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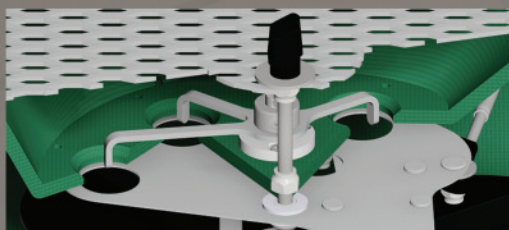
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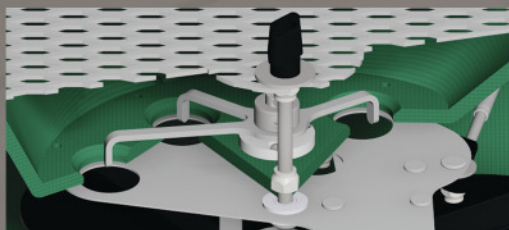
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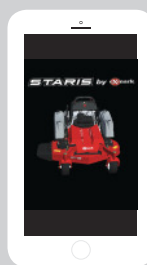
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## Not in Kansas anymore

I've hit the ground running — or maybe I should say flying — in my first two months as editor-in-chief of *Landscape Management*. It's appropriate I'm writing this column at 30,000 feet, on my way to San Diego for a conference. Aside from quiet weekends filled with basketball (both coaching my son's first/second grade team and watching my Kansas Jayhawks) it feels like I've otherwise been traveling nonstop.

Last fall, in anticipation of my new role, I started taking trips to learn more about this industry I was about to immerse myself in. Of course, GIE+EXPO was an easy one, but I also attended one of Marty Grunder's Grow! events in Dayton, Ohio — which was valuable — and I had the pleasure of hosting the *LM* Growth Summit at Reunion Resort outside Orlando.

But that was a few trips over a few months. In January, I got busy and packed in six cities in three weeks.

Batting leadoff was the Real Green Solutions 2019 conference in St. Pete Beach, Fla., followed by a home game, the Outdoor Connections Expo in Lawrence, Kan. Then it was a road trip to Omaha, Neb., for the Lighting Summit, hosted by *LM* editorial advisory board member Jerry McKay, owner of McKay Lighting. The fourth week of January took me to San Francisco, Pebble Beach, Calif., and Phoenix. That trip was for our sister publication (*Golfdom*) and our sports turf website (*AthleticTurf.net*) — visits to 2019 U.S. Open host course Pebble Beach Golf Links followed by a trip to Cypress

Point Golf Club, then the Sports Turf Managers Association annual conference, where I was happy to see many familiar faces who cross over into the world of *LM*.

*LM* Publisher Bill Roddy and I agreed that we wanted to get our year off to a fast start, and that's what we did.


The commitment to get on the road had immediate payoff. Before the Real Green event even started, while at lunch with Bill, we made some new friends in the industry. Sorry for the vague teaser, but I'm confident that conversation will lead to a future cover story. I would have never learned of that story had I chosen to stay back in Kansas.

The great stories kept coming at me quickly. I was among a couple hundred people who got to hear Real Green Systems CEO Joe Kucik tell the emotional story of how his father, a World War II vet, taught him the meaning of hard work and helped him get his business off the ground. In order to support his family, Joe's father worked as a Detroit police officer during the days and a baker at nights. It was the origin story not of Real Green, but of Joe himself, and a key insight into one of the industry's most successful businessmen.

At the Outdoor Connections Expo in Lawrence, I met Paul Eltschinger, owner of PaulHaul. A young entrepreneur, I learned about how he left behind both his formal education as a vocalist and a career as an arborist in order to pursue the success of the Little Helper, a four-wheel motor-

ized cart invented by his uncle. These carts can move up to 900 pounds, and Paul's biggest challenge is keeping up with demand. (Turn to page 10 to see an image of Eltschinger and the Little Helper, and visit PaulHaul.com to learn more about the cart.)

In Omaha at the Lighting Summit, I had the pleasure of meeting many interesting entrepreneurs, including Matt Nicol, who is profiled in this month's "Five Questions" (see page 54.) A proud veteran of both the Army and Air Force whose military career has taken him around the world to fight for our freedom, I learned about how his post-military career in the corporate world was "sucking the life" out of him. He then got the idea to create Lightscape Outdoor Lighting, based in Columbus, Ohio. Seven months later, he quit his desk job and he's again traveling, but now to luxurious properties to artistically light them. His story is fascinating, and I haven't even mentioned his upcoming book or the movie he's connected to.

I'm only two months into this new job, and at times I feel like I'm drinking from a fire hose. But I'm relieved that when it comes to great stories, this industry is clearly overflowing with them. My team and I have committed to packed travel schedules in order to report on this industry — if you're at a conference and happen to sit down next to one of us, I hope you'll say hi, and tell us your story. 





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“We use Indeed quite heavily and have had great results with it.”



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# LM GALLERY

Check out a few of the places where the **LM** team made its rounds recently.

**1 Front and center** Thanks to stellar booth placement, attendees entering the trade show at the Real Green Solutions conference in St. Pete Beach, Fla., immediately saw John Prusa (left), president of Turfware. With Prusa is Bill Roddy, publisher of *Landscape Management*.

**2 The Lawn Plus team** Joe Kucik (center, in red), CEO, Real Green Systems, was thrilled to see that West Alexandria, Ohio-based Lawn Plus sent four of its best and brightest employees to Real Green Solutions 2019. They are (from left to right) Jeff Michael, Chris Kopf, Ashley Cress and Bob Brower.

**3 Bright ideas** Lighting professionals traveled from far and wide to attend the Lighting Summit in Omaha, Neb. (From left) Anthony Bogdanovich, Imagine Lighting Co., San Pedro, Calif.; Mike Potucek, Artistic Outdoor Lighting, Lombard, Ill.; and father-son duo Ty and Keith Rosser from Landscape Lighting Pro of Utah in Midvale, Utah.

**4 Meet Paul of PaulHaul** Paul Eltschinger, owner of PaulHaul, shows off the Little Helper, a four-wheel motorized cart capable of moving 900 pounds, at the Outdoor Connections Expo in Lawrence, Kan.

**5 Beers in the basement** Jerry McKay (left), McKay Lighting, Omaha, Neb., invited all the attendees of the 2019 Lighting Summit to join him in his basement for a couple of cold ones. Rees Haley (right), Full Moon Lighting & Electrical, St. Simons Island, Ga., said, "sign me up!"

**6 LM Growth Summit reunion** Reminiscing about the good times they had together at the 2018 *LM* Growth Summit are (from left to right) *LM*'s Bill Roddy; Dan Shiplov, PermaGreen; Rod Marquardt, Nufarm; and Seth Jones, editor-in-chief, *LM*.

**7 Whose face is on the \$5,000 bill?** Winners were handed these fancy bills at the Real Green Solutions casino night, adorned with Real Green CEO Joe Kucik's smiling face.



PHOTOS: SETH JONES (1-5); RYAN GERARD (6, 7)



## SELLING TIPS

WEED CONTROL WITH  
TURF SAFETY

**F**inding an herbicide to use for postemergent grassy weed control can be a challenge for lawn care operators (LCOs). Lane Tredway, technical services manager for Syngenta, says the new Manuscript herbicide, featuring the active ingredient pinoxaden, is going to be a good resource for LCOs, as part of a season-long program, to ensure their clients' lawns are weed-free and they're renewing their programs year after year.

"Manuscript is going to be a welcomed addition to the toolbox," he says.

## TURF SAFETY

A big challenge for turf managers trying to control grassy weeds is to do so without severely injuring the desirable turf. "We want to be able to control those weeds without damaging turf, and Manuscript can do that," Tredway says. "LCOs are impressed with the level of turf safety, which is crucial to lawn care in particular where aesthetics are so important."

Manuscript offers postemergence control of weeds, including crabgrasses and dallisgrass, in Bermudagrass and zoysiagrass.

In 90- to 100-degree heat, many herbicides can exhibit side effects on the desirable turf, says Shawn Emmack, Mid-South U.S. territory manager at

Syngenta. Manuscript doesn't do that.

"You want to be able to apply a product that's going to work on the weeds but not damage the lawn," he says.

## TIMING FLEXIBILITY

Weeds that germinate in early spring, such as crabgrass, get bigger and more difficult to control throughout the summer. Typically, LCOs are limited to only controlling young crabgrass plants. With Manuscript, LCOs can control small plants all the way to mid- to late-summer, Tredway says, adding that Manuscript is a supplement to preemergence herbicide programs or a rescue option for where a preemergent failed or wasn't applied.

"With Manuscript, LCOs aren't limited to controlling weeds in April and May – when the weeds are so small that you can't even see them yet," Tredway says. "When you really need to be able to control them is mid-season when those weeds are big and noticeable, and they start to become more objectionable to the customers."

Sometimes LCOs inherit a yard or acquire a new customer mid-season, and that yard may not have had any herbicide treatment before, so it's full of weeds.

"Now we offer an herbicide that provides good activity on dallisgrass during the summer months," Emmack says. "Prior to Manuscript, for effective control, LCOs had to wait until fall to control dallisgrass."

Using Manuscript as a spot treatment can give those LCOs an opportunity to control some of these hard-to-control

weeds that may have been neglected in the yard before," Emmack adds. "I think the lawn care market is going to see this as a great new tool for their businesses."

Syngenta has done many trials across all segments of the turf industry, including the southern U.S. and the transition zone.

Numerous test trials were conducted in southern U.S. this past summer that showed Manuscript's good foliar absorption, according to Emmack, who oversaw about 10 trials in his region. He noted the product may be applied any time of year, but the best control comes in the spring and fall.

## MAXIMIZE EFFICACY

The herbicide is packaged with Adigor, a surfactant that was specifically developed to enhance the performance of Manuscript. According to Tredway, the surfactant increases and speeds up the absorption of Manuscript's active ingredient into the target weeds. The herbicide is mostly foliar absorbed.

"If LCOs get a rain storm during the day, they can be more certain that enough of the active ingredient has been absorbed before the rainfall washes it off," Tredway says.

Another benefit of the absorption rate is that LCOs don't have to rely on the homeowner to water in Manuscript or wait for natural rainfall to come along.

"LCOs don't need a lot of extra steps to make the product work," Emmack adds.

#LawnSellingTips



Lane Tredway



Shawn Emmack



## FINAL PUSH FOR H-2B REFORM FOR 2019 SEASON

BY ANDREW BRAY

**O**n Jan. 25, Congress and the president reached an agreement to reopen the government for 21 days. During that time, negotiations are expected to intensify around wall funding in the Department of Homeland Security (DHS) fiscal year 2019 spending package. The DHS spending package is also the legislation where we are seeking H-2B visa cap relief for temporary/seasonal employees.

As legislators debate wall funding and other controversial DHS-related issues, the National Association of Landscape Professionals (NALP) is pushing the narrative

**“All current signals are pointing toward some compromise ... which may include some temporary H-2B cap relief.”**

that this is a bipartisan issue. It will have drastic economic impacts on the landscape industry and its constituents if action is not taken during this three-week negotiation period, set to expire Feb. 15. This is likely the best opportunity to ensure substantial relief for the 2019 season. All current signals

are pointing toward some compromise in the DHS appropriations, which may include temporary H-2B cap relief, followed by a broader discussion later this year about more substantive and permanent reforms that NALP has been seeking.

In January, nearly 100 NALP members descended on Capitol Hill to lobby for H-2B reform. During the visits, members were urging bipartisan support and raising the awareness of the dire situation. Following the fly-in, a letter urging H-2B cap relief was sent to congressional leadership with signatures from a bipartisan group of 31 senators and 98 representatives, which demonstrates strong support for the inclusion of some immediate H-2B cap relief.

NALP continues to pressure law makers for relief, and is working with the Department of Labor and DHS on processing issues. If you have been impacted during processing, please contact me at [andrew@landscapeprofessionals.org](mailto:andrew@landscapeprofessionals.org).

