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» **TREES DEVASTATED BY EAB** show apparent signs of decline (left), but those trees that have been treated continue to thrive (right). Photo courtesy of ArborSystems

Rise from the Ash

New management options and strategies are leading the charge against Emerald Ash Borer

GREEN INDUSTRY PROFESSIONALS, homeowners and municipalities faced with Emerald Ash Borer (EAB) infestation have not only had to battle the pest, but also misinformation. In many cases, people have thought that nothing could be done to control the pest; or they have thrown good money after bad by not understanding the pest, community policies or both. However, effective and predictable management strategies have emerged as scientists have continued to refine application techniques and treatment protocols.

When insecticides are applied according to these newer protocols, results demonstrate that several products can effectively protect ash trees even when subjected to peak EAB populations. These new management options and informed control strategies are showing that treatments work, and are a viable option for preserving the economic and environmental benefits that trees provide. Depending on the situation for municipalities, treatment of high-value trees can be as, or more, cost-effective than tree removal. Working with a reputable tree health care distributor, and developing a proper plan can meet the needs of your clients and the community as a whole.

THE CURRENT STATE OF EAB

"Emerald Ash Borer continues its spread throughout states currently infested with EAB, and was also recently detected in Iowa — raising the total number of states with confirmed infestations to 13," said Shawn Bernick, director of research and technical support at Rainbow Treecare Scientific Advancements.

According to Chip Doolittle, president of ArborSystems, the outbreaks in Iowa are more sporadic due to the fact that EAB is now moving into the plains states, and there are a lot of cornfields and open spaces between groves of ash trees.

This past year, EAB has been identified in the Minneapolis-St. Paul area, as well as in southern Wisconsin, Missouri, north-central Kentucky, West Virginia, Pennsylvania and Washington, D.C., said Jim Rollins, Midwest regional sales representative at Mauget.

"It continues to spread in all directions," said Rollins. "One trend I've noticed is that it tends to follow the major highways, which tells me that it is catching a ride on cars or trucks, or being spread via firewood or on nursery stock."

"EAB has the ability to survive in dead wood — notably firewood — for an extended period of time," said Rob Gorden, director of national sales for Arborjet. "This dormancy, known as estivation, typically occurs from late fall through early spring, when it can be easily spread in firewood."

Said Bernick, "Forecasting how quickly EAB will spread into a given area is challenging, because it is virtually impossible to predict where and when infested firewood will be transported to the next new location."

According to Gorden, many states are actively searching for EAB using traps and trained early detectors. Most new finds continue to show evidence of being in the trees for several years before discovery. New finds increase each year during adult flight, when the insects are both more visible, and more likely to become entangled in traps.

"EAB tends to move in waves," said Doolittle. "Pests infest a region, and when all the ash are dead or treated, [EABs] move on or die out. If you treat trees proactively, or even when early signs of infestations are noticed, you can protect and save the trees."

According to Bernick, research continues to be aimed at better understanding the biology and life-cycle behaviors of EAB. In addition, several research projects are being conducted to develop improved detection and surveying methods, and better understand the impacts of EAB on different ash species.

"While not all insecticides labeled for EAB have shown acceptable levels of protection, scientists have found that when specific management protocols are followed, multiple insecticide options are available that can be used to protect and preserve high-value ash trees," said Bernick.

John Mascaro's Photo Quiz

Answers from page 17

The piles of soil on this foul line were caused by a trail of fire ant beds coming across the warning track. The question of why they only built their access tunnels on the white line is still up in the air. After posting this question on my Facebook page, we had many guesses ranging from soil pH to the fact that the white paint reflects sunlight and therefore below the ground would be cooler. Sports turf extension specialist Pam Sherratt from Ohio State consulted their resident entomologist, Dr. Dave Shetlar, and he offered the solution that ants like to move in cracks and crevices, which probably more readily occurs in painted lines. He said they are seeking a new home.

We also had guesses that the paint retains more moisture under the line and the fact that ants like to stay below ground until there is adequate moisture in the ground which makes it easier to dig. We also had some strange guesses alluding to the possibility that the ants were after beer in the paint or a guess that the ants were simply army ants and following the line while marching. I doubt we will ever figure out the real reason, however it sure has been fun trying!

Photo submitted by Mike Estlinbaum, Director of Maintenance at the Big League Dreams Sports Park in League City, TX.

