all tie-in with the soil type, water quality and turf cultivar. "We attempt to isolate improvements to the system first," he explains. "We start with heads, nozzling and coverage because that's typically where systems go awry. Sprinkler heads have the shortest life cycle in the system and can provide the greatest return for the least cost. Good quality matched-precipitation turf heads really impact coverage and turf quality."

Then he suggests reviewing the control system: the number of stations in use and available; how reliable it has been; how many control-wire splices have been made; whether or not there have been problems with ground faulting. If your control system is in relatively good health, some of your hydraulic issues might be resolved or postponed through scheduling strategies.

Finally, it's time to work your way into the heart of the system, the pump station and piping, which ultimately have to perform to specification for the rest of the system to deliver. "As we start looking at water service pressure, there are significant opportunities to improve irrigation system efficiencies," says Bruce. "Things change. There may be areas of new development around the site that have

dropped system pressures, like a new subdivision or mall."

Adding a jockey pump can contribute to system pressure, but oftentimes the system is so out of kilter that an entirely new pump station is in order. "Typically, older stations use a staging of constant-drive pumps," he says. "Generally, we specify VFDs, or variable drive pump controls, so the station performs continuously at its peak on the pump curve. But if the budget or project doesn't allow for that, we do what we can through scheduling to keep the constant drives operating in the sweet spot of the pump curve."

Planning a total overhaul

Some projects just can't be pieced back together, and a ground-up design is in order. Under such conditions, with an appropriate budget, the existing football field is removed, including the growing medium, and replaced with a new medium, drainage, new irrigation, new soil and new sod. Because an irrigation consultant can specify irrigation and oversee the overall construction process, the end product is assured to perform as designed.

"A legitimate independent irrigation consultant will take as many factors into consideration as we can identify when doing a complete ground-up retrofit," says Bruce. "Including the timing, to optimize seasonal turf recovery, safety and liability issues specific to sports turf, permitting and compliance, water sources and potential alternate water sources, and the like."

Bruce says the current trend for football fields, particularly in the Southeastern Conference, is to eliminate irrigation equipment from the playing surface altogether, specifying big-gun turf cannons that punch into the ground and rain 200 gallons of water per minute 300 feet through the air from the sidelines. "They're also good for crowd control," he adds. "But, it's expensive. We have to use big pipe and high-pressure pumps."

For more traditional field retrofits, the general strategy for head placement is to keep them away from high-use areas. Bruce avoids placing heads in any hashmark areas. "We generally spec a four-across or five-across system, but some managers like the ability to water down the center of the field," he continues, "It's about what's best for the manager, the site and the front office."

Appearances and liability are very important in sports turf, and the need for greater attention to your irrigation system runs hand in hand with that. Getting an outside professional involved guides you in implementing, phasing and budgeting a retrofit project while advocating your position as turf manager.

Whether you're replacing a head or rebuilding an entire irrigation system, retrofitting irrigation is more of a philosophy than it is a task. Keeping your irrigation system running at original design performance levels is a professional ethic, not just part of the job. ST

The American Society of Irrigation Consultants (ASIC) provided this article. For more information about ASIC or its members, call 508/763-8140 or visit www.asic.org.

Board Member Montgomery Resigns

Boyd R. Montgomery, CSFM, resigned his position as STMA Treasurer effective immediately. Montgomery has taken a new position at The Toro Company to develop additional sports turf markets in the eastern U.S. and will be relocating to the Minneapolis area. He was in his fourth year of STMA board service. Per STMA bylaws, any professional member holding a board position who becomes employed in the commercial sector must resign their board position. Commercial members are eligible to hold two positions on the board: Commercial Vice President and the Commercial Representative. Montgomery also resigned from the The SAFE Foundation's Board of Trustees.

President Mike Trigg, CSFM has put in place a 90-day time period to appoint a replacement for the remainder of Montgomery's term, which is up in January 2006, and effect the transition. Trigg says, "Our Board will miss Boyd and the passion he has for the profession. He has been a strong contributor, not only in the financial area, but in all areas of STMA. We know that he will continue to advocate for the sports turf manager and wish him great success in his new position."

Montgomery had been the Sports Turf Manager for the Sylvania Recreation Corporation for which he oversaw a 135-acre park, 30 baseball/softball diamonds, 300 acres of grass, 25 soccer fields, four lacrosse and flag football fields, and 4.5 miles of the university bike trail system.