*Editor's note: This article was published on Feb. 4. This remains a fluid situation. Please contact the NALP government relations team for updates.*



## ISUZU REPORTS 4TH CONSECUTIVE RECORD-BREAKING YEAR

Isuzu Commercial Truck of America broke multiple sales records last year, making 2018 a new benchmark for sales of Isuzu trucks and parts. This marks the fourth year in a row Isuzu has set a record. In 2018, dealers retailed 23,914 Isuzu trucks to customers. In addition, Isuzu parts sales increased 5.9 percent versus 2017, setting another record.

“We anticipate that we will continue our momentum in 2019,” said Shaun Skinner, president, Isuzu Commercial Truck of America and Isuzu Commercial Truck of Canada. “Unemployment is low, housing starts are expected to run at strong levels and consumers continue to turn to on-line retailers, meaning an increasing need for delivery trucks.”

**In 2018, dealers retailed 23,914 Isuzu trucks to customers, according to the company.**





# Larry Bakker, founder of LDS, leaves behind lasting legacy

BY DANIELLE PESTA | LM ASSOCIATE EDITOR

**A** Michigan landscape industry legacy has died. Larry Bakker, the founder of Landscape Design Services (LDS), died on Jan. 9, while in Florida. He was 77.

Larry built his legacy with leadership, positivity and an extraordinary team culture.

“Dad was more than just a boss at LDS,” said Matt Bakker, Larry’s son. “In his 40 years of leadership, he hired countless team members, and treated and cared for them like family.”

Today, the full-service landscape company in west Michigan has grown to 150-plus team members. Even after retiring in December 2008, Larry still came to weekly meetings and built relationships with new team members at LDS, Matt said.

Matt and his brother Jeremy grew up in the business and have been in leadership roles since Larry retired.

“It was great working with Dad in the family business,” Matt said. “Growing up, Dad was always in our lives, but the blessing of working alongside the man for 26 years allowed me to see another side of him.”

Larry served in many organizations in the industry, one of them being the Michigan Nursery & Landscape Association (MNLA), where he was a board member and president.



Larry Bakker (left), pictured with Marty Grunder (center) and son Matt Bakker (right).

Amy Upton, MNLA executive director, said Larry was an innovator in the landscape industry.

“When he served on the board (at MNLA), he looked at all segments and was very thoughtful before making decisions on policy,” she said. “There was no question about it, he simply cared about our industry.”

In 1990, Larry received the Member of the Year Award and in 2012 the Half Century Club Award from MNLA.

“If I needed anything, he was there, even after he retired,” Upton said. “I often asked if he wanted to come back on the board, and he would just smile.”

## NALP CEO stepping down

Shortly before press time, National Association of Landscape Professionals (NALP) CEO Sabeena Hickman announced that she is stepping down from the position she has held for 12 years.

Hickman will serve as a consultant to the organization for the next six months to ensure a smooth transition of leadership responsibilities.

NALP has formed a task force that will oversee transition plans and the search for a new chief executive. Jeff Buhler, NALP president, says the association will continue to operate fully during the transition.

“Sabeena leaves our association in a remarkably strong state, which is a true reflection of her strategic leadership, unfailing dedication to our members and passion for bettering the landscape industry,” he said.

## BrightView acquires California Bay Area company

BrightView kicked off 2019 by acquiring Emerald Landscape Co., a commercial landscaping firm located in California’s Bay Area. Emerald specializes in commercial landscape maintenance, enhancement, tree care, turf management and irrigation services. Emerald has more

than 200 employees who work at Bay Area branch locations, including Livermore, Hayward, Concord, San Jose, Manteca and Tracy. Steve Jacobson, Emerald’s president and co-founder, along with Emerald’s senior leadership team, will continue to run the day-to-day operation of these branches.

## EPA approves Vexis herbicide granular

The U.S. Environmental Protection Agency (EPA) approved federal registration for Vexis herbicide granular, which will be available for sale in mid-2019. Based on a new proprietary active ingredient, pyrimisulfan, Vexis is the result of a partnership between PBI-Gordon Corp., Kumiai Chemical Industry Co. and its U.S. subsidiary K-I Chemical U.S.A. A primary feature of the herbicide includes postemergent control of sedges and kyllinga species, including purple and yellow nutsedge, cockscomb and false green kyllinga. Vexis can be used on a wide variety of cool- and warm-season turfgrasses: Kentucky bluegrass, fine and tall fescues, perennial ryegrass, bentgrass, Bermudagrass, bahiagrass, buffalograss, kikuyugrass, seashore paspalum, St. Augustinegrass (including improved varieties) and zoysiagrass.



# CUTTING EDGE

AN IN-DEPTH LOOK  
AT THE MAJOR  
TURNING POINTS  
IN THE EVOLUTION  
OF THE MOWER —  
AND WHAT'S NEXT.

BY SARAH WEBB |  
LM ASSOCIATE EDITOR







#### **MOWER REVOLUTION**

Compared to those from several decades ago, today's mowers allow for a much cleaner cut.

PHOTO: EXMARK

**A**ndrew Morse of Belknap Landscape Co. in Gilford, N.H., compares operating a mower from a few decades ago to driving a tank. Paul Fraynd, co-owner of Sun Valley Landscaping in Omaha, Neb., jokes that the machines' seats resembled those found in football stadiums. Stephen Crowell, director of Maui operations for SGS Hawaii in Maui and Kauai, comments on the extra hours it used to take to mow lush multiacre properties.

On a couple of ideas, they all agree: The mower industry has made — and will continue to make — some considerable leaps forward to help landscape companies ease the strain of the labor crisis.

"Our biggest struggle in the industry is labor, so I think mowing is a place we can really look at being innovative and using new technology," Fraynd says.

*LM* spoke with several experts — landscape contractors and mower suppliers alike — to find out more about these innovations. It all comes down to improvements in four major segments: performance, ergonomics, maintenance and safety.

### **EFFICIENT AND PROFICIENT**

As the labor problem becomes more prevalent, mower suppliers are rising to the challenge.

"Contractors are looking for higher-productivity machines that allow them to get more done quicker with fewer people," says Lenny Mangnall, product manager for Exmark.

Enter the zero-turn mower. Many experts agree that a major turning point in the mowing industry came when the zero-turn riding mower started to gain traction in the late 1980s and early 1990s. These machines provided increased speed and maneuverability that hadn't been seen on previous models, according to Nick Minas, product manager for John Deere.

"The zero-turns help save time because you're able to turn on a dime and make passes very quickly versus other models where you have to make a 10-point turn to turn around," says Morse, recurring services department head of Belknap Landscape Co.

In addition to helping with the labor shortage, these mower updates, large and small, have helped contractors deliver a better service to their customers.

"I remember having to go over the lawns three or four times to have it be properly mowed, and now you can get it single or double cut and it looks really nice," Fraynd says. "The machines are so much more efficient and able to better handle wet, long grass."

Electronic fuel injection (EFI) technology also has had a significant impact on the mower industry. The engine technology started becoming popular in the mowing industry about five years ago.

Similar to the technology that's been used in cars for several decades, EFI helps provide better fuel economy, lower emissions and better startup.

"Fuel is one of your variable costs, and the more you can manage that, the better off you are," says George Reister, Husqvarna's global product manager for commercial zero-turns.

He adds that EFI improves how a mower performs in takeoff and maneuvering situations because the technology engages the throttle so it's more responsive.

"It also gives the operator a sense of better control because the controls are instantaneous," Reister says. "It's almost like driving a BMW versus an old 1950s Chevy."

The use of twin-cylinder engines in smaller machines — a trend that began in the early 1990s — was another significant upgrade in the mowing industry, according to Tim Cromley, Walker Manufacturing Co.'s marketing manager.

"We were able to put more power in a pretty compact place," he says,

*Continued on page 16*



Continued from page 15  
adding that the horsepower on the machines initially increased from about 16 hp to 20 hp.

Other updates that have helped contractors become more efficient include larger tires and higher blade tip speeds — both of which have helped increase overall ground speeds — along with increased options for collecting grass and other debris.

“You didn’t have many options to collect grass; even the collectors were very clumsy and heavy,” Morse says. “Now, they’re lightweight or already built on. You can dump it without getting off the machine. It’s about working smarter rather than working harder and being time efficient.”

Innovations such as mulching decks and rear-discharge decks

#### EASY RIDER

Modern mowers enable landscape pros to maneuver around obstacles and landscape plantings.



have helped contractors save on cleanup time.

“By discharging clippings out the back of the mower, cleanup time to stop and blow clippings off of sidewalks and out of parking lots is virtually eliminated,” says Brian Schoenthaler, marketing coordinator for The Grasshopper Co.

The versatility of mowers also has made an impact. For example, in

addition to allowing for attachments, several models of stand-on mowers can be converted to walk-behind machines, sometimes referred to as second-generation stand-on mowers.

“It allows you to have a better option for loading and unloading trailers,” Reister says.

“You can walk up the ramps. You can go up a hill and walk behind the machine with greater control. It’s related to both performance and efficiency, but there’s a safety element to it as well because you have the option to step off the machine and operate it in a different capacity.”

#### CRUISING IN COMFORT

With the operator top of mind, mowing manufacturers also have found ways to improve on the comfort of the “tanklike” machines of the past.

“When we listen to commercial contractors, they identify two focus points. Reducing operator fatigue and improving the operating experiences aids in employee retention,” says Kubota Senior Turf Product Manager Tom Vachal. “Reducing operator fatigue leads to greater productivity, while increased unit performance yields better results and reduced time on the job.”

A major improvement involves better handleability. For example, end users now only need to put forth minimal amounts of effort to operate controls, where it used to take a lot of effort. Additionally, the positioning of the controls has improved to become more ergonomic.

To further ensure the comfort of ride-on machine operators, mowing manufacturers have enhanced the quality of the seat and incorporated full-on suspension.

“Full-on suspension allows you to absorb bumps and other jarring

Continued on page 18

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Continued from page 16  
sensations while you're mowing,"  
Minas says.

For those operators who aren't sitting all day, the ergonomics have improved as well. In many cases, stand-on mowers are beginning to replace walk-behinds.

"On some of the older walk-behind mowers, you were reaching over the machine to get to the controls. It actually really bothers your back," Reister says, adding that while the introduction of the sulky solved the problem of the operator standing all day, operators still had to extend uncomfortably to handle the controls.

"The (mowers) that allow you to stand within the machine with the controls wrapping around are a superior way to cut," he says.

#### COMPACT COMFORT

Dave Walker is pictured in 1977 riding the first Walker mower, the Model S.



#### MAINTAIN AND SUSTAIN

Following a long day of mowing, contractors no longer need to spend several additional hours in the shop performing maintenance on their machines — thanks, in part, to reduced component counts, toolless removal of various segments and improved deck and body designs.

Fewer components mean fewer hours spent greasing or fixing up different aspects of the mower, according to Mangnall, adding that Exmark reduced its component count by 40 percent in 2009 to help contend with this issue.

Additionally, on many models, panels can be removed without the use of tools, making oil filters and oil drain hoses easier to access, Minas says.

PHOTO: WALKER MANUFACTURING CO.

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Other manufacturers, such as Walker, designed the mower so the body tilts open and the deck tilts up.

"Our design really allows you free rein over your entire machine to do the maintenance that's going to keep that machine running for a long time," Cromley says.

As smart technology becomes more integrated into daily lives, mower manufacturers are also looking for ways mowers can send maintenance updates and alerts to the end user. On certain machines, operators already can interact with the mower's interface to receive information about mower functions, maintenance reminders, property statistics and troubleshooting issues.

### ON THE SAFE SIDE

Several experts agree that one of the biggest safety innovations in the mowing world was the introduction of the rollover protection system (ROPS).

John Deere pioneered ROPS for tractors in the mid-1960s, but it hadn't caught on with mowers until the early 2000s, according to Minas.

"Now, you don't really see commercial mowers without ROPS," Minas says. "It's just a standard safety feature along with seat belts."

Operator positioning also has played into the machines' overall safety.

### TAKE A WALK

Walk-behinds such as Exmark's 32-inch 5-speed mower from 1986 are being replaced by stand-on and ride-on machines.