If you would like to submit a photograph for John Mascaro's Photo Quiz please send it to John Mascaro, 1471 Capital Circle NW, Ste # 13, Tallahassee, FL 32303 call (850) 580-4026 or email to john@turf-tec.com. If your photograph is selected, you will receive full credit. All photos submitted will become property of *SportsTurf* magazine and the Sports Turf Managers Association.

TREATING PREVENTATIVELY

"Preventative maintenance is the key," said Dr. Joe Chamberlin, field development manager, southeast, for Valent Professional Products. "How preventative? Nobody can tell."

"Upon entering a tree, EAB begins to feed and damage the vascular system undetected," said Gorden. "Its damage is often invisible for two or more years. By the time that damage is evident, the pest is well on its way to killing the tree. Experience has demonstrated that preventative treatments afford the greatest chance of reducing damage and saving the tree."

According to Chamberlin, it is recommended that once EAB is spotted within 10 to 15 miles that you should begin preventative treatments. "However, just because it was spotted within 10 to 15 miles, does not mean that your tree is not already infested with EAB," he added.

Bernick points out that one of the biggest challenges to managing EAB is determining exactly where EAB is located.

"EAB is extremely difficult to detect when its population levels are low," said Bernick. "We also know that the likelihood for success with insecticides increases significantly if trees are treated prior to being infested. Given these two challenges, it makes it difficult to recommend treatments solely based on a specific distance to a known infestation. Fifteen to 20 miles from the nearest infestation is good guideline, but it is only a guideline."

"Make sure that you are well educated as to what to look for in terms of damage," said Rollins. "When you are out and about, keep an eye on ash trees. If you seen anything that looks like damage, investigate further, and then it might be time to begin preventative treatments."

Bernick recommends determining the value of the tree to the client or city. "The value of the tree must then be weighed against the relative risk of the tree being infested with EAB and the cost of doing the treatments," he said. "The closer you are to an infestation, the greater your risk is to losing a tree from EAB.

"Not all trees can or should be treated, so it is important to work with clients to identify which trees provide the most benefit to them," he added. "A municipality must prioritize candidate trees for treatment as well."

APPLICATION METHODS

"Research has improved our ability to effectively manage EAB," said Bernick. "EAB insecticide recommendations continue to change as new research comes in. Soil-applied insecticides are commonly used by professionals to manage many keys pests, and can be effective against EAB when used correctly.

According to Gorden, applicators should be aware that soil-applied products may require several weeks for absorption from the soil into the roots for effective protection within the tree. "Trunk-injected treatments aren't introduced slowly to a tree, as they are placed and sealed directly into the trunk through the tree's vascular system," Gorden added.

However, homeowners are limited to purchasing soil drench products, applied once annually, said Gorden. Research indicates that once EAB begins to attack, a second annual soil application is required to save their trees. When this point is reached, the only legal way to treat by soil drenching is to contact a certified applicator to make these treatments, he stated.

According to Doolittle, trunk injection that does not require drilling to apply the chemical is beneficial option — especially when treating already infested trees.

According to Chamberlin, some chemicals for control of EAB are now labeled for basal bark application, which is a more holistic approach to tree care. The chemical is applied from soil level up to breast height up to the point of runoff around the circumference of the tree. It works out to a couple fluid ounces of product per inch of diameter at breast height. The highly soluble molecules absorb quickly into the xylem for uptake.

"The speed of uptake with basal bark spray is comparable to soil injection or trunk injection treatments, but the applicator does not need specialized equipment and can visibly monitor the proper amount of product to apply," said Chamberlin.

In terms of safety, all of these product labels have been reviewed by the EPA and exposure and toxicity determine risk, Chamberlin added. In the case of basal bark application, it is equivalent to any chemicals you might apply to your lawn on a regular basis. There are huge safety margins built in.

According to Gorden, when selecting an application method, considerations should include ease of application, proximity to environmentally sensitive areas, available soil areas, insecticide runoff potential, effective residuals, and length of control of the product.

"There are certain philosophies or strategies for preventative treatments, and other strategies for when the pest is firmly entrenched in the area," said Rollins. "It also depends on the size of the tree being treated. Treatments are different for small trees versus larger, more established trees."

According to Rollins, there is a lot of good information available on the Internet, through local extension services, and through local ISA chapters.

