Nutrition.” They compared treatments of conventional dry granular ammonium nitrate with ammonium nitrate applied through a fertigation system. They found that nitrogen fertigation stabilized turfgrass nutrition during the last weeks of the bi-monthly fertilization cycles, with lower leaching levels.

What does this mean for the facility manager? Because fertigation gives micro-doses of nutrients, you won’t see the huge flush of succulent growth on plants and turfgrass found with granular fertilizers. Water requirements decrease, along with fewer grass clippings. “We conducted a test for the city of Santa Fe, NM, on several of their parks and found that water reduction went as high as 48% with nutrient injection systems. In the West, water conservation is the biggest issue today,” notes Chaplinsky.

Tim Schumacher, president of Bio Green Injector Systems, Las Vegas, NV, says fertigation offers contractors an important advantage with new landscape installations. “New plantings will look much better with the injector systems during the six-month to one-year warranty program on plant material. The chances of a call-back are much less.” He says many contractors lose plants because of high alkaline soil conditions in the Las Vegas area.

“Because an injector system can be used to buffer soil pH, plant losses and callbacks will decrease.”

Equipment for any program

Fertigation equipment costs for agricultural and golf course systems can get expensive, but it’s a different story for the landscape and sports field markets. Prices are all over the map and continue to decrease. Units with proportional injection are the most popular:

- Turf Feeding Systems’ unit for as little as $1,000 (Model 500 valve box-ground mount system) is specifically designed for ground mounting at office building complexes, parks, sport fields or large estates. It uses a commercial 15 x 21-in. lockable valve box, which contains a 15-gallon poly tank.

- Green Tech, a firm in Laguna Hills, CA, sells InjectaFLO™ fertilizer injection systems through two different divisions, Enhanced Technical Services (Dublin, CA) and Pacific Technical Services. “The InjectaFLO system includes a flow sensor that installs in the irrigation main line, conveying variable water flow rate data to an electronic batch control unit,” says David Gibson, CEO of Green Tech. “Pulse signals are then relayed to a metering pump that dispenses the correct amount of product for the acreage and flow rate.”

“A fertigation unit can cost around $8,000 for sports field applications,” notes Kruse. “Cost is the biggest objection I hear with fertigation. However, if the customer lets me take a look at his budget, I can show how a fertigation system actually saves money over a five-year period.”

Kruse likes a unit from Agri-Inject called Inject-Pro™, a five-foot high unit with a tank built right on the unit. It’s easy to use — “almost a no-brainer for the customer” — and includes a polyethylene base, a pump, mixer at the bottom of the tank, injector probe and a flow meter. Kruse says it is easy to drop on site and plugs into 110 power sources. It’s also available in 12-volt DC model and automatically adjusts pump output to water flow changes for consistent application.

What about residential fertigation systems? “A homeowner should expect to pay around $2,000 for a professional quality
Fertigation units are used to micro-dose nutrients to the 5.5 acres of turf and roses at the San Jose Municipal Rose garden.

unit. They don’t need the ‘bells and whis-
tles’ of a commercial unit, but should look for a quality unit with flow metering,” advises Kruse. Will this market be a significant factor? He says no, believing that most homeowners will shy away from fertigation, with the exception of the high-end homeowner with technical interests.

Others, however, think homeowner interest will rise. Bio-Green Injector’s systems for commercial and residential use range from $49.95 for a half-gallon injector system up to $330 for a 10-gallon system that will treat up to two acres. “We serve more than 2,000 customers, including Rio Hotel and Casino, Texas Station and the Las Vegas Strip,” says Schumacher.

How to get off probation

As head gardener at the 5.5-acre Municipal Rose Garden in San Jose, CA, Mary Heidler has her hands full. “Over the years, the garden shifted from an overhead watering system to a new system with flat popup spray heads and three InjectaFlo fertigation systems to control and monitor nutrient levels,” says Heidler. “The turf and rose beds are all on separate heads. The only granular fertilizer we use is a single February application of a systemic product.”