"Our deck sits in front of the tractor so it's a true floating deck," Cromley says. "We believe that's the safest place to be in the center of the machine, so there's really not any forces sending you in any directions. Our machine sits low, that helps with imbalance."

*Continued on page 20*

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### SAFETY FIRST

The rollover protection system is a major safety update that's present on many commercial zero-turn mowers.



*Continued from page 19*

Another safety update comes in the form of integrated parking brakes. Once the operator moves the control lever to the outer position, the parking brake automatically engages, according to Reister.

Previously, the machines had a separate lever for the parking brake, which meant that in order to get on and off the machine, the operator had to reach down and find a different lever, usually located by the seat.

Other safety upgrades include automatic engine and blade shutoff, fuel spillage prevention features and probe tests to prevent end users from contacting hot points, such as mufflers.

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### FUTURE TRENDS

Moving forward, experts say they expect to see more advances in alternative fuel options, such as propane-powered and battery-powered equipment, and increased development in the robotic sphere.

"If you look to the future, that's going to splinter into several different categories," says Brian Manke, product manager for Stihl. "Some commercial mowing will be replaced with robotic lawn mowers. You will have some commercial operators that will move to a battery platform. Then there will be some with the traditional gasoline-powered equipment."

For Crowell, the future of battery-powered equipment is already here. Crowell's company, SGS Hawaii, began using battery-powered equipment about seven years ago when it started doing maintenance for several resorts around Hawaii, many of which required low-noise, no-emissions maintenance.

"We're trying to look for better ways to provide a service for the resorts and give the guests a better experience," Crowell says. "We really want to push the envelope on trying to be quiet gardeners in these resorts that we take care of."

He adds that because the equipment made less noise, his crews were able to get moving earlier in the day, often before 7 a.m.



Since his company began using battery-operated equipment, Crowell says the technology has greatly improved. For example, the mowers feature larger batteries, increased runtime and are now self-propelled. However, Crowell says he would like to see more zero-turn options in the future.

Catering to contractors interested in battery-powered equipment, several manufacturers have already entered the battery-powered market, including Mean Green Mowers, which only manufactures electric mowers.

"We got into the electric mowers because the technology is so old in the gas mower market," says Joe Conrad, president of Mean Green Mowers. "We decided to build all-electric mowers so we didn't have any of the emissions, noise and maintenance problems of gas mowers."

Several other experts say the low-noise, low-emission aspects of battery-powered equipment make it ideal for schools, hospitals and other similar areas.

Additionally, Conrad says the electric mowers require no filters, spark plugs, belts or hydrostatic transmissions. He adds that the vibration produced from Mean Green's electric mowers is about an eighth of the vibrations put out by a gas mower.

*Continued on page 22*

## MOWER MODEL TRENDS: BE ON THE LOOKOUT

It's no secret that the zero-turn ride-on mower led the industry in popularity for some time. However, the stand-on mower — especially if equipped with zero-turn technology — could soon surpass it.

"The zero-turn stand-on is by far our fastest growing mower," says George Reister, Husqvarna's global product manager for commercial zero-turns. "The zero-turns are the staple of the industry right now."

Much of the appeal of stand-on machines stems from the fact that the operator isn't required to walk with the machine, as with walk-behind mowers. Additionally, stand-ons are more compact and therefore can fit into tighter spaces, such as a trailer.

"As we see stand-ons coming into the market, the key benefit is you've got a much smaller footprint and it's more productive than a walk-behind," says Jamie Briggs, director of marketing at Exmark. "As landscape contractors struggle to find labor, they're bringing on equipment that these users are willing to use."



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### LONGER LIFE

Short battery life is one challenge with battery-powered mowers, but companies are working to increase battery lifespan.



Other companies are looking into battery-powered mowers, but don't find it feasible quite yet.

"You need a system that's fast enough that can recharge overnight and a battery that lasts all day," Reister says.

Many manufacturers have similar thoughts about automated mowers — it's a potential solution for the future, just not entirely practical yet.

However, there are several manufacturers, such as Stihl and Husqvarna, that have already produced robotic mowers.

"It's hard to find enough skilled labor that can run heavy equipment," Reister says. "This helps fill that gap. You're able to manage a blend of robotics, large zero-turns and stand-ons."

Morse agrees. "Is it the ultimate solution for a company? Probably not, but it's what we consider another tool in the toolbox."

Down the line, experts say they also expect to see a rise in GPS-based systems, where contractors can monitor and receive information about any given mower's trajectory.

"I dream about having these automated mowers that remember the path and know where to mow and provide the same cut, same service every week," Fraynd says. 🤖

PHOTO: MEAN GREEN MOWERS

*Continued from page 21*

Challenges of implementing battery-powered equipment include a higher upfront cost, shorter runtimes and long charging times compared to gas equipment.

"It's like buying some of your fuel upfront," Conrad says, adding that the fuel cost is usually paid off by a quarter to a third of the machine's service life.

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## WEED AVENGERS

# Shut down sedges

Yellow and purple nutsedge are grasslike weeds in the sedge family. If left uncontrolled, nutsedge can spread and return year after year. Here are some tips to identify the yellow and purple varieties of the weed and keep your turf sedge-free. **BY ABBY HART | LM SENIOR EDITOR**

## YELLOW/PURPLE NUTSEDGE

### KNOW YOUR ENEMY:

- Grasslike weed, but not a grass;
- Triangular stem;
- Shiny, glossy leaf surface;
- Warm-season, perennial;
- Fibrous root system that produces tubers that can survive years in the soil; and
- Can grow anywhere, but particularly thrives in southeastern climates due to wetter soils and warmer temperatures.

## YELLOW NUTSEDGE

### KNOW YOUR ENEMY:



- Emerges in late spring and actively grows in summer;
- Sprouts yellow seedheads;
- Features wider leaves with straight edges that abruptly come to a point; and
- Sprouts single tuber growths (called nutlets) below ground.

## PURPLE NUTSEDGE

### KNOW YOUR ENEMY:

- Purple seedheads (smaller than yellow nutsedge seedheads);

- Narrow leaves that taper slowly to a point; and
- Purple nutsedge tubers grow in chains underground. For this reason, it's typically harder to control than yellow nutsedge.



### COMBAT STRATEGY:

- Typically sedges thrive in wetter soils and poorly drained, low-lying areas;
- When laying sod, ensure the turf is free of nutsedge tubers;
- Check for drainage issues and soil compaction. Check irrigation heads for possible overlap that may cause turf to become more saturated;
- Consult with university extension experts to research the best products for your turf;
- Be sure to use products labeled specifically for nutsedge;
- Apply a postemergent herbicide before the sedges sprout tubers — in late spring/early summer or when signs of sedge active growth are observed (in temperate climates, around June 15 — earlier for warmer climates, later for colder climates);
- Apply postemergent herbicides such as pyrimisulfan, halo-sulfuron, trifloxysulfuron, sulfentrazone, imazosulfuron or a combination product containing carfentrazone and one of the aforementioned products; and
- Generally, purple nutsedge in particular will need repeat applications of a postemergent — at least two for acceptable control. 📌



Purple nutsedge features narrow leaves and can be more difficult to control than yellow nutsedge.

**SOURCES:** Tina Bond, Ph.D., herbicide/fungicide technical service, FMC; and Eric Reasor, Ph.D., southeast research scientist, PBI-Gordon





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## TURF DISEASE ID + CONTROL

# Brown patch blues

**Brown spots on lawns can appear due to a variety of turf pests and diseases, but a common culprit is brown patch. Experts offer their tips for properly identifying and treating the disease.**

BY ABBY HART | LM SENIOR EDITOR

**F**or Kevin Herrmann, brown patch is a disease that comes with the turf territory.

The general manager of the Raleigh, N.C.-based Fairway Green Lawn & Shrub Care, says, “Pretty much every fescue lawn in the summer in North Carolina is going to have brown patch.”

### THE BASICS

Brown patch fungus is mostly a concern for turfgrasses in the Transition Zone and south, and it’s most common in cool-season tall fescue, says John Haguewood, Quali-Pro’s Gulf Coast area manager. He adds that brown patch also can be found in St. Augustinegrass, centipedegrass and seashore paspalum warm-season grasses.

Brown patch tends to appear as roughly circular areas on the turf. The patches can range in size from 6 inches to several feet in diameter,

and they vary in color — including yellow, tan, orange and brown — depending on the grass species, weather conditions and prior turf management.

Lane Tredway, technical service manager for Syngenta, says brown patch may be confused with gray leaf spot and Pythium blight and can develop at the same time.

Gray leaf spot appears as gray and fuzzy leaf spots that are oval or round, and Pythium appears dark brown or black and greasy. Tredway says with brown patch, irregularly shaped brown patch lesions appear on each individual leaf, which can range from tan to brown in color, with a thin dark brown border and a dry, desiccated texture.

Brown patch thrives in warm and humid conditions, and the fungus can become active whenever nighttime temps are above 60 degrees. The disease is strongest during May through September, though Tredway notes that he’s seen active brown patch during all months of the year except for January. “I always like to say that brown patch doesn’t have a calendar,” he says.

### CONTROLLING THE PROBLEM

“Understand the site and the historical opportunities, that’s your starting point,” says Rick Fletcher, technical services manager for Nufarm. “If you’ve got a plan for treating those diseases, that plan should include irrigation, thatch controls and core aeration.”

Brown patch thrives during periods of high humidity or 10 hours or more of

leaf wetness. Fletcher recommends not irrigating late in the day, since leaving grass wet all night can help promote the growth of brown patch fungus.

Fertilization is also a key component of brown patch control, Tredway says. He recommends that small amounts of nitrogen (0.25 lb. of nitrogen per 1,000 square feet) be applied over the summer months.


As for chemical control, a variety of active ingredients including azoxystrobin, propiconazole, thiophanate-methyl, tebuconazole, flutoloni and polyoxins are effective on brown patch in rotation or in combination.

Both Tredway and Haguewood recommend introducing brown-patch-resistant varieties of tall fescue into lawns.

Fletcher says that over time, if a lawn care company is aerating, overseeding and thickening up a stand or doing annual fraze mowing or dethatching, it can slowly introduce resistant cultivars into the turf.

Fairway Green tries to get ahead of its brown patch problems with a proactive strategy, according to Herrmann.

“The best way to control injury and damage brown patch is to control on a preventive basis,” he says. “Get out there before the disease gets active and protect the turf with a fungicide.”

Fairway Green uses various fungicide brands and modes of action that provide coverage from 17 to 28 days. The company also provides a leave-behind flyer to educate customers on brown patch and the treatment process. 



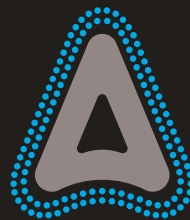
**PATCH ATTACK**  
Brown patch typically varies in color from yellow to brown.



Brown patch can be identified by its irregularly shaped leaf spots and dry desiccated texture.