"Get all of that information, and make your decisions based on the data, the type of trees you are dealing with, and the level of infestation in your area," he said.

Doolittle said that the message is that, "Emerald Ash Borers are not the end of the world. EAB can be managed without the drastic measure of cutting down trees that resulted in tens of thousands of healthy trees being cut down unnecessarily. These pests can be controlled, and ash tress can be saved, both preventatively and curatively, with proper chemical treatment."

According to Gorden, since EAB only feeds and reproduces on ash trees, scientists believe that as the EAB wave reaches a city, it will kill all unprotected trees while protected trees remain untouched.

"When the unprotected trees begin to die, they are no longer suitable for EAB reproduction, and the EAB population will begin to fall, reaching significantly lower levels in the community," said Gorden. "Treatment will not be required at intense

Bernick points out that one of the biggest challenges to managing EAB is determining exactly where EAB is located.

and frequent levels indefinitely."

Municipalities should create an EAB management plan, and revisit the plan as new research comes in so that the necessary changes can be made. Also, municipalities should identify how the city will pay for management of EAB (limited Federal and State funding is available to local governments for the management of EAB).

"Treatments are effective when applied according to specific protocols," said Bernick. He added that, "The economics of treating municipal trees have changed dramatically over the past four years. Treatment can be a cost-effective option for a city and result in preserving the economic and environmental benefits that urban trees provide communities."

Gorden agrees; "Treatment is now an effective means of protecting trees, and is far less costly — even in the long run — than removing trees. Even without adding in all the indirect costs associated with tree loss, treatment will effectively preserve tree while costing less.

According to Chamberlin, for municipalities it is often a matter of economics, but for homeowners, saving an ash tree might have personal meaning. "Perhaps they grew up with that tree, used to swing from that tree, etc.," he said. "For a municipality, it is a different dynamic economically. A standard street tree out in the open might only cost a few hundred dollars to remove, but a tree near a house, power lines or other structure can be much more expensive."

"Systematic and preemptive removal of these urban trees will not solve the problem, but instead, create a new set of problems including increases in heating and cooling costs, storm water runoff, and urban flooding, as well as neighborhood and property value decreases," Gorden added.

But according to Bernick, an effective municipal EAB management strategy *will* utilize a variety of practices including tree removal, replacement with non-ash species, insecticide treatment and, in some cases, letting nature take its course.

"Prioritize which trees will receive treatment and recognize that not all trees are good candidates for treatment," he said.

Rollins tells homeowners and municipalities to be proactive and have plans in place and ready to implement. "You don't want to wait until that tree is half dead before you begin a treatment program," he said.

THE "TAKE-HOME" MESSAGE

"The take-home message is that you can't assume that if the tree isn't showing symptoms that it isn't infested," said Chamberlin. "Once the tree reaches 40 percent dieback, about the only option is to cut it down."

Said Doolittle, "I think the main take-home is that [professionals] need to be aware that usually when they find the larvae, the insect has already been there for at least two years. That means they should be preventing this well in advance of the wave."

According to Bernick, diagnosis of EAB can be challenging, especially in the earliest stages of an infestation.

"Symptoms of EAB can easily be confused with drought or other abiotic stress and damage from native wood borers," he said. "Also D-shaped exit holes are not readily apparent at eye level on trees that are in the earliest stages of infestation. University Extension services and state and federal government agencies have produced great EAB fact sheets to help practitioners diagnose the signs and symptoms of EAB. Reference these and have them handy when you are in the field."

Bernick also urges professionals to follow the proper application protocols. "Ensure that products are applied at the proper time, using the correct dosage rate and application technique," he said. "Treating trees before they are infested and showing visible symptoms will increase your likelihood for success."

"Be proactive," said Gorden. "Preventative and early treatment of trees infested with EAB provides the best results for saving the tree."

According to Gorden, if a tree is undersized, physically damaged, or infested beyond treatment options, plan for its removal and replacement. However, as stated earlier, the cost of citywide removal is financially and environmentally devastating to the community as well. ■

John Kmitta is editor of *Arbor Age* and *Landscape & Irrigation*, sister publications to *SportsTurf*.

Continuing turf education important & available

THE FIRST TIME ERIC FASBENDER ATTENDED AN STMA CONVENTION he noticed that "these guys with blue blazers on were the guys who people kept coming up to and talking to all the time."