He is a Certified Associate Parks & Recreational Professional. He obtained his Associates Degree from Owens Community College and graduated from the Parks and Recreation Maintenance Management School conducted by North Carolina State University.

STMA Welcomes New Members

STMA's new member drive and renewal for current members began in October for 2005. Following is a list of those new members who joined STMA for this year. Please welcome them with an email or a telephone call and look for those in your area at your chapter events and turf field days. Their full contact information is on the members-only side at www.sportsturfmanager.org.

Arkansas
Frank Unger, Physical Fitness Center,
Ft Wainwright, AR

Alabama
David Han, Auburn University, Auburn University, AL
Bradley Kirkland, Auburn, AL
Kyle Lewis, Southern Athletic Fields, Huntsville, AL
David Lovell, UAB, Birmingham, AL
Paul Patterson, University of Alabama at Huntsville, Huntsville, AL

Arizona
Joey Brazil, City of Surprise, Surprise, AZ
Sam Chiovari, City of Phoenix, Phoenix, AZ
Lonnie Crabtree, City of Phoenix, Phoenix, AZ
Kevin Denney, Phoenix, AZ
Jim Denoia, Scottsdale College, Scottsdale, AZ
Jim Derr, Simplot Partners, Glendale, AZ
Tim Graves, University Campus Services, Prescott, AZ
Carl Hanson, Jr., City of Surprise, Surprise, AZ
Gary Howard, Mesa, AZ
John Koper, Landlogic, Scottsdale, AZ
Heather Kraus, Rain Bird Corporation, Tucson, AZ
Steven Lee, City of Phoenix, Phoenix, AZ
Pat Lynch, Sun Lakes H.O.A. #2, Sun Lakes, AZ
Hector Madrid, Jr., Town of Queen Creek, Queen Creek, AZ
Richard McPherson, Robertson Industries, Inc., Chandler, AZ
Edward Miller, City of Phoenix, Phoenix, AZ
Jim Millyard, Town of Queen Creek, Queen Creek, AZ
Russell Montoya, Peoria Sports Complex, Peoria, AZ
Michael Phillips, Tucson, AZ
Lawrence Polk, City of Phoenix, Phoenix, AZ
Leonel Puig, City of Phoenix, Phoenix, AZ
Richard Purcell, Town of Queen Creek, Queen Creek, AZ
Kevin Soloman, City of Goodyear, Goodyear, AZ
Steve Tassinari, City of Phoenix, Phoenix, AZ
Christina Todd, Horizon Phoenix, AZ
Cheryl Vasquez, City of Phoenix, Phoenix, AZ
Todd Wuellner, Rio Vista Community Park, Peoria, AZ
Steve Zimmerman, City of Flagstaff, Flagstaff, AZ

California
Tim Brignolo, San Luis Obispo, CA
Rick Covert, Mira Mar College, San Diego, CA
Tim Deutscher, Soilogix, Inc., Rancho Santa Margarita, CA
Rich Genoff, San Francisco 49ers, Santa Clara, CA
Ricardo Jacobo, Baldwin Park, CA
Carl Jones, Rancho Cucamonga, CA
Aaron Lakey, Soilogix, Inc., Newport Beach, CA
Angeli Logan, CSUDH Carson, CA
Scott MacVicar, San Francisco Giants, San Francisco, CA
Clayton Peet, LA Memorial Coliseum Comm., Los Angeles, CA
Chris Ralston, Bakersfield Blaze, Bakersfield, CA
Phillip Ruan, All Sport Turf Aeration Svc, Cypruss, CA
Jesse Sandoval, City of San Bernardino, San Bernardino, CA
Cutberto Santana, University of California Davis, Sacramento, CA
Edward Schmachtenberger, California Baptist University, Riverside, CA
Shawn Smith, Selma Unified School Dist., Selma, CA
Scott Warr, Rain Bird, Roseville, CA
Chris Weaver, Landscape Consulting Group, Mission Viejo, CA
Paul Webb, RPW Services, Fullerton, CA

Colorado
Sharon Barth, American Civil Constructors, Littleton, CO
John Eden, Revive Inc., Denver, CO
Steve Gehrke, Town of Carbondale, Carbondale, CO
Ray Krebs, Newstripe, Inc., Aurora, CO
Brad Leitner, Littleton Public Schools, Littleton, CO
Patrick McDonald, Univ. / N Colorado, Greeley, CO
Steven Mead, Brock USA, Boulder, CO
Bartolo Mendoza, City of Aspen, Aspen, CO
Greg Nelson, Manitou Springs School District 14,