Heidler says each of fertigation units costs about $8,000. But the results have been worth it. “This is an All-American Rose Test Center. When I arrived three years ago, we were placed on probationary status by the organization. After a year with our new irrigation and fertigation system, we were taken off probation because of the improved health of the plants.”

But the system is not perfect, she cautions. “The one problem I see is our inability to use different fertilizers for the roses and the turf. However, we believe fertigation is promoting soil microbial activity — breaking up the top portion of our heavy clay soil.” To keep the program going, liquid fertilizer is delivered for two 55-gallon tanks. “Locate a reliable fertilizer distributor before you go with a fertigation system,” she notes.

“We believe fertigation is a good idea, especially at high-end properties,” adds Mike Schmitt, a manager of WaterWise Systems in Calabassas, CA, the water management division of Environmental Care Inc. “Fertigation offers more effective cost and use of time than granular fertilizer, given that irrigation systems are not that efficient.” Schmitt believes fertigation will become even more popular in the commercial landscape trade, particularly in low-volume irrigation systems.

However, he cautions it is essential to examine the distribution uniformity (DU) before considering a fertigation system. “Otherwise, you are wasting fertilizer just like water.” He recommends an irrigation system should have a minimum of 70% DU.

Kruse will not encourage customers to purchase a fertigation system unless they are willing to undergo water, soil and tissue testing. He says customers like New York City’s Central Park have seen the benefits of fertigation when combined with testing.

“If you can satisfy customer needs and also take care of the turf, it’s an economic home run. A compact-sized fertigation unit that features ease of installation and use will overcome most objections facilities managers might have with a fertigation system,” Kruse adds. LM

“The contractor must take a responsibility with fertigation. It is probably the most ideal way to fertilize in drip systems and on slopes, where granular fertilizers wash away.”

— Green

LM

—Robert Reaves, who lives in Austin, TX, is with Irricom, a public relations/communications firm.
TurfGrass Trends delivers...

...practical turfgrass management information you can use today, from the #1 research digest for turf managers. Begin your subscription right here, and see what you’ve been missing! Each issue is written by field experts, and includes leading-edge research and timely information for practical, proven answers to the your turfgrass challenges.

- disease management 
- nutrients 
- insect management 
- genetic improvement 
- irrigation 
- weed management 
- so much more in every issue!

"...helpful and informative. I believe this is a very valuable publication, especially as we all work to protect the environment."

Dr. Terrance P. Riordan
Turfgrass Plant Breeder
University of Nebraska

Yes! Begin my subscription to TURFGRASS TRENDS

U.S. & CANADA

<table>
<thead>
<tr>
<th>6 Months</th>
<th>$96</th>
<th>1 Year</th>
<th>$180</th>
</tr>
</thead>
</table>

ALL OTHER COUNTRIES

$210 (1 Year)


- My payment enclosed. (Make checks payable to TURFGRASS TRENDS.)
- Please Bill Me
- Charge my subscription to: 
  - VISA 
  - MasterCard 
  - American Express

Signature: ___________________________ Date: ____________

Account # __________________________ Exp. Date: ___________

Billing Address: __________________________________________

City __________________________ State _______ Zip/Postal Code _______

Fax completed form with credit card information to 218-723-9417 or 9437, or mail coupon with your payment to TURFGRASS TRENDS, 131 West First Street, Duluth, MN 55802-2065.

Charges will appear on your credit card statement as Advanstar Communications Inc., which publishes and distributes this magazine.

Name (please print) ________________________________________

Title ___________________________________________________

Business ________________________________________________

Address ________________________________________________

City __________________________ State _______ Zip/Postal Code _______

Country ________________________________________________

Internet/E-Mail Address _________________________________
Keys to satisfying (and keeping) clients

Top lawn and landscape pros share what they’ve learned about putting smiles on customers’ faces.

By ROBERT E. REAVES

Customer retention equals survival in the landscape business. Increasingly, it seems you have to provide legendary customer service to retain and grow your customer base. But once you catch the customer satisfaction fever, you’ll soon realize it’s contagious!