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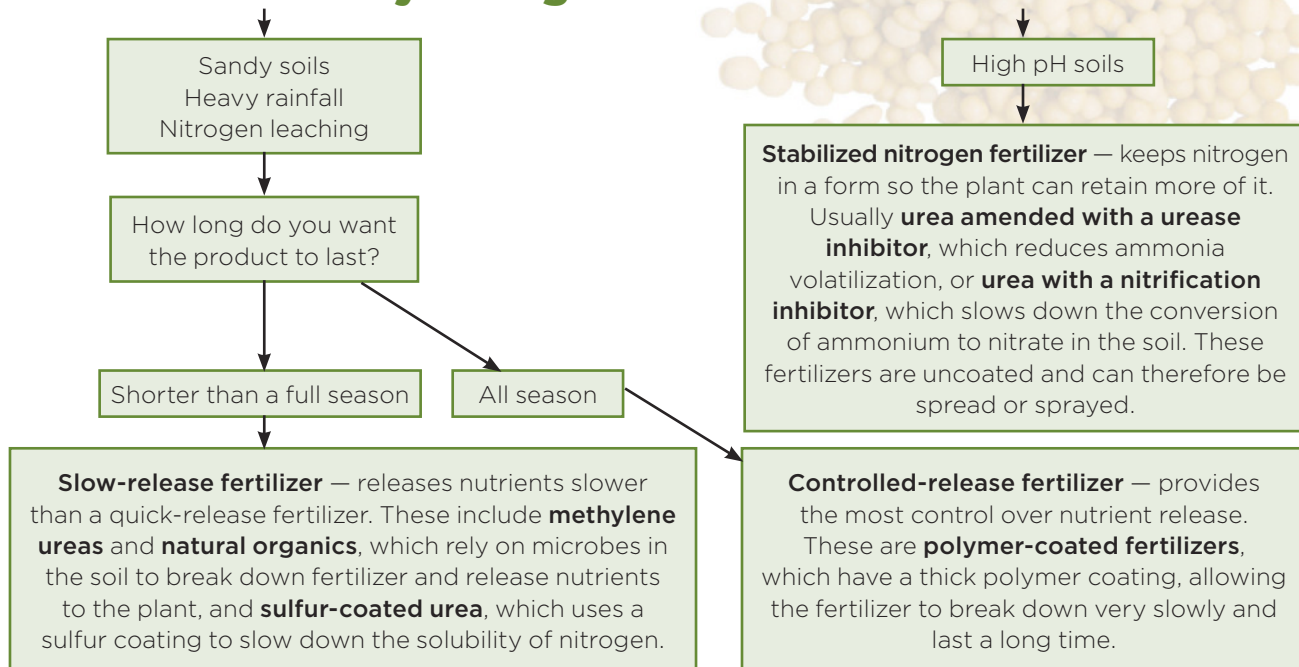
BY ABBY HART | LM SENIOR EDITOR

**E**nhanced efficiency fertilizers (EEFs) are another potential tool in your lawn care arsenal.

Eric Miltner, Ph.D., agronomist for Koch Turf and Ornamental, says, “With EEFs, lawn care operators (LCOs) don’t have to apply fertilizer every six weeks — but if they still want to make property visits every six weeks, they can use their time to complete other lawn care tasks other than applying fertilizer, such as spot spraying for weeds.”

Let’s take a look at how these fertilizers work and help differentiate between the available types.

## What is your big environmental concern?



## HOW THEY WORK:

EEFs are products that allow increased plant uptake and reduce the potential of nutrient losses to the environment (via gaseous losses, leaching or runoff). Bob Hartman, director of sales and marketing for Knox Fertilizers,

says regarding nitrogen, there are several types of EEFs, including urease and nitrification inhibitors (products that can coat a urea pill or be homogeneously distributed throughout), sulfur- and polymer-coated

nitrogen (coated urea prills) and slow-release nitrogen fertilizers, such as methylene urea, composts, biosolids, manures and litters.

## PRODUCT USE DOs:

Miltner suggests that LCOs consider how long they would like their fertilizer to last and that they examine the soil and environmental conditions and understand what is in their bag of fertilizer.

With the higher cost of EEFs, Hartman recommends technicians calibrate their spreaders correctly, so they do not over- or underapply product.

## PRODUCT USE DON'Ts:

Don't keep the same spreader calibration settings from product to product, Miltner cautions. Every product flows differently through the spreader, even though they may have the same percentages of nutrients.

Lastly, Miltner says that EEFs are beneficial even if you don't use them for the long coverage benefits. “If you're making frequent applications every six weeks, you don't necessarily need a long-lasting product,” he says, “but it's still important to use enhanced efficiency fertilizers because they get more nitrogen into the plant.”



Bob Hartman



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## DID YOU KNOW

# Grubbing around

Aside from knowing that they wreak havoc on lawns, there's a lot to learn about these little larvae. **BY ABBY HART | LM SENIOR EDITOR**

**W**hite grubs are the larvae of scarab beetles. There are about 10 native species of grubs that damage turfgrass in North

America, including masked chafers, May beetles, green June beetles and the black turfgrass ataenius. The Japanese beetle, European chafer and Asiatic beetle came from Asia and Europe.

Of the white grub species, Japanese beetles and chafers are the most difficult to control.

The May and June beetles have a two- or three-year life cycle depending on the species, while other significant species have a one-year life cycle.

White grubs can be identified by the spines or hairs on their last abdominal segment, also called a raster. The arrangement of these bristles is a key indicator to determining the species present.

The majority of grub damage doesn't come from the grubs themselves, but

from animals digging and feeding on white grubs. Moles, raccoons, skunks and turkeys are the most common animals that destroy turf when feasting on white grubs. 🐾

SOURCES: ROB GOLEMBIEWSKI, BAYER GREEN SOLUTIONS TEAM, AND MATT GIESE, TECHNICAL SERVICES MANAGER, SYNGENTA



PHOTO: ROB GOLEMBIEWSKI

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## FERTILE GROUND

# From lackluster to lush

**Biological fertilizers enhance turf's growth and vitality, experts say.**

**BY EMILY SCHAPPACHER | CONTRIBUTOR**

**P**at O'Bryan was ready to leave the lawn care industry. The owner of Jamison Pest & Lawn in Cordova, Tenn., was tired of promising customers lush, green lawns and ultimately delivering lawns that were "just OK." Set to focus solely on pest control services, O'Bryan decided to make one last effort and explore the realm of biological fertilizers, hoping it might make some sort of difference for his customers' lackluster turf.

What a difference it made.

Jamison Pest & Lawn is not only still offering lawn care services, the company is heavily advertising them and is excited about the future.

"As a business owner, I had been frustrated with lawn care for 15 years, but with these products, I am able to deliver on the promises we make as an industry,"

O'Bryan says. "We were treading water as a lawn care company. Since using biological fertilizers, sales have gone through the roof, and we have fewer cancellations."



**Pat O'Bryan**



**ORGANIC GROWTH**  
Biological fertilizers increase the supply of primary nutrients to the host plant and soil.

A biological fertilizer, or biofertilizer, is a substance that contains living microorganisms that promote growth and vitality by increasing the supply or availability of primary nutrients to the host plant and soil. These fertilizers are typically derived from live plant materials or minerals, and they come in liquid or granular form. Biological fertilizers differ from organic fertilizers, which are derived from plant, animal or human waste products. Industry experts say that using biological fertilizers can create healthier, denser turf with deeper color that is more resistant to drought and

disease. Soil treated with biological fertilizers also promotes improved water management.

"Biologicals in a general term are any carbon compound that enhances the plant through a hormonal response through the soil or the plant itself," says John Perry, president, founder and CEO of Greene County Fertilizer Co., a manufacturer and supplier of soil-amending fertilizers based in Greensboro, Ga. "The addition of biologicals releases stress and strengthens the plant by giving it something it would never get from a standard fertilizer."



**John Perry**

*Continued on page 32*





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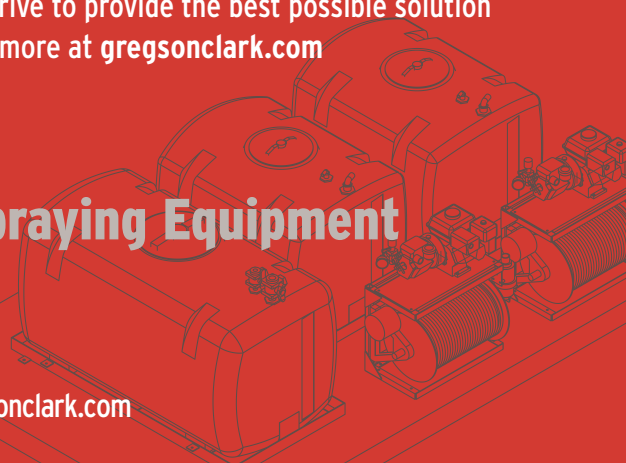


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## FERTILE GROUND



*Continued from page 30*

O'Bryan, whose \$2-million company provides 75 percent pest control and 25 percent lawn care services to a 90 percent residential clientele, uses a liquid root growth stimulator and a liquid aerate product, in addition to the company's traditional lawn care products. Since incorporating these biological products two years ago, O'Bryan says his customers have seen improved color, more resistance to drought and disease and better winter hardiness. Because his firm works with customers across three counties with different soil types, the company uses soil testing and adapts its lawn care programs as necessary.

"We have moved everybody up a bracket by improving the soil quality," he says. "The yards that used to be poor are now OK and the yards that used to be OK are now spectacular."



Jim Loar

Jim Loar, president and CEO of Cool Planet, a producer of

biochar-based technology in Greenwood Village, Colo., says the living microorganisms in biological fertilizers work to restore and enhance the natural nutrient cycle and organic matter found in soils. These products complement traditional lawn care regimes to enhance a lawn's overall beauty, quality and resiliency.

"At the end of the day, all plant materials require a balanced nutritional program very much like human beings," Loar says. "Sometimes you need to take a supplement or a multivitamin, and I think plants are very much the same. Biological fertilizers focus on improving what nature already has provided in that given space."


Hugh MacGillivray, chief commercial officer of Anuvia Plant Nutrients, a manufacturer of slow-release bio-based fertilizer products based in Zellwood, Fla., says lawn care operators (LCOs) interested in adding bio-fertilizers to their lawn care programs should consider the benefits they can experience with fairly minimal effort. MacGillivray says Anuvia's products are "plug and play" and require no



Hugh MacGillivray

special handling or equipment. While the products may require an additional cost versus conventional products, they work to improve soil quality over time, increasing nutrient efficiency and providing more satisfied customers who are looking for premium performance along with sustainability.

"LCOs should take a hard look at these products because they bring unique benefits that conventional nutrition doesn't," MacGillivray says. "The environmental footprint is also very positive, as they have less impact on the environment while providing greener, healthier lawns."

Perry agrees. "Everything is just better—I don't know how you can beat that," he says. "LCOs are seeing a reduction in the overall use of chemicals because the turf is healthier. Healthier turf with less inputs helps LCOs save money over time." 

Schappacher is a freelance writer based in Cleveland.

**LUSH LAWN**  
Biological fertilizers help create healthy, dense turf that's rich in color.



## TIPSHEET

# Fire ant control

BY ABBY HART | LM SENIOR EDITOR

### BACKGROUND:

- Fire ants are easily identified by the mounds they build. The above-ground portion of the mound is usually conical and can be a few inches tall and several inches across to as much as a few feet across. They can be found anywhere on a lawn or landscape.
- The insects tend to move down further into the ground when it's dry. Mounding will occur after rain events because the ants try to raise their brood above the saturated soil to get away from the moisture.
- A fire ant colony established in June could contain 15,000 insects one year later. A mature colony of three years may contain 100,000 to 500,000 workers and several hundred winged forms.
- You can determine if fire ants are active by putting out a piece of greasy food and checking it 30 minutes later.
- Fire ants prefer open, sunny areas found on lawns, though you can find fire ant mounds in any area of a lawn. The size of the mound depends on the lawn's soil characteristics and how frequently the mound is disturbed.

### CONTROL TIPS:

- There are several different species of fire ants — the red imported fire ant and southern fire ants chief among them — but the species of ant doesn't make any difference in control method.
- If you're walking lawns and laying down fertilizer, always be cognizant of fresh fire ant mounds.
- Spraying insecticide on foraging ants will not control a colony, and spraying a nest may cause the colony to disperse, which could make control even more difficult.
- Treat the mounds either with liquids, granular products watered in over the top of the mound or bait control.
- Digging up mounds typically results in the movement of nests or dispersal of the fire ant mound.
- A granular or liquid broadcast program provides good residual and potentially preventive control for fire ants. In the case of a new queen flying in from a neighboring yard, the broadcast treatment should be able to stop the queen fire ant from starting a fresh colony.



#### SUN DWELLER

Fire ants prefer open, sunny areas on lawns but can also be found elsewhere in the turf.



#### ↑ HIGH AND DRY

Fire ants typically build mounds after rain events to escape saturated soil.