Colorado Springs, CO
Ezra Paddock, Jefferson County School District, Golden, CO
Bret Ramsey, Rain Bird, Littleton, CO
Timothy Roberts, Facilities Management, F ort Collins, CO
Wes Ross, University of Colorado, Boulder, CO
Matt Schwartze, Highlands Ranch Metro Dist, Highlands Ranch, CO
Chad Strahlo, Fort Collins, CO
Bryan Tupa, Castle Rock, CO
Rob Walls, City of Westminster, Westminster, CO
Jeff Woods, City of Aspen, Aspen, CO

Connecticut
Christopher Everone, West Haven High School, West Haven, CT
Don Lemieux, Norwich Navigators, Norwich, CT
Dmitri Paris, Trumbull Parks Department, Trumbull, CT

Washington DC
Ronald Cheek, Gallaudet University, Washington, DC
Graham Davis, American University, Washington, DC

Delaware
Terry Duffy, Saint Marks High School, Wilmington, DE

Florida
Eleutero Amaro, Islamorada Village of Islands, Islamorada, FL
Brian Anderson, Boca Pointe Community Association, Boca Raton, FL
Charlie Baldwin, City of Tamarac, Tamarac, FL
Christopher Brown, Orlando, FL
Terrell (Opie) Cheek, Clearwater Thrashers Baseball Club, Clearwater, FL
Budgie Clark, Toronto Blue Jays, Dunedin, FL
Wayne Currey, Ph.D., Weed Systems, Inc., Hawthorne, FL
Ken Czerniak, II, Sports Turf Mgmt, LLC/Fl Div, Boynton Beach, FL
Chris Denson, UNICCO, University Of Miami, Coral Gables, FL
Doug Ehman, Venice, FL
Wendell Haynes, City of Callaway Leisure Services, Callaway, FL
Chad Holliday, City of Fort Myers, Fort Myers, FL
Lee Kehres, Saint Lucie County Parks & Rec, Ft. Pierce, FL
Scott Koch, Aspen Golf Course, Celebration, FL
Renato Luis Lauretti, University of Florida, Riverview, FL
Deanna McAtamney, City of Ft. Lauderdale, Ft Lauderdale, FL
Thomas O'Connor, Saint Lucie County Parks & Rec, Ft. Pierce, FL
Shane Pool, Osceola County Softball, Kissimmee, FL
Joseph Porter, Tip Top Enterprises, Inc., Miami, FL
Jack Privateer, Saint Lucie County Parks & Rec., Ft. Pierce, FL
Jorge Rubro-Boitel, Univ North Florida-Athletics, Jacksonville, FL
Toby Washburn, Midwest Turf Support, St. Augustine, FL
Clive Williams, City of Boca Raton/Sugar Sand Park, Boca Raton, FL

Georgia
Randy Brashears, Sports Turf Company, Whitesburg, GA
Sean Connors, State Univ of West Georgia, Carrollton, GA
Daniel Dixon, Athletic Fields, Inc., Cartersville, GA
James Dudley, Suwanee, GA
Richard Garland, Rome-Floyd Parks & Rec. Authority, Rome, GA
Brett McCrary, Valdosta, GA
Nick Meadows, Precision Turf LLC, Buford, GA
Josh Morrow, Athletic Fields, Inc., Cartersville, GA
Gregory Ownby, Fayette Co B.O.C., Fayetteville, GA
Stephen Quaife, Gainesville, GA
William Ray, Jr., Valdosta, GA
Kevin Selsor, Traditions Turf Management, Inc., Acworth, GA
Kenneth Stewart, Westminster Schools, Atlanta, GA
Tony White, Evergreen Lawncare, Sandersville, GA

Hawaii
Michael Pyle, Hualalai Resort, Kailua-Kona, HI

Iowa
James Awtry, Ames, IA
Mike Burt, Grinnell College, Grinnell, IA
Andy Hamann, North Scott Community Schools, Eldridge, IA
Chris Hickman, Iowa State University, Des Moines, IA
Mitch Langstaff, Ames, IA
Randy Shives, Central College, Pella, IA
David Vander Heyden, Burlington Bees, Burlington, IA
Del Wichhart, Central College, Pella, IA