“I think customer satisfaction starts in the way we present and perform our service. If your delivery is good, it takes away the variables that promote dissatisfaction,” says David Harris, president of Liqui-Green Lawn and Tree Care, Bloomington, IL. His company provides fertilization and pest control for a customer base that is 90% residential and 10% commercial.

We’re always ready

“We’re on call 24 hours a day, seven days a week,” says Howard Freilich, CEO of Blondie’s Treehouse Inc., Larchmont, NY. His company is the eighth largest interior landscape management company in the country — with more than 800 clients in the New York City and tri-state area.

“The customer satisfaction philosophy is the foundation of our company and extends from our employees to our customers,” says Wayne Conrad, who built Clean-Cut in Austin, TX, which is now a part of TruGreen LandCare.

Pam Stark, vice president, client relations of Environmental Care Inc., Calabasas, CA, says ECI has a passion for customer satisfaction. “We reinforce the importance of customer satisfaction through an ongoing customer survey program, face-to-face client interviews and in-house training programs.” ECI has five divisions, including exterior landscape management, interior landscape, water management, golf course management and tree care. They have service centers throughout the United States.

“We’re in a service industry that must deliver excellent customer service,” says Richard Akerman, whose Northwest Landscape Industries, Tigard, OR, was an industry leader when it was purchased by TruGreen in 1998. “A company can deliver the absolute best quality landscapes, but if you don’t maintain exceptional customer satisfaction, you’ll probably lose the business.” With three branches in the Portland area, his business is 65% landscape management and 35% landscape installation.

Be quick on the draw

One important way to keep customers satisfied is to respond to service calls quickly.

“If nothing else, leave the customer a note and let them know you have an action plan. Your response time is very important because it lets the customer know you value their business,” explains Harris.

Written communication can be an effective tool. “After a contract is signed, we always send a letter thanking the customer for their business,” adds Matt Stano, owner of Stano Landscaping, Milwaukee, WI. The company’s services include residential
that you value them as a customer," he remarks. His commitment to customer satisfaction even extends to customers who have canceled contracts. "One example is to have focus lunches with people who have actually fired us. Several months later, many of these customers come back to us."

**Check and recheck**

Job site inspections are an essential part of customer satisfaction at every company we interviewed. Liqui-Green has an inspection program called GoldCare, with one to three inspection of a customer's lawns per year. "We look for any problems and make recommendations for a customer's future needs," Harris explains.

Clean-Cut has an impressive three-step inspection program for its commercial customers. Wayne Conrad visited accounts in his territory every Monday. He walked the properties and visited with the property manager about special needs or problems. The second visit of the week was by the Clean-Cut crew leader, who checked in with the property manager when the crew arrived at the site. At the end of the week, each property was inspected by the director of operations to ensure the work was done to the customer's satisfaction.

**Survey and find out**

Used correctly, surveys can be an excellent way to evaluate customer satisfaction and strengthen relationships with customers. When ECI begins a contract with a new customer, they survey the client about 60 days after the contract begins. Existing customers receive a written survey once per year. Survey results are tabulated by service center, region and division — providing an excellent snapshot of customer satisfaction levels.

"Complaints from customers are seen as an opportunity at ECI," comments Stark. After a service center receives a complaint, the service center manager contacts the customer to resolve the problem. Several weeks later, Stark contacts the customer to make sure the service center responded to their complaint. "We actually encourage complaints. When we take action and exceed customer expectations, it makes the bond even stronger between ECI and the client." Stark says this ECI philosophy is called "service recovery."

Harris believes surveys can be valuable when used under certain guidelines. "A company should use surveys strictly as surveys — not vehicles for up-selling a customer. In many cases, companies take surveys to the extreme and constantly use them for up-selling," he says. That can irritate clients.

Your customer satisfaction program? Build it on getting back to customers quickly, listening to them and delivering what they want — when they want it.

**Robert Reaves is with Irricom, a communication and PR firm located in Austin, TX.**

---

**Suggested reading on customer satisfaction**


Award-winning landscape management

A view to the north through the Rotunda Garden, where brilliant golden tulip ‘Monte Carlo,’ contrasting with ‘Coral Burst’ crabapples and lush green turf, welcomes agents and guests.