- Fire ant baits will take longer than broadcast treatments, which can knock mounds down within 15 minutes or less and provide residual treatment in the yard for 30 to 90 days.
- For lawns with a wide infestation, broadcast treatments are ideal, and a technician can spray larger mounds with additional applications of insecticide.
- For direct mound treatments, technicians should treat the area 1 to 2 feet outside the mound.
- Whatever they're using to treat the mound, technicians should be sure to use enough force to break the apex of the mound to get the material down into the mound itself to kill the insects. Unless the apex of the mound is broken, fire ants will simply move the mound away to avoid the insecticide. 🐜

#### FIRE ANTS' M.O.

Fire ants can be easily identified by the conical, above-ground mound that they build.





## THE BIG ONE

# Out of the blue

**LOCATION** San Antonio

**COMPANY** Clean Scapes

**DETAILS** A call out of the blue was what it took for Clean Scapes, a landscape firm in San Antonio, to win the maintenance contract for the Blue Skies of Texas retirement community in 2009.

Clean Scapes Principal Brett Nichols says he made the cold call after he found out that a fellow Clean Scapes employee had been fishing with Blue Skies' director of maintenance.

As part of the contract, Blue Skies wished to create an inviting, safe and pleasant atmosphere for its residents, many of them Air Force veterans and their spouses. The property — formerly known as Air Force Village — is located on a 200-acre plot a few miles outside of San Antonio.

Maintenance challenges include the close proximity of the site's St. Augustinegrass to large trees, positioning it in the shade; uneven terrain, posing a safety hazard for senior residents; intense heat and drought-like conditions; and a large population of deer, rabbits and wild hogs.

The Clean Scapes team addresses these issues by implementing thorough planning, communication and documentation. The company uses John Deere riding mowers, complete with mulching decks and converted to propane, and Echo two-cycle equipment.

The project earned Clean Scapes a Silver Award from the National Association of Landscape Professionals' Awards of Excellence program.

*See more photos from this project at [LandscapeManagement.net](http://LandscapeManagement.net).*



PHOTOS: CLEAN SCAPES





**Captions** | **1.** Blue Skies of Texas is located on the outskirts of San Antonio, and offers modern retirement housing and a range of senior-focused services and amenities. **2.** Greenery is ever-present throughout Blue Skies. Each parking island, median and roundabout features an array of color and plant material like the one shown here. **3.** Bursts of color can be seen throughout Blue Skies. Residents love their homes and the atmosphere the landscape provides them. **4.** Mountain laurels like those pictured here can be found throughout the property. They are given to residents who are celebrating their 50th wedding anniversary. Each tree well is adorned with a small placard with the names of the residents to whom the tree has been dedicated. **5.** Pictured here is an older section of the community, which features duplex living with plenty of room to breathe.



## EXPERTS' TIPS

### Stand-On Mowers

Stand-on machines help reduce operator fatigue and improve maneuverability.



#### FERRIS Dan Roche

Director of marketing,  
commercial products  
**FERRISMOWERS.COM**

If cutting grass was all about mowing straight lines all day, stand-on mowers wouldn't have a leg to stand on. But it's not. Real mowing is about going around obstacles, avoiding debris, ducking under branches and negotiating tight corners. Stand-on mowers increase efficiency because getting on and off the machines to remove debris is much quicker and easier. Look for a stand-on mower where the power takeoff automatically disengages without turning the engine off when the operator leaves the platform; this makes entry and exit faster. Stand-on mowers also help add maneuverability as they're typically better at negotiating tight obstacles because the units have shorter wheelbases and no overhang. Additionally, the operator's line of sight is improved. Also, evaluate how comfortable the mower is. Is the operator platform equipped with suspension and is the mower adjustable to fit the operator?



#### BOB-CAT CO. Ron Scheffler

Senior product manager  
**BOBCATTURF.COM**

When working with stand-on mowers, make sure to plan for fuel fill-ups. Whether you have a reserve tank or a fuel gauge on your mower, always make fuel checks part of your daily routine. This includes having an emergency gas can on your trailer.

When you stand on the machine, be sure to lean forward to align your center of gravity with the mower. This will help you handle slopes better and be more comfortable. Finally, if you're new to stand-on mowers, one thing you'll notice is the different controls. For example, the point of reference (POR) bar in front of the handles helps you rest your hands and gives you more control of the machine. Some people don't know that you can adjust the stability bar. You can also use the POR bar to temper the speed for newer operators.



#### EXMARK Lloyd von Scheliha

Product manager  
**EXMARK.COM**

To maximize the productivity of crews using stand-on mowers, it's important to survey each property quickly prior to mowing and come up with a plan of attack. Pick up any toys, trash or other objects that could stop you while mowing. Also, note any new plantings, low-hanging branches or landscaping feature changes that have come up since your last visit. Then, decide on the safest, most efficient way to cut the lawn. While it's true that it's easier to mount and dismount a stand-on mower to pick up debris than it is a zero-turn rider, the best option from a productivity standpoint is to eliminate the need to stop before you start mowing.





**HUSQVARNA**  
**George Reister**

*Regional product manager, U.S. wheeled*

**HUSQVARNA.COM**

It's important to use stand-on mowers that are built for a full day's work and that prevent fatigue. Visibility is a vital factor. Stand-on mowers offer line of sight at all four corners, which can be a nice time saver and allow for closer cutting to obstacles and minimize extra time spent trimming. Serviceability is another important factor. Use a mower with balanced weight distribution — mowers with the engine and transmission lowered and mounted evenly on the frame provide a lower center of gravity, creating safer maneuverability and easier serviceability. Look for a solution that makes it easy to access the pumps, engine bay and fuse box — preferably requiring a minimum amount of tools. The most important factor is safety. Take a close look at where the major user functions are located, including deck lifts, emergency buttons, levers, etc. Knowing where those are helps avoid excess stress on joints and injury.



**JOHN DEERE**  
**Carl Agee**

*Product marketing manager*

**DEERE.COM**

Stand-on mowers are growing in popularity, offering unique benefits to professional landscapers. To improve uptime and ensure their mowers are ready to go daily, operators should inspect machines before and after using. At the start of the day, check oil levels, tire air pressure, brakes and belts to make sure nothing is low or damaged. Walk around the machine, looking for leaks and loose or missing parts. This will help to reduce potential downtime while on the job. After each use, thoroughly clean debris and lubricate the machine. Additionally, check the mower blades and deck drive belt for wear. Finally, add fuel as needed to the machine to ensure it's ready to go in the morning.



**KUBOTA**  
**Tom Vachal**

*Senior turf product manager*

**KUBOTAUSA.COM**

Stand-on mowers are becoming the Swiss Army knife in commercial landscapers' toolboxes. They are compact, requiring less space on trailers; they allow landscape pros to mow under low-height obstructions; they offer the ability to quickly get off and on to pick up debris; and perhaps most important, stand-on mowers reduce operator fatigue. The flexibility of stand-on mowers makes them one of the most valuable assets on a landscaper's trailer. They allow the operator to mow in tight and wide-open spaces. The improved operator visibility allows the operator to tackle jobs quicker, saving time and improving productivity. Most stand-on mowers also allow the operator to quickly and easily complete routine maintenance on the unit, reducing the amount of time the machine needs to spend at the dealership and saving the contractor time and money.



**WRIGHT**  
**MANUFACTURING**  
**Ed Wright**

*Vice president of engineering*

**WRIGHTMFG.COM**

Looking at mowing as a time study, you will find that a significant amount of time is spent turning and maneuvering the mower. On smaller properties, the time spent mowing can be as low as 50 percent of the engine runtime. Because stand-on mowers are compact and agile, they can help you cut down your mow times. It's essential that the operator master the ideal two-step turnaround technique: As the operator approaches the end of a stripe, he should make a slight turn toward the next stripe as he slows to a stop. Then, looking backward in the direction of the turn, he should begin gently moving backward while gently pivoting the machine to the next stripe. Performed well, this technique is fast, gentle on the turf and easy on the mower.



## BRAND U

# A Kubota convert

**A contractor who doesn't like change finds himself a new favorite.**

BY CLARA RICHTER | LM MANAGING EDITOR


**F**rank Seems, owner of Seems Landscape Design in Belmar, N.J., just recently started purchasing Kubota mowers when he determined they were better quality and a better price than what he had been using.

"I'm not one to change," he says. "I like what I like. But we don't have many dealers around here that were dealing parts or service anymore (for the machines we were using). Our downtime was a week or two instead of a day or two."

Brian Lonergan, president of Ace Outdoor Power Products in Bayville, N.J., is Seems' dealer. He suggested the company give Kubota a spin. After the crew demoed some equipment and found they liked it, Seems purchased three

Kubota mowers: Z725 (60-inch) and Z723 (48-inch) zero-turns and a WG14 (36-inch) walk-behind. The company's mowing crews use the mowers to trim the turf on residential, commercial and industrial job sites.

"It was one of my guys who loved using it," Seems says. "I don't cut grass, I'm mostly in the office, but we found out we purchased one and the guys were fighting over who wanted to use the mower."

The company has plans to purchase two more Kubota mowers this spring. So, why do they like them so much? In Seems' opinion, "As far as reliability and cut and price point, you can't get a better mower." 

The three Kubota mowers Seems purchased all run on gas. Their maintenance is handled in-house, and the crew at Seems Landscape Design is used to working with gas-powered machines.


According to Seems, the operators like the comfort of the machines. The crews typically put about 1,000 hours a year on its mowers, so being comfortable while operating the mower is an important feature.

The No. 1 thing Seems likes about the Kubota mowers is the quality of the cut they produce. "It was a very nice cut," he says. "We got the vacuum bagger attachment, and it saved us a lot of time and work. Once we acquired one and used it and liked it, we purchased another one." With plans to purchase two more this spring, it looks like the size of the fleet will keep on growing.

The machines are extremely easy to maintain, Seems says. The crews still change the oil every two weeks, but they haven't had any issues with the machine itself. "As long as you change the air filters and fuel filters, there's not really much more you can do," Seems notes. "We sharpen the blades every two days, change the oil every two weeks, which we would do with any mower."







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## HARDSCAPE SOLUTIONS

# Functionality with a twist

**LOCATION** Broomfield, Colo.

**COMPANY** Lifescape Colorado

**THE DETAILS** This project's compact courtyard area between the main house and guest house created challenging space restrictions. The area had to connect the two buildings and also have a pool, fire pit area, spa, outdoor kitchen, dining and living room to accommodate large gatherings.

Various trails and paths lead guests around the property alongside beds incorporating ice plant, veronica and lambsear.

The property had a large area needing turf, but water conservation and maintenance demands were a concern, so the contractor incorporated irrigation supplies from Rain Bird Corp.

The courtyard's design elements created privacy without blocking views of Colorado's Front Range.

The pool is surrounded by 0.75-inch Mirage Porcelain Pavers from Belgard and custom cast-gray coping.

The courtyard is raised 10 feet from street level, which made installation of the project's custom elements challenging. Lifescape Colorado used cranes to place larger elements — including the 15-by-6-foot concrete wall that was cast off-site — into the courtyard. Other elements of the project were installed with a Caterpillar skid-steer, a John Deere mini excavator and walk-behind Toro Dings.

This project earned Lifescape Colorado a 2018 Silver Award from the National Association of Landscape Professionals' Awards of Excellence program.

*See more photos from this project at [LandscapeManagement.net](http://LandscapeManagement.net).*



PHOTOS: DAN DEGRUSH, LIFESCAPE COLORADO





**Captions |** 1. The front landscape was designed to complement the home's contemporary style of architecture. 2. Craning the steel wall into place for the custom water feature. 3. Planting beds incorporated ice plant, veronica and lambsear. 4. Grasses and contemporary pathways add interest along the massive wall that anchors the courtyard area. 5. The client's desire for the property around the home, courtyard and guest house was a landscape that would complement the modern style of the home with color, texture and design. 6. Design elements throughout the courtyard were designed to create privacy without blocking views. 7. A trail leading from the perimeter of the property to the main house.



## INSTALLATION SOLUTIONS

# Cutting through the options

Experts share what's new in the cut-off saw market.