Fasbender, who back then considered himself "a rookie groundskeeper for a minor league baseball team," kept his eyes and ears open.

"It wasn't hard to figure out that these guys were the legends in the industry," he said. "I started to learn so much from them, and I decided right away, 'That's who I want to be.' "

In the decade since, Fasbender, who recently was promoted to assistant director of athletic facilities and grounds at Louisiana State University, has earned the right to wear his own blue blazer, bearing the CSFM logo.

The Certified Sports Field Manager designation signifies a small percentage of STMA members who have made continuing education a priority and passed tests to prove their knowledge. A CSFM patch says its wearer has spent considerable hours in seminars, workshops, conference—not just learning but sharing time and talents with others. It's an assurance that the bearer is current, knowledgeable and up-to-date in the sports turf industry.

For Fasbender and others like him, a focus on continuing education pays a dividend beyond catching up on the latest in agronomy or irrigation, pesticides or fertilizers. By attending training events, he said, the benefit of networking with others, including learning from the "legends in the industry," helped propel his career.

STMA convention organizers and continuing education specialists acknowledge that it's hard to take time out of busy schedules to travel to conventions or workshops. Sometimes it's even hard to carve out an hour to sit in front of a computer for an hour of self study. But continuing education and networking with peers is the way to ensure that all stakeholders are getting the best possible results through the most efficient means.

"Turf management is only about one-third of the job," observed Pam Sherratt, STMA board member, chair of the STMA conference education committee and a sports turf extension specialist at Ohio State University. "There's dealing with people, budgets, office politics, fundraising."

Those topics are non-technical, but important, parts of STMA's training opportunities.

"It's all about learning and taking it back home to help your facility," said Mike Goatley, an STMA officer and associate professor of crop, soil and environmental sciences at Virginia Tech University, acknowledging that "the recession has made it harder to get people to attend, but we're still hosting a conference, and we're putting a lot more online so that members can have access to information any time, day or night."

Sherratt pointed out that the land grant universities have excellent extension services and that their bulletins can be downloaded for free at one's convenience. Also, she said, STMA sponsors webinars and provides study materials for certification programs. And, even if you can't make it to a convention, sometimes the workshops can come to you.

Jeffrey Knight, central region education manager and instructor for Ewing Irrigation, a distributor of landscaping products, said his company will bring training to school district or park department meeting rooms, as well as to Ewing branches around the country.

"We'll call a city or water purveyor and get a meeting room and do a one- or two-hour training session," Knight said. "We're aiming for the guys in the field. We want them to see training as an investment."

Knight said Ewing classes are especially popular in states that require licensing, certification or continuing education credits for installers of irrigation equipment. Texas, for example, requires irrigation installation companies to have at least one licensed person on staff that has taken a 36-hour class and passed a tough state exam, with a 45 percent passing rate, Knight said. Oregon, Louisiana, California and Florida also have varying levels of licensing or certification requirements for installers of irrigation equipment, he added.

Ewing classes also are eligible for continuing education units, complementing the continuing education programs of the Irrigation Association, the Golf Course Superintendents Association of America, the Oregon Landscape Contractors Board, the Professional Landcare Network, and STMA's CSFM program.

Educators emphasize that the ability to grow grass is just the starting point for succeeding in turf management. For example, "some people may not be comfortable with the math involved in calculating pressure losses in an irrigation system," Knight said. "We can train the hands-on guys in the field to determine head coverage, to not put too many heads on a valve, to be efficient in scheduling and not waste water."

Knight said the intent isn't to be an infomercial for company products although sales and customer loyalty is a goal. The overarching intent is for both trainer and student

"There are always new hot topics," Goatley said. "Sustainability is the big buzzword these days. Everyone wants more information about how to protect the environment and provide a safe, playable field in the face of budgetary restrictions. We'll never get away from basic agronomics, but we're seeing tremendous hunger for 'green' training."

to be perceived as industry experts.

Turf experts acknowledge that some of the basics of turf maintenance can be easily taught on the job, but it's a mistake to take a been-there-done-that approach to continuing education.

"There are always new hot topics," Goatley said. "Sustainability is the big buzzword these days. Everyone wants more information about how to protect the environment and provide a safe, playable field in the face of budgetary restrictions. We'll never get away from basic agronomics, but we're seeing tremendous hunger for 'green' training."