Employees share annual/perennial maintenance duties, rotating responsibilities biweekly. Weeding and pinching Coleus ‘Molta Lava,’ Impatiens ‘Dazzler Star Mix’ and Alyssum ‘Carpet of Snow’ maintain the colorful appeal.
Westfield Companies

The 1998 Grand Award Winner of the Professional Grounds Management Society for the Industrial or Office Park category.

The insurance company, which started in the back of a general store, now resides on a property of 600 acres with two 18-hole golf courses, a clubhouse complex and the home office. The home office complex is comprised of one large colonial brick building, entertainment center, print shop, inn, training annex and almost 20 rental properties. The landscaping staff takes care of both the home office and the clubhouse complexes.

Professionalism and excellence are essential with such a high profile/high use property. Minimizing impact on guests and golfers is a priority. All turf, paved surfaces, shrubs, trees, furniture, statues and most mechanical exterior features are managed by the in-house staff. The areas around the first tees on both golf courses are the in-house staff’s responsibility as well.

The back of the Entertainment Center borders on the South Golf Course holes, three greens and four tees. Timing of maintenance of this area is critical, minimizing disturbance to guests and golfers.

Editor’s note: Landscape Management is the exclusive sponsor of the Green Star Professional Achievement Awards for outstanding management of residential, commercial and institutional landscapes. For more information on the 1999 Awards, contact PGMS at 120 Cockeysville Road, Suite 104, Hunt Valley, MD; 410/584-9754.

Property at a glance:

- **Location:** Westfield Center, Ohio
- **Staff:** In-house
- **Category:** Industrial or Office Park
- **Year site built:** 1948-1994
- **Total acres maintained:** 600
- **Acres of turf:** 40
- **Acres of woody ornamentals:** 6
- **Acres of display beds:** 1
- **Total man-hours/week:** 40

Maintenance challenges

- preservation of birch allee with drip irrigation and improved soil composition
- year-round cultural practices to maintain premium-looking turf without irrigation
- annual color impact in spite of 30% budget cut

Project checklist

(Completed in last two years):

- new print shop landscape installation
- work order system with weekly task calendar
- issue department policy manual increasing training of staff

On the job

- 4 full-time staff, 5 seasonal, 3 licensed pesticide applicators
Problem with spruce

On one client's property, there are three Colorado blue spruce trees in the back and two in the front of the house. The three in the back yard are showing some problems. During the first week of May we treated all of the trees with carbaryl for spruce gall. The problems consist of browning of new growth and rusty color of 2- to 3-year-old needles. Any idea what the problem might be? What can be done now to help the trees?

— TORONTO, CANADA

Based on your description and the sequence of events, the problem is most likely related to phytotoxicity (plant injury) resulting from spraying carbaryl (Sevin). Several factors related to pesticide applications can cause phytotoxicity:

1. Improper mixing of pesticides (high rate).
2. Using a combination of incompatible products.
3. Treating at high pressure — thus blasting.
4. Treating on sunny days — if the mixture sits in the hose for a period of time, it can get very hot. When the hot mixture comes in contact with the plants it causes injury. Often the plants that were treated first may show more injury, with later treated plants showing less injury as the treatment continues. It is important to re-circulate the mixture back into the tank to avoid the mix from becoming too hot.
5. Dry soil — make sure soil moisture is adequate when treating in the future.
6. Plants under stress. Review your treatment program and evaluate treatment techniques to avoid problems in the future.

Wait to see how the plant recovers, then check the terminal buds. If they are green the plant should produce normal, new growth. However, if the buds are brown or black they are dead.

One other possibility for discoloration may be winter drying and/or mite feeding damage. Check for these possibilities.

Since the plants are stressed consider treating with a miticide to manage the potential mite problem. Providing the proper amount of water, fertilizer, mulch and pest management will improve plant vigor.

If it quacks

We have a serious problem with quackgrass growing in our flower beds, on areas of our house foundation and a little bit in our lawn. Is there a selective herbicide that will kill the quackgrass? What can be done to manage this?