BY DANIELLE PESTA | LM ASSOCIATE EDITOR

**CUT IT OUT**  
Contractors should consider safety and ergonomics when using cut-off saws.



**W**hat tools do you use to make hardscape projects successful? A cut-off saw is a versatile option when working with a variety of materials such as stone, pavers, concrete, steel or plastic.

When looking to purchase a cut-off saw, contractors should consider a few different features for efficiency and ease of use. We talked with product managers from Echo and Husqvarna to find out what's new for these handheld tools.

### ERGONOMICS

If there's a way to lessen exhaustion after using a cut-off saw, landscape contractors will happily welcome a solution.

Getting the saw started is the first step. Brad Mace, a product manager at Echo, says the typical operator

will start the saw dozens of times per day. So, manufacturers, such as Echo, have taken steps to make sure the saw starts quicker and with less effort.

A spring-assist starter and a decompression valve can help reduce pulling effort for the operator, and a choke with automatic fast-idle provides more fuel to the engine and allows the saw to start faster with fewer rope pulls, Mace says. Additionally, a purge bulb provides fresh fuel to the carburetor.

When running a saw all day long, it's important for the machine to include vibration reduction features and run smoothly.

A rubber-coated handle can help absorb some of the machine's impact while cutting, Mace says. "We've also isolated the engine, with rubber engine mounts, and the handle from the blade," he adds.

To reduce vibrations from the saw, Husqvarna has developed metal springs in the handles of its power cutters, according to Christian Johnsson, Husqvarna's North American product manager for handheld products.

"One of the things we always have close to our hearts is ergonomics," Johnsson says. "If you're using a tool on a daily basis for several hours, we have to make sure you use the product with the best ergonomics."

### SAFETY

These machines are inherently dangerous with a big rotating blade at the front. No matter what, get the right education and know what you're doing with the saw, Johnsson says. Reading the operator's manual and the instructions first is the No. 1 step to safety.

"Have someone else nearby with experience that can teach you and give you some tips," he says.

### Dust

The material these saws cut through produce dust that is typically abrasive.

Protecting the operator and the machine's engine are the two most important things to keep a job site safe and running efficiently.

Air filters tend to clog quickly because there's so much dust when cutting.

This can bog down the unit, and it won't have enough power when the air filter is clogged up.

A way to combat this is with a four-stage air filter, Mace says.


"The filter takes all of the dust and debris out of the air stream before it even gets to the cylinder," he says. "Because once it gets to the cylinder, it can do a lot of damage."

With any saw, be sure to use a dust compression method that incorporates water or a vacuum system. Regardless if water or a vacuum is present, the landscape contractor should always wear a high-quality mask, such as one that meets APF 10 requirements, Mace says.

### Noise

A lot of the sound you hear from a cut-off saw is the blade cutting through the material, which you can't avoid, but Johnsson says there are ways to combat the noise of the machine itself. Equipment that runs on battery power instead of gas tends to be quieter.

"If you don't want a gas-driven power cutter, there's options," he says.

At the end of the day, Johnsson says, no matter how it's powered you want the machine to be well balanced, easy to use, reliable and as lightweight as possible. 



Christian Johnsson



Brad Mace



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## EXPERTS' TIPS

### Skid-steers



#### ASV Buck Storlie

*Product line manager*  
**ASVI.COM**

One of the easiest ways to preserve a low cost of ownership with a skid-steer is to do what you can to limit tire wear. Use three-point turns and avoid spinning out the tires. Both tips are especially important in severe ground conditions. Practice safe loading procedures. This includes not ramming the bucket into a pile of material quickly. Loading more slowly helps reduce the sudden load on the machine and reduces the risk of operator injury from hitting an unknown object below the pile. Also, keep the bucket only as high as required to clear ground obstacles. Failing to do so is one of the main reasons for most tipping accidents. Finally, read your skid-steer's manual for details about your machine.



#### CASE CONSTRUCTION EQUIPMENT Perry Girard

*Product manager*  
**CASECE.COM**

The skid-steer is the No. 1 tool carrier in North America, but the attachments that you add have the opportunity to allow you to take on more billable work. This eliminates the need to purchase additional/separate machines and reduces your dependency on hiring other contractors. The understanding of attachments as a force multiplier and a billing multiplier for a core piece of machinery, such as a skid-steer, grows each day. The mentality of "we'll hire that out to another contractor" can be replaced with "we can do it ourselves and make a business case for it." The total cost of ownership is directly related to machine utilization. Higher utilization will directly drive your profits and provide you a competitive edge. Pairing it with the right suite of attachments will result in greater profits and getting more out of that core asset over its lifetime. Entrepreneurial contractors understand this.



#### CATERPILLAR Kevin Coleman

*Product manager*  
**CATERPILLAR.COM**

Providing the operator with comfortable equipment that he/she enjoys running increases the likelihood of a long-term relationship with a company. An enclosed cab design that is sealed and pressurized keeps the operator environment clean and quiet. Adjustable joystick control positions provide a wide range of comfortable operating positions for maximum comfort and control. Having excellent visibility is key when operating a skid-steer, and an operator should be able to see the tires, attachment and all around the job site. A rearview camera can help with hard-to-see areas behind a machine.



#### DITCH WITCH Chris Thompson

*Product manager*  
**DITCHWITCH.COM**

When operating properly, mini skid-steers increase productivity on a wide variety of landscape job sites. To optimize machine performance, operators should practice regular maintenance on the machine and its attachments. Keeping attachments in working order and practicing regular maintenance should help further extend machine productivity and longevity. Each attachment should have its own maintenance routine detailed in the operator's manual. The most common attachments and their recommended maintenance include:

- **Pallet forks:** Inspect forks before each use for damage or wear that requires immediate attention.
- **Plows:** Inspect for loose hoses or fittings and check the blade for wear or cracks.
- **Tillers:** Lubricate the bearings and inspect tines for damage.
- **Trenchers:** Check for worn teeth and proper chain tension to reduce the amount of binding.





**JCB**  
**Chris Trampush**

*Product manager*  
**JCB.COM**

When choosing and using a skid-steer loader, landscape professionals should consider the machine's rated operating capacity and hydraulic flow capabilities. These two attributes directly impact the ability of the machine to lift heavier loads and operate a wider range of power-hungry attachments, such as mulchers, mowers and cutters, which are common for land clearing or site preparation. Landscapers also have a choice between radial lift machines, which provide a more "connected feel" to the attachment, and vertical lift machines, which provide a bit more forward reach for loading/unloading material on trucks or trailers. Pay careful attention to the manufacturer's warranty and the dealer-provided after-sales support and service when choosing a new machine. These factors will have a significant impact on productivity.



**JOHN DEERE**  
**CONSTRUCTION**  
**& FORESTRY**  
**Gregg Zupancic**

*Product marketing manager*  
**DEERE.COM**

Landscapers are up against various tasks that require the proper machinery to get the job done. Whether hoisting pallets, moving sod or clearing brush, using a versatile skid-steer with a durable attachment can help optimize performance and productivity. Landscapers can maximize use of skid-steers on-site by understanding each application's unique needs and terrain. Whether working on vast land or clearing through narrow crevices, skid-steers that offer a compact design and smooth handling controls can improve a landscaper's time and efficiency even in challenging terrains. Having a skid-steer that is fuel-efficient can also maximize productivity.



**TAKEUCHI**  
**Lee Padgett**

*Product manager*  
**TAKEUCHI-US.COM**

There are several key items for landscape professionals to consider when purchasing a skid-steer loader. In particular, it's important to purchase the right machine for their application. There are generally three different frame sizes offered: small, medium and large. Large frame loaders provide the additional power and flow needed to perform in applications that require greater lift capacity; the ability to run high-flow attachments, such as milling heads; and the ability to move larger volumes of material. It's also important to understand the difference between vertical and radial lift loader arrangements. This will further help match the machine to the job. Operators who do more grading and dirt work tend to prefer the radial lift design because it generally has greater bucket breakout and lift arm forces. Radial lift loaders also have excellent midheight reach due to their lift path.



**VERMEER**  
**Brett Newendorp**

*Landscape market manager*  
**VERMEER.COM**

Loaders come in all shapes and sizes, but more landscape contractors are choosing mini skid-steers as an alternative to larger models to help perform work once done by hand. Fitting into tighter areas, backyards and through narrow gates are some of the mini skid-steer's biggest benefits. These compact machines also offer several additional advantages over full-size loaders. The overall weight puts less stress on the towing vehicle, does not require a driver to have a CDL and produces less ground disturbance. Attachment options include buckets and blades for dirt work and site prep. Grapples can be used to handle logs and brush and to help feed a brush chipper. Powered rakes and tillers can prepare areas for seeding or beds for planting. Auger drives and bits can be used to install fence posts or dig holes for trees. Trencher and plow attachments work well for irrigation or utility installation work.



## BUSINESS BOOSTERS

# 3 reasons to invest in attachments

Why landscape pros may want to add attachments to their lineup.

BY DANIELLE PESTA | LM ASSOCIATE EDITOR

Selecting the right equipment is key, but it is just as important to choose the attachments that will be most beneficial for the business.

Mark Crutcher, COO of Landscape Development Inc. (LDI), headquartered in Valencia, Calif., says the firm's main attachments are rototillers, trenchers, augers and brushcutters.

To select those attachments, Crutcher says they first evaluate their primary work and then take a look at the most commonly used pieces of equipment.

"Each business has a core set of tasks that need to be performed, and that's ultimately what drives the type of equipment and attachments you utilize," he says.

Be sure to review the most common ground conditions you encounter. Users with heavy-duty work in terrains such as rock and clay can improve attachment efficiency with a higher torque rating. For example, John Deere has made improvements to its PA30B planetary auger by increasing the max torque rating from 4,166 to 4,500 pounds-foot of torque, according to Gregg Zupancic, product marketing manager for John Deere Construction & Forestry.

There are numerous benefits of using equipment attachments. Here are three of the positives including versatility, safety and labor.

### 1. VERSATILITY

Investing in equipment that can be used in more than one application is key to versatility.

"The objective is to mechanize because that makes you much more efficient," Crutcher says.

Equipment is one of the more expensive items in a landscape contractor's budget, which is why companies will want to make sure each machine is getting high utilization.

"You have to have enough equipment so you're not holding up jobs," Crutcher says. "But the last thing you want to do is own an expensive piece of equipment and have it sitting 80 percent of the time."

Instead of having three dedicated pieces of equipment, a contractor can have one piece of equipment with three different attachments. "Attachments should always be seen as a business-building acquisition — one that significantly improves the total cost of ownership of that machine over its lifetime," says Perry Girard, product manager, Case Construction Equipment.

### 2. SAFETY FIRST

Above all else, safety is the top concern when operating equipment and attachments.

"Safety is the most paramount thing and the biggest challenge that we face," Crutcher says. "So, anything that we can do to put the crew in a situation where they can be safe, it's better."

At LDI, there is an operator with a dedicated piece of equipment and a complete set of attachments, says Crutcher.

"We prefab the back of the truck to accommodate all the attachments, so they're easy to get on and off the

**LABOR SAVER**  
Adding attachments to a company's lineup is one way to alleviate the labor crisis.



piece of equipment," he says.

The liability is higher for some projects when using labor for a project versus a piece of equipment. Especially on a slope, for example, the risk of injury decreases when using a piece of equipment with an attachment, Crutcher says.

### 3. LABOR-SAVING


"I've got more work than I do laborers," Crutcher says.

Do attachments save labor? The answer, Crutcher says, is yes because the machine can go faster than an individual or a group.

But, every crew doesn't necessarily need to have a piece of equipment.

"A lot of times people will run equipment and then it will just sit on the job site. It will be used for a very short period of time," Crutcher says. "When you have dedicated operators, the uptime on the equipment is much higher because it's one operator going from site to site to site."

By utilizing attachments, a landscape contractor can prevent the risk of potential injuries and cut labor hours.

"The more efficient I can make the crews, the more opportunities I can create for them for career advancement," he says. 



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## WATER WORLD

# Balanced approach

**LOCATION** Lake Zurich, Ill.

**COMPANY** Balanced Environments

**DETAILS** The Kemper Lakes Business Center is a multitenant corporate campus surrounded by 150 acres of grounds, all of which are managed by Balanced Environments.