Also, "a large majority of the STMA membership is looking for basic help with fertilization, watering, feeding and renovation," Sherratt said. "A small number are looking for new research and new gadgets. Others are looking for information on the personnel and budget issues. These are all presentations that we've made at conferences and that people can find online."

Goatley said he's detecting strong interest in more training from parks and recreation employees, partly because of high turnover and an influx of inexperienced workers in some of those jurisdictions.

While dealing with staff turnover is always a challenge, Knight said that "even the pros that've been around for awhile" can benefit from troubleshooting classes and exposure to new products or ideas. Some of the most effective training, Knight said, reaches bosses who have unrealistic expectations about what should be happening out in the field.

"Yes, it can be tough to take a day off work and attend a class. But a day of training, whether it leads to specialist certifications or not, is an asset, not a liability," Knight said. "It's going to make you better at what you do." ■

Diane Stafford is a business writer and workplace columnist at *The Kansas City Star*. This is another installment of the 2010 Ewing Professional Development Series. STMA and Ewing have again partnered in this series to bring sports turf industry professional development and career issues to the forefront. For more information, go to www.STMA.org or www.Ewing1.com.

With the increase in the variety of organic fertilizers available, it is important to understand the advantages and drawbacks of each product category before making a buying decision.

Recycled food waste fertilizers now on market

THE TREND toward eliminating the use of synthetics in our landscape is inexorable. Using organic and natural products is now an essential component of many green industry maintenance systems.

Biostimulants increase the biological activity of soils, reducing fertilizer and water inputs, and yielding greener, longer-lasting results, ultimately providing notable economic savings. Organic programs incorporating biostimulants allow professionals to maintain solid levels of plant growth and quality. These same organic programs help turf managers improve turf recovery processes through an enhanced, steady supply of vital nutrients.

Using organic products helps turf professionals stay ahead in other important areas, such as legislation and regulation. New environmental laws and nutrient control programs, such as phosphorus bans in Florida, and strict pesticide regulations in place in Canada, are signs of a more enforced sustainable movement that is sure to come either by popular demand or government action.

In general, an organic fertilizer product should work to improve the overall physical and biological health of the soil, decrease water and total fertilizer usage, increase plant growth, and decrease incidence of disease and insect damage and weed encroachment. Specifically, organic programs should ensure the delivery of desirable levels of key nutrients, primarily Nitrogen (N), Phosphorus (P) and Potassium (K).

With the increase in the variety of organic fertilizers available, it is important to understand the advantages and drawbacks of each product category before making a buying decision. Currently, widely used forms of organic fertilizer are derived from chicken waste, bio-solids, and animal blood or bone meal. An emerging category is fertilizer treatment made from recycled food waste.

Bio-solids are derived from treated sewage sludge generated or collected from wastewater treatment plants. They are an especially low-cost category and help municipalities reduce the costs of having to manage such an abundant form of waste, which is otherwise essentially useless. The low-cost of bio-solids make them a popular choice for large-scale applications. They are often used to reduce dependence on chemical products and can help condition the soil. These products may contain heavy metals and other components, which can potentially run-off into streams, lakes and other waterways.

Chicken waste products also have a popular following, as they are pervasive and inexpensive. Offering a steady supply of essential nutrients, chicken waste fertilizers generally yield effective results. One area of concern is that they also often contain high levels of phosphorous and use of this nutrient is sometimes restricted and in some cases, such as in Florida, the use of phosphorous has been banned entirely. Manure based products also tend to have a strong and offensive odor especially when wet.

Blood and bone meal products possess vital nutrients such as nitrogen, along with other helpful supplements, such as calcium and iron, which can help to improve rooting and manage disease suppression and stress tolerance. Again, users need to understand the regulations concerning phosphorous levels when considering products made from these materials.

Recycled food waste fertilizers are nutrient rich products that rapidly stimulate soil microbial activity. Due to an inherently high content of rich nutrients and minerals these organic products enhance the soil's own reservoir of nutrients. Significant levels of humic acid are produced during the food waste recycling process. A high level of protein in food waste offers a diverse supply of free amino acids.