Illinois
Roger Behling, College of Dupage, Glen Ellyn, IL
Luke Cella, Illinois Turfgrass Foundation, Lemont, IL
Bill Fenn, Patten Industries, Inc., West Chicago, IL
Joshua Foreman, Edwards, IL
Chuck Gura, Moore Landscapes, Inc., Northbrook, IL
Dan Loehman, Warrenville Park Dist., Westmont, IL
Doug McCarty, Eastside Centre, East Peoria, IL
Jim Miller, Univ of Ill Campus Rec., Champagne, IL
Michael Munie, MJM Services, Inc., Belleville, IL
Cory Purintun, Village of Lincolnshire, Lincolnshire, IL
Shayne Ratcliff, Lake Forest College, Buffalo Grove, IL
Mick Tempel, Champaign Park District, Champaign, IL

Indiana
James Bergdoll, Purdue University, Lafayette, IN
Steven Biehl, Purdue University, West Lafayette, IN
Jerry Carr, Turf America, Indianapolis, IN
Darin Kain, Country Stone, Waterloo, IN
Mike Kirkpatrick, Muncie Sports Hobby Dev. Group, Muncie, IN
Daniel Mudd, Purdue University, West Lafayette, IN
Tom Preslar, Gary Southshore Railcats, Gary, IN
Travis Tindell, Columbus Parks & Rec., Columbus, IN

Kansas
John Boyd, Desoto School District - USD 232, De Soto, KS
James Elliott, Garden City Recreation Commission, Garden City, KS
Darren Gfeller, Kansas State Univ., Chapman, KS
Charles Hawkins, BIA - Haskell Indian Nations University, Lawrence, KS
Gillis Miller, BIA - Haskell Indian Nations University, Lawrence, KS
George Ogden, BIA - Haskell Indian Nations University, Lawrence, KS
Brent Walker, Grant County Recreation Commission, Ulysses, KS

Kentucky
Stephen Crider, St. Xavier High School, Louisville, KY
Tommy Davis, Univ. of Kentucky EJ Nutter Training Fac., Lexington, KY
Benjamin Heiple, Lexington Legends, Lexington, KY
Doug McDonald, Georgetown College, Georgetown, KY
Robert McIntyre, III, Louisville, KY
John O'Neill, N Kentucky Univ., Highland Hts, KY
Erin Sherrill, Lexington Legends, Lexington KY
Lyle Travis, Florence Freedom Baseball Club, Florence, KY
Dustin Zerrer, Lexington, KY

Massachusetts
Larry Bunn, Oxford, MA
Patrick Fallow, Millbury, MA
Gary Fialkosky, Gary Fialkosky Lawn Sprinklers, Newton, MA
Russ Gray, Clark University, Gardner, MA
Jeffrey Leary, Fitchburg State College, Fitchburg, MA
Michael Lucier, Charlestown, MA
Nathan Salmore, The Westmoor Club, Nantucket, MA
Noah Snyder, Amherst, MA
John Twohig, City of Holyoke, Holyoke, MA
Andrew Walsh, Amherst, MA

Maryland
Chaye Bardell, Owings Mills, MD
Michael Davillier, MNCPPC, Wheaton, MD
William Harris, Salisbury Univ, Salisbury, MD
Kevin Mercer, Saint Mary's College of Maryland, Mary's City, MD
Michael Schneider, Engineered Sportfield Solutions, Havre De Grace, MD
Michael Schneider, AWS Convergence Technology, Gaithersburg, MD
Glenn Sweet, Landon School, Bethesda, MD

Maine
Timothy Cronin, University of Southern Maine, Gorham, ME
Kevin Eyre, Waterford, ME
Jason Folsom, Husson College, Bangor, ME
Anthony Jack, MSAD #57, Waterboro, ME
John Sullivan, Marshwood High School, S Berwick, ME

Michigan
David Bailey, Chelsea, MI
Scott Blankenship, Lansing, MI
Aaron Gardner, Midland, MI
Derek Morton, Saline, MI
David Myas, Lansing, MI
Dean Noworyta, U of M, Maybee, MI
Michael Poll, Hamilton, MI
Justin Stevens, Elsie, MI
Michael Szekely, Michigan State University, Pinckney, MI