The company took over the landscape contract for the property in 2017, when a new management company took over the campus.

"Irrigation on this site is crazy," says Gayle Kruckenburg, senior account representative for Balanced Environments. So crazy, in fact, that the irrigation superintendent, Spencer Roberts, visits the site once a week, which is unusual, according to Kruckenburg.

The irrigation system provides water for more than 90 percent of the primary turf areas. It includes 4-inch main lines and 91 zones controlled with five Weathermatic smart controllers.

The property possesses changing water tables and soil types. The irrigation system is fed by a series of lakes that surround the property. Algae and other debris can clog nozzles, some of which need to be changed on a monthly basis.

Balanced Environments recently separated zones for flower and turf requirements and relocated and removed heads as landscape changes were made.

Each year, the system is winterized, a process that occurs over the course of two months.

*See more photos from this project at [LandscapeManagement.net](http://LandscapeManagement.net).*

## ROTATE

A succession of three full-color planting rotations are coordinated through the landscape season. The seasonal plantings aim to present color, vibrancy and scale. Emphasis on multilayered floral selections keeps the interest high from every perspective. Irrigation is strictly controlled to respond to changing conditions from spring through fall and with each seasonal planting change.



## PROBLEM SOLVED

The large, expansive parking lot areas present a challenge for the landscape management team. The site's irrigation system does not extend coverage to the islands or outer border areas. The system has more than 100 strategically located quick-coupler valve connections to allow crews convenient hose-watering opportunities. The company's in-house irrigation team services the system throughout the growing season.

## GATHER UP

A large, upper-level deck provides tenants with an opportunity to gather outdoors. The company's landscape maintenance crew is tasked with the daily maintenance of several thousand square feet of artificial turf and concrete paving. Seasonal color planters provide character and color consistent with other plantings on the site. Automatic irrigation is not available for these planters, so daily monitoring for adequate water helps keep them full and vibrant.



## BLOSSOMING SUCCESS

Periodic fertilizer applications and tight control on the irrigation, integrated into each of the planting beds, keep the mixture of plantings vibrant and full. Large specimen trees are actively maintained with periodic pruning to reduce conflicts with the building facades.





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## EXPERTS' TIPS

### Controllers

The demand for smart solutions has trickled into the irrigation world.



**RAIN BIRD CORP.**

**Joe Porrazzo**

*Product manager — controllers*

**RAINBIRD.COM**

WiFi-enabled controllers are becoming increasingly popular as more people use their mobile devices to manage various systems on their properties. Choosing the right controller can be challenging for contractors because there isn't a single perfect solution and different products work best for different applications. Contractors should consider their core customers' needs and choose the controller that best meets those needs by asking themselves questions like:

- Does the customer need to manage multiple irrigation systems or a single system?
- Is flow sensing a must?
- Does the property require advanced irrigation system programming features?

The steady rise of "connected" solutions also is making it possible for manufacturers to update and improve existing, previously installed controllers. It's important for contractors to stay up-to-date with this information. Just because a controller doesn't have a certain feature today doesn't mean the manufacturer can't add it at a later time.



**EWING**

**Warren Gorowitz**

*Vice president of sustainability*

**EWINGIRRIGATION.COM**

Smart controllers help conserve water and create efficiency while maintaining lush landscapes. The sustainable aspects of smart systems will interest your more eco-minded customers, like those more interested in xeriscape designs. I recommend pairing smart irrigation systems with water-efficient nozzles to make a positive impact on the environment while creating lush lawns. These nozzles feature thicker water streams, wind resistance and great uniform distribution. Another supplemental tool for smart irrigation systems is smart flow sensors. These sensors monitor overflow conditions, alerting you to shut off water flow.



**RACHIO**

**Tim Myers**

*Head of product*

**RACHIO.COM**

Smart irrigation systems work best when both the pro and homeowner can have easy access. Current setups for most smart irrigation systems require the homeowner to share personal data, including his or her username and password. In the wake of privacy concerns, it's important to have secure processes in place. Onboarding features that allow a pro to set up the system and seamlessly transfer ownership to the homeowner — while maintaining access without sharing passwords — is the safest way to go.





## HUNTER INDUSTRIES

### Ben Sacks

*Associate product manager — controllers*

**HUNTERINDUSTRIES.COM**

From doorbell cameras to robotic dog-treat dispensers, the “internet of things” revolution has led consumers to demand control at their fingertips. Not to be left behind, the landscape industry is quickly evolving to meet these expectations. The smart irrigation techniques of today require an internet connection. Customers want automatic schedule adjustments based on real-time weather data and forecasts, text notifications from their flow sensors and the ability to access their irrigation controllers from anywhere in the world. The remote irrigation management capabilities of a cloud-based control system are essential tools for professionals to ensure healthy landscapes. These advanced technologies help users save time, money and water while protecting landscapes and meeting the needs of customers who want smart, automated irrigation solutions.



## SITEONE

### Steve Counter

*Vice president, category management*

**SITEONE.COM**

A smart irrigation controller is like having extra labor on your team, maximizing your business and value to customers.

- **Save time.** Online management allows contractors to adjust schedules, suspend zones and change watering factors from smartphones or desktop devices. **Tip:** Set up default schedules and make global system changes for all irrigation control systems at once.
- **Save money.** Controllers can connect to online weather, which tells the system if, when and how long to water, thus saving resources and costs. **Tip:** Install a flow meter to provide instant alerts in the event of water waste due to a broken sprinkler head or pipe, or a faulty valve. With remote automatic shutoff, it prevents the broken zone from running until repaired.
- **Save maintenance.** Smart controllers are managed best by a licensed professional contractor. **Tip:** Ensure that the local router has a clear connection to the controller and perform any needed maintenance to support that.



## THE TORO CO.

### Peter Lackner

*Product marketing manager*

**TORO.COM/EN/IRRIGATION**

Upgrading our phones, computers and even our cars is something many of us do every few years. Updating home technology often doesn’t happen as often, but keeping current can save time and money. When was the last time your customers upgraded their irrigation system controllers? If the answer is “more than a few years ago,” now is the time. Putting technology to work in customers’ yards takes the guesswork out of watering. Next-generation irrigation system controllers make it easier than ever to save water, time and money. “Smart” controllers feature more user-friendly programming functions. Just like phones, icon buttons provide easy-to-understand shortcuts to the functions users need. They take you through the scheduling process, delivering precise watering without having to constantly refer back to the owner’s manual. The result is more efficient watering with less frustration.



## » EVERY DROP COUNTS

# The American Society of Irrigation Consultants: An introduction

BY CLARA RICHTER | LM MANAGING EDITOR

Last May, 20 percent of the U.S. was experiencing severe to extreme drought. That number jumped to 25 percent in June, according to the National Climatic Data Center and the National Oceanic and Atmospheric Administration.

So, how can landscape and irrigation professionals practice good water management and still maintain healthy plant growth? The American Society of Irrigation Consultants (ASIC) seeks to help answer that question.

ASIC was formed in California in 1970, but the group's headquarters is currently in Royal Oak, Mich. It is comprised of about 285 members from around the U.S.

According to ASIC, recognition that water is a finite resource has put pressure and scrutiny on the landscape irrigation industry. That's why part of the core mission of ASIC is to advocate for the responsible use and preservation of water resources and to create fundamental irrigation design standards, improve system efficiencies and eliminate water waste.

The primary objective of the group, according to Executive Director Carol Colein, is to promote the efficient use of water for irrigation through education of members on the latest technology and tools for providing the most energy-efficient systems possible.

Irrigation will continue to be under scrutiny by public agencies, the organization says, and the industry needs to continue to put forward a professional,

cohesive approach to respond to outside pressures to reduce or eliminate landscape irrigation.

### WHAT IS AN IRRIGATION CONSULTANT?

An irrigation consultant offers an unbiased opinion to clients so they can decide how they would like to irrigate their property. They work independently from contractors, manufacturers or distributors.

Although irrigation consultants typically don't work directly with landscape contractors, they are important resources and can be a good source of knowledge for anyone taking on an irrigation project.

Irrigation consultants may give their clients, such as builders and property owners, a list of preferred bidders — contractors who have proven they can do a good job and do it on time.

So, it helps contractors to have knowledge of the consultants in their area they could work with. It could help land a major irrigation project if an irrigation consultant knows that a company has a reputation for doing good work.

"A consultant would say, 'Here are the products, here are the contractors, here's what we recommend,'" Colein says.

It also helps for landscape contractors to keep a finger on the pulse of what new technology or innovations consultants are incorporating into their plans. Consultants spend every day trying to design the most efficient and effective irrigation system, Colein says. So, in a lot of ways, they drive industry standards.

"Irrigation consultants have been known to start trends in terms of a new

product coming out," she adds. "Saying 'Yes, this is great.' They start specing it, and then a year later, it seems to be the industry standard. So, a lot of times, they're on the forefront of trends or the evolution of better design, a better system."

Additionally, many members of ASIC are involved in the Net Zero Water concept and work to promote the incorporation of rain catching, condensation, effluent water and tertiary-treated water into irrigation plans, Colein says. These measures may be adopted by contractors to preserve potable water.

Additionally, the Irrigation Association and ASIC teamed up and developed best management practices for irrigation systems, which can be used by landscape contractors who do irrigation installation. The three areas the document focuses on are design, installation and maintenance and operation of irrigation systems. According to Colein, it's a three-legged stool.

"You can have a great design, but if it's not installed properly, you've got nothing," she says. "You can have a great design that's well installed, but if it's not managed properly, you've got nothing. You need to have all three pieces of that puzzle, and they all need to work together."

This all plays into the bigger picture of preserving the right to use water to maintain landscapes, Colein adds. If irrigation systems are properly designed, installed and maintained, they can produce beautiful green spaces while still conserving an important resource. 



Carol Colein

### MORE TO COME

Check back in April for more content from ASIC.



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# FIVE QUESTIONS

INTERVIEW BY SETH JONES | EDITOR-IN-CHIEF

## Matt Nicol

**OWNER + FOUNDER**

**LIGHTSCAPE OUTDOOR LIGHTING, COLUMBUS, OHIO**

### 1 Why did you start your company?

I was passionate about landscaping, and was an artist, but I could never find a way to make a living with my art. I thought about doing landscape architecture because I could combine landscaping and artwork. Well, I went into the military and wasn't able to follow that (path) and ended up in the corporate world. I wanted to get back into landscaping and doing something creative. The corporate world was sucking the life out of me. I met Joel Mayor with Texas Outdoor Lighting ... He told me what he did and I said, "That's it!" I love lighting, I love landscaping, I have an artistic eye, so I started on that journey to start my own landscape lighting company.

### 2 What can you tell me about your military career and your connection to the movie "Lone Survivor?"

I enlisted in the Army Reserves when I was 17, a junior in high school. I followed my dream and became an Army helicopter pilot at age 21 — I did that for about 12 years — then I wanted to go see the world and do more, so I applied for the Air Force's pilot training program. I happened to be deployed during a specific time when we lost a high-value Navy SEAL team. The date was June 29, 2005. Some people may recall the date and Operation Red Wing. The movie "Lone Survivor" was created from that incident. I didn't remember until the movie came out and the date and incident were detailed in the movie — we were assigned one support mission to drop water, ammo and MREs to a company of Marines in the Tora Bora region of Afghanistan that was looking for Marcus Luttrell, the "Lone Survivor."

### 3 What's your favorite part of your job?

I love working with people. I cater to a high-end

clientele, and you meet some really fascinating people, some really successful people, and tackle some very complex lighting jobs on large homes. To be out there that first time, do the reveal with these clients and see their faces when we light up their homes — it is amazing.

### 4 How far and wide will you travel for a lighting job?

I'll travel anywhere; it just depends on the job. I'm currently working with a client in Blacksburg, Va. They have a 400-acre farm and very historical home from the Civil War in the mountains of Virginia. (The owner is) a retired Air Force general, so with my military/Air Force background and the historical significance of the home, it really fascinated me. One of the nice things about being an entrepreneur is that you can make those decisions. If I didn't want to do that job, I wouldn't go do it.