According to the EPA "the use of recycled food waste (compost) has a myriad of environmental benefits, such as improving soil health and structure, increasing drought resistance, as well as reducing, and even eliminating, the need for supplemental water, fertilizers, and pesticides," while the New York State's Department of Environmental Conservation states that that benefits of composting organic matter also includes "an increase in beneficial soil organisms such as worms and centipedes, [and] suppression of certain plant diseases..."

Food waste is also normally diverted to landfills to decompose, which causes harmful methane gases to release into the atmosphere, making food waste recycling an excellent way to reduce the emission of greenhouse gases. One disadvantage of food waste is that because it is a relatively new concept, it is not as available as other forms of fertilizers.

Different brands, different ingredients, different results

All organic products are not created equal, but one thing to remember is that natural products will result in healthier grounds and soils. It may take some time before full benefits and results are evident and in some instances there may be a minor decrease in quality during the first year of transitioning from a synthetic to an organic program. Organic products slowly release nutrients into the soil, which helps to continually sustain the soil for an extended number of weeks. Organic fertilizer products help to divert low-valued waste from piling up in landfills, which helps to reduce fuel, transportation and labor costs. In fact, according to the EPA, "Landfills are the largest source of human-related methane emissions in the United States, accounting for approximately 34 percent of all methane emissions."

Synthetic products create, rather than reduce, carbon emissions. In fact, the production of 1 ton of synthetic fertilizer requires the burning of enough natural gas to release 4.6 tons of carbon dioxide into the atmosphere. Organic programs produce beautiful, naturally healthy turf, fields and landscapes more gradually, but offer many long-term benefits, and the ability to truly improve the overall quality and cost of growth. An understanding of what and how organic products work is essential in developing a program that will achieve landscape and turf management goals while reducing or even eliminating pesticide and synthetic fertilizer use, and providing environmental benefits. ■

Edward J. Gildea is President of Converted Organics Inc., www.convertedorganics.com. Links to relevant studies available on www.sportsturfonline.com.

Products you can see at STMA Conference

New Deere walking greens mower

For 2011, John Deere is proud to announce the launch of the PrecisionCut Walk Greens Mower line up featuring the patented Speed Link Height of Cut system, which decreases the time for adjusting heights of cut. Additionally, the new mowers have an optional brush attachment located in front of the grass catcher to stand the grass up prior to cutting, improving cut quality and increasing striping performance. The 180SL, 220SL, 260SL models compliment the brand's existing Quick Adjust cutting units and position John Deere as the leader in cutting unit technology.

www.johndeere.com

Two new cold weather installation adhesives

Two new one-part, urethane adhesives for cold weather installations are offered by Synthetic Surfaces Inc. Norris Legue says the faster and higher green strength (high grab) development of NORDOT Adhesives #34P and #34N-4 helps offset the normal curing slow down of all adhesives as temperatures drop. Their high grab and holding properties before cure (still green) help avoid variable weather-related problems such as surface expansion and contraction; wind lift; and turf curl from "roll memory." The products do not solidify in their containers nor become too thick to spread in cold weather and are usable throughout winter in areas where there is no ice or snow on the ground. Also usable for quick repairs.

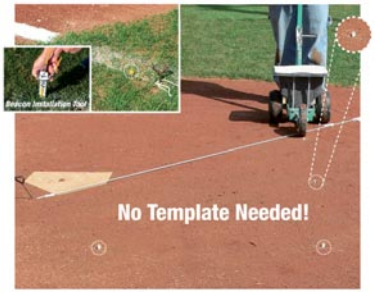
www.nordot.com

Brite Striper 3000 SP

The new Pioneer Athletics Brite Striper 3000 SP is a self-propelled airless striping machine; featuring a breakthrough belt-and-chain drive system, an optional 15-gallon hopper, and a 5.5 hp Honda engine. The Brite Striper 3000 SP uses a high-pressure pump with adjustable pressure from 0-3,000 psi and can be used on both natural and synthetic turf surfaces, but is versatile enough to stripe parking lots or paint large areas. The electrical clutch system pump engagement maximizes the life of the pump and allows the user to easily adjust pressure.

www.pioneerathletics.com

Beacon Field Mark system



Take the hassles out of using a tape measure and batter's box templates every time you mark the field. Permanent Field Marks reduce marking time. Placed at the perfect depth with the installation tool, they remain noticeable when marking but won't interfere with play. Mark corners of the batter's box, defining edge of baselines/foul lines, soccer goal corners, end zone and football field edges.

www.beaconathletics.com

Hydraway 2000 Drainage System

The Hydraway 2000 Drainage System solved drainage issues at the Toronto Blue Jays' spring training facilities in Dunedin, FL. Assistant head groundskeeper Matt Johnson for the Blue Jays' Florida operations stopped by the Hydraway booth at the 2010 STMA Conference and inquired about the system. In April he contracted with Munie Green Care to install Hydraway on one of the practice fields. Matt informed us that they had 2 weeks this summer where they received more than 14 inches of rain each week and the field that had Hydraway installed was playable and drained as expected. Previously this field was not playable for days after a 2-inch rain. The Blue Jays installed another Hydraway system last month in another field because the first one performed so well, Johnson said.

www.hydraway.net

StabilizerBallyardClay

Do more with less. You have heard the term, but the player's performance reflects directly on your reputation. Don't compromise. Regular old mound clay is simply dug out of the ground and packaged. StabilizerBallyardClay is a manufactured blend of clay, interlocking soil particles, and Stabilizer. No longer will your mound turn to mud. This stabilized mound clay is designed to manage moisture for you, remaining stable during rain events and holding onto water longer in dry periods. StabilizerBallyardClay is ready to pack out of the bag, so you don't have to sacrifice player performance for time or budget.

www.stabilizersolutions.com

New Gulp syringe de-watering pump

Underhill introduces the Gulp Syringe Ultra, latest addition to the company's Gulp line of de-watering pumps for turf and landscape areas. The series' most compact model can be used for multiple tasks, including: water removal from sprinklers or valve boxes; spa and fountain clean-out; and plumbing or pipe repair. It features a 12-inch clear plastic chamber and pumps up to 12 ounces per stroke. Like all Gulp pumps, the Syringe Ultra is constructed from heavy-duty, corrosion-proof materials and has a stainless steel shaft for reliable performance. The pump chamber is so strong it can withstand damage from accidental "run-overs" by carts or trucks. The pump is also self-priming and easy to clean. Inlet and exit caps twist off for rinsing and the dual wiper seal can be replaced.

www.underhill.us

TifSport Bermudagrass

There are many excellent reasons why certified TifSport Bermudagrass was the grass of choice for Moses Mabhida Stadium for the 2010 World Cup Soccer matches in Durban, South Africa. For starters, TifSport's turf quality, turf density and turf strength all help it recover quite rapidly from injury and stress. It addition to superior color, cold hardiness and disease resistance, TifSport handles frequent, lower mowing heights and heavy overseeding exceedingly well. TifSport can only be sold as certified sod or sprigs, and only by licensed members of the TifSport Growers Association.

www.tifsport.com

Cub Cadet Commercial's TANK S LP

Cub Cadet Commercial is giving green industry professionals another option for fuel efficiency with the TANK S LP. Powered by either an 852 or 999cc Kawasaki engine, the TANK S LP offers reduced emissions and fuel costs while giving users the same high-performance found in all TANK S units. The benefits of liquid propane extend far beyond reduced emissions as lawn care professionals will also enjoy longer engine life, longer run times and less engine maintenance. Additionally, the TANK S LP meets all current EPA and CARB emissions standards making it the perfect energy efficient solution.

www.CubCadetCommercial.com

Pitching Rubber Inserts

Southern Athletic Fields has introduced pitching rubber inserts, an innovative design that can be used with Aluminum or Plastic Tube Four Sided Pitching Rubbers and that allows for no "bubbling" or "buckling" and creates a smooth flat surface season after season. Product tested on Division I college fields and maximizes the life of pitching rubber to allow for all four sides to be used. Consists of five pieces that fit both the aluminum and plastic tube; three synthetic material pieces, milled to properly fit the required pitching rubber tube; and two PVC pieces that are used as filler between the synthetic materials. Product is for Official size pitching rubbers, 6" x 24" only.

www.mulemix.com

New aerator sizes from TurfTime

TurfTime Equipment introduces 5 new sizes of aerators ranging from 36 to 96 inches. The new design enables the use of both slicing and coring tines. Standard gauge roller comes with slicing tines and ballast tank. These machines carry a 5-year limited warranty. Optional wheel lift kits are also available.

www.TurfTimeEq.com