### 5 Tell me about the book you've written.

My book "Seize the Night" is an autobiography. It's subtitled, "One veteran's guide to overcoming darkness and finding a life of purpose." Writing a book was something I always wanted and had been encouraged to do. The book is aimed at helping those struggling to find themselves and their life's purpose — perhaps as a result of a failed career, marriage or other setbacks in life — and find their light in times of darkness and "seize the night" once and for all. 📖

### BEST ADVICE

**"When things get tough, a challenge or problem arises in life or in business, don't ever quit! Keep going. The lessons learned, the growth and sense of accomplishment achieved when you choose to persevere are critical to our mental health and success in life."**



## PHOTOS: WEEDS TREES AND TURF

issue of *Weeds, Trees and Turf* (LM's former name) featuring an article about hydraulic mowers hit mailboxes — landscape contractors would have dreamed of someday operating robotic mowers? Check out our cover story on pages 14-22 to find out more about how mowing technology has evolved over the years.



The new hydraulic mining applications that are now being delivered cover greater operator convenience and safety, machine productivity and versatility and operating economy for both rilling rotary and reel miners that cut through from five to fifteen feet wide.

Hydraulics, of course, are not unknown to smaller utility rowers and other turf care equipment. Hydrostatic transmissions are commonly used in our machines, with forward and reverse controlled by a single foot throttle. Hydraulics are also used for raising and lowering cutter decks and reel gangs by actuating another single foot pedal.

By themselves, these appliances enhance maneuverability in trimming, moving over obstacles such as curbs and in such transport. They also take the virtu-

To fully appreciate the many benefits of hydraulic *motoring*, the unique advantages of hydraulic systems over other forms of power transmission should be reviewed.

First, a hydraulic system is relatively simple, consisting of fluid, reservoir, pump, valve lines and motor or cylinder. Fluid flows from motor or cylinder. Fluid from the reservoir, put under pressure by the pump, is controlled by the valve in the line as it moves to the motor or cylinder that raises a counter block, rotates tools or rotates

Continued on page 1

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On the safety side, reels can be instantly stopped or started, and automatically discharge when spools are raised.

Hydraulics also lend themselves to improved machine protection through the use of monitoring devices that with warning lights and buzzers alert the need for attention before problems occur.

And adding to the productivity of these new machines are diesel engines that require far less atten-

## How to by fl.



tion that gas power, deliver better operating economy and have longer lives.

Not only will the new series of hydraulic towing machines cut more half before, they promise to give general maintenance budgets a proper trimming, too. And in these days of scarce dollars, diesel machines that perform so well in the dock as they do on a ledger is a real find in industry-inspector-and-towing.

WTJ

# succeed ailing

Designing machines that perform well and

MULIC from page 62

characteristic of a system is that it offers more a smaller package, equipment weight and economy. And, because transmitted by fluids and hoses that contain, components can move advantageously, then, too. For example, it opens and closes a dig infinite adjustment power applied as it is

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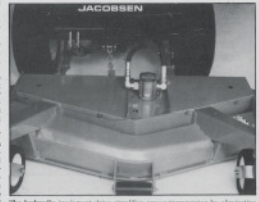
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centroids of leakage, wear or looseness. This could be a part of an overall check before the machine moves out onto the turf and when it returns.

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# Elements of an effective employee credit card policy



BY DANIEL GORDON

The author is a CPA who caters to landscape and lawn care firms. Reach him at [dan@turfbooks.com](mailto:dan@turfbooks.com).

**I**n the landscape and lawn care business, we find ourselves on the road solving many problems. As such, we often require supplies that can't be planned for, such as parts for our equipment, fees for mechanics who provide emergency repairs while on the road, meals while we're out and about and other expenses that need to be paid for on the spot.

Enter credit cards for our employees — a perfect way to solve the problem of on-the-spot payments. While distributing credit cards to employees is a great idea, you should have some policies regarding limits and usage to prevent employee abuse and overuse. The following are three best practices I recommend you implement as part of your employee credit card policy.


**Give cards only to trustworthy employees.** Remember, trust works both ways and providing some employees with credit cards may empower those employees and show you trust

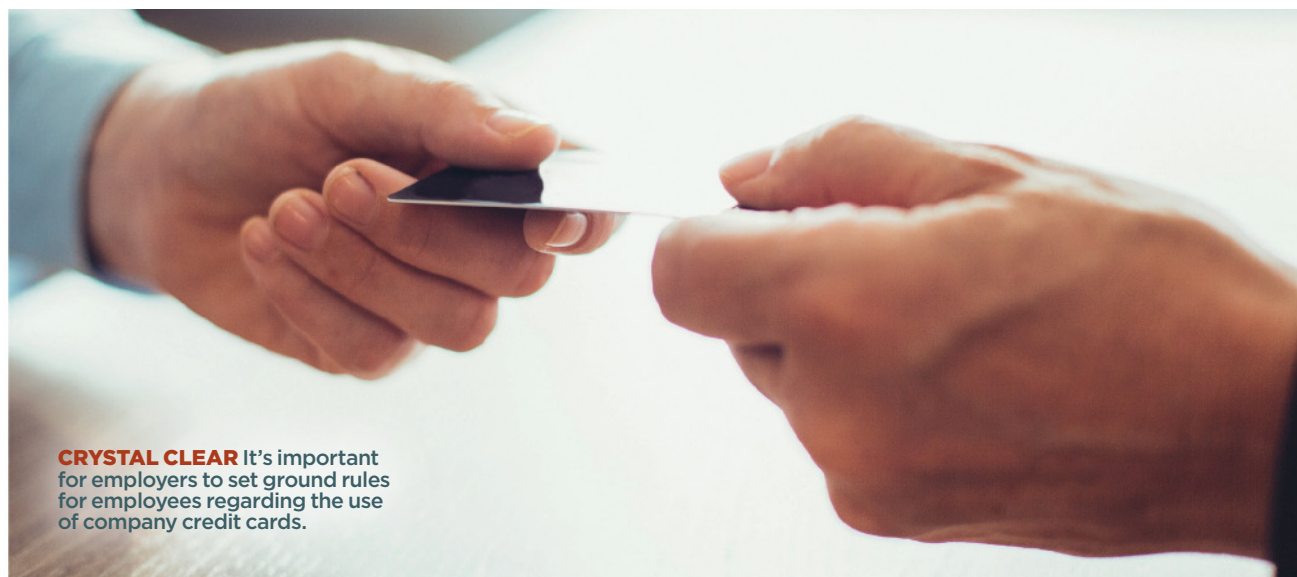
them. This move can be positive if done properly. If you distribute credit cards to your employees and then distrust them, it can lead to bad vibes between you and the employee and a possible decrease in productivity. Therefore, distributing credit cards only to employees who demonstrate maturity and fiscal responsibility is the first best practice you should consider.

**Lay out the rules.** Devise a workable and smart expense policy. This policy should define acceptable purchases, the limits on purchases that don't need approval, how the expenses should be submitted for reimbursement and if the company will pay the expense directly. It may be best to have a brief conversation with any employee who will have a credit card and carefully go over the guidelines. You don't want to find yourself with large charges that the employee believed he or she had the authority to make.

**Trust but verify.** Check your credit card statements regularly,

either by going online to analyze activity or downloading the transactions into QuickBooks. I highly recommend checking credit card charges daily, so you know exactly what is being spent and can identify potential fraud immediately. Question every charge you don't recognize. In addition to the downloads, many credit card companies offer smartphone alerts each time a card is used. Depending on the volume of charges, alerts can get annoying, but perhaps a supervisor can monitor this important, real-time activity instead of the owner. Control is vital. Remember, an unchecked credit card can do a lot of damage.

Building a company culture of prudent spending is key to an effective employee credit card policy. If you've hired the right folks, then issuing business credit cards shouldn't be a problem. Good employees will know when it's appropriate to use them and will follow your direction when you define what the cards are to be used for. 



**CRYSTAL CLEAR** It's important for employers to set ground rules for employees regarding the use of company credit cards.



**When operating a wide-area mower, keep in mind these key items to help ensure the job is performed safely and smoothly.**

- **Prepare the lawn or field for mowing.** Check the surface for items such as sticks, rocks, toys, sports equipment, dog bones, wire and equipment parts. Make sure items are not hidden in tall grass. Additionally, look for and mark immovable objects, such as pipes or partially buried rocks. Always walk the area and perform an inspection.
- **Beware of fixed objects.** Running into a fixed object can shatter the blade and throw jagged chunks of metal out of the discharge chute or under the housing. Obstacles such as ditches, rocks and stumps can throw you off the machine. Be especially alert when objects may be hidden by tall grass, weeds or brush.



- **Use the correct kind of mower for the job.** Check the operator's manual for the type of job your mower is designed to do.
- **Use heavy-duty blades when necessary.**
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### Submit by April 1

*Landscape Management* is accepting submissions for the **LM150** list, which will appear in the June issue. Entries are due by April 1.

The **LM150** is a list of the largest landscape companies ranked by annual revenue. **LM** has published the list annually since 2009. It has grown to include breakouts for customer mix, service mix, regions and firms with double-digit growth.



To submit your company's details, visit **LandscapeManagement.net/LM150**.

Contact **LM** Special Projects Editor Marisa Palmieri with questions at mpalmieri@northcoastmedia.net.

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# GROW WITH GRUNDER

BY MARTY GRUNDER

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## What's *your* Super Bowl?

**A**s I sit down to write February's column, the New England Patriots have just managed to secure their spot in the Super Bowl for a third straight season.

By the time you read this, we'll know for sure if they return home to Boston with the ring this year or go down in defeat to the Rams, but — love them or leave them — you can't deny the Pats' singular focus and drive. The team has a clear vision of where they want to go, and with Bill Belichick and Tom Brady at the helm, they don't waver from it.

Do you know what *your* company's Super Bowl is? Do you have a clear vision for *your* team? Just as important, does your team know what that vision is? Do you have the discipline to keep working toward it?

In my experience running Grunder Landscaping Co. (GLC) for nearly 35 years and coaching and consulting with thousands of landscape pros over the years, the concept of and need for a company vision is as clear as mud. Sure, we all want to succeed and make money, but many of us don't have a more

“... without a clearly articulated vision, you have no filter to run decisions through, and your team has no larger principle or motivation to organize around or work toward.”

specific destination in mind. And for many of our teams, it's blurrier still.

Why is this a problem? Because without a clearly articulated vision, you have no filter to run decisions through, and your team has no larger principle or motivation to organize around or work toward. Instead, you find yourself endlessly distracted by each new opportunity that presents itself or derailed by each new problem that arises. You can't focus on the bigger picture because *there is no bigger picture*.

Years ago, before we got smart about our vision at GLC, I fell victim to all of this and more. I would bid on jobs that weren't a good fit for our expertise or capacity and then scramble to deliver if we somehow won them. Every weekend, I would read a new business book and then eagerly stride in Monday morning with a whole new game plan for my team, leaving them whiplashed week after week. I'd see an opportunity to make money offering another product or service — selling Christmas

trees, cleaning driveways, peddling gift baskets — and leap right in without ever really considering if it was something I or my team could do well or even *wanted* to do.

Now, truth be told, I can't honestly say I am not guilty of some of this behavior still; most entrepreneurs have an ongoing thirst for what's new. But I can tell you that having figured out a vision for GLC — to be recognized by our clients, our team members and experts in our industry as the best landscaping company in our market area — has helped me and my team to focus. It's crystalized who we are and who we don't want to be. It's given us an inspiring goal to continually strive toward. It's empowered my employees to put the brakes on me when necessary. And it's given me as the CEO a litmus test for every significant decision I need to make: Will it help to get us recognized as the best, or won't it? Does it align with our vision, or doesn't it? If the answer is no, I know I need to pass.

Use the slower days of winter to really dig in and think about the vision you have for your company. Identify what your Super Bowl is, and help your whole team drive toward it this year.

See you next month! 📺




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