— ILLINOIS

Quackgrass is a very aggressive perennial weed, with extensive underground rhizomes. It can spread rapidly in open areas, as well as other landscaped areas.

Once established, quackgrass can be difficult to manage. There is no selective herbicide for management. Very early in the developmental stage it can be selectively, mechanically dug. However, it is important to remove all underground rhizomes. If they are not removed, they can sprout and present a problem in the future.

Another option is a non-selective herbicide, such as Roundup, Finale or Scythe. These herbicides will kill a wide variety of vegetation in the treated area. While using these herbicides, make sure that the treatment doesn’t get on non-targeted plant areas. Also, product effectiveness depends on several factors such as concentration of treatment mix, actively growing quackgrass and proper coverage. The treated area may require reseeding.

Fire ants go to school

Is there anything we can use to manage fire ants in school grounds?

— TEXAS

Amdro Pro from American Cyanamid can be used to manage fire ants in several locations including school grounds. This has been recently added to the label along with other sites such as airports, roadsides and cemeteries.

Make sure that your pesticide applicator license will allow you to treat in these areas.

LM
Spread mulch and compost by hand is a costly, labor-intensive process. It limits production and puts workers at risk for injuries. The Express Blower will turn an inefficient process into a profit center and blow your competition away!

The Express Blower can be operated by one person, with remote control, in any weather, on any terrain. Spread mulch, compost, soil mixes, playground chips or any number of other organic materials for landscaping, lawn restoration, erosion control and much more.

With our ALL NEW Injection System, the Express Blower can inject seed, fertilizer or other additives WHILE BLOWING! Install a lawn with soil mix and seed, or blend weed inhibitors with mulch. You can even topdress and overseed turf with only one application.

Get a jump on your competition. Call today and find out how you can expand your possibilities with an Express Blower!

Visit our web site at
www.expressblower.com
A division of Rexius Forest By-Products, Inc., Eugene, Oregon
You're doing what!...

That's the response from most landscape contractors when they first hear about the all-new seed injection technique for lawn installation. Not only is it surprising that soil mix for lawns can actually be blown into place, but now seed can also be injected and blended with it to create the ideal method of lawn installation.

Rexius Express Blowers of Eugene, OR, has developed the "Supplemental Injection System" that mounts onto their Express Blower Trucks. These powerful systems can literally blow topsoil mixes right into place instead of the current practice of dumping and wheelbarrowing with large crews of workers. Simply put, any granular material such as fertilizer, gypsum, pre-emergent herbicide, polymer granules, and yes, even seed can be injected into the blow stream of compost and soil mixes while being applied.

The process is simple and takes only about an hour to install a typical 2500 sq. ft. lawn. With an Express Blower, you would arrive at a job site that has been prepared either by leveling or tilling the subsoil, and then the final 1 to 3 inch layer of topsoil mix would be blown into place with the seed completely blended throughout the mix. When the seed is blended this way, your germination rate increases greatly because the seed is warmer, stays moist and won't be disturbed by watering. With this beneficial environment for seed, germination can be expected in as little as 5 days! The contractor who normally performs 4 separate processes of placing soil, seeding, fertilizing and then raking the seed in, can combine all these methods into one complete process with an Express Blower in only one hour.

One other method of seeding, that is gaining much attention, is in the area of sports turf topdressing. Core aeration and compost topdress in sports playing fields for restoration of compacted soils is an ideal application for the Express Blower. The blower system is capable of blowing a fine, even layer of compost over the turf without driving conventional equipment on the play area. The process usually takes 2 to 4 hours and with the Express Blower injection system, the field can be overseeded at the same time. The cost savings to the customer and the potential profits to an Express Blower owner make this niche market an incredible opportunity for the future.

Companies all over the country are expanding their business and realizing the profitability of an Express Blower. They have tapped into several new markets and now spread mulch, compost, topsoil blends, playground chips, and even animal bedding for the livestock and poultry industries. They have also expanded into new areas of business such as turf topdressing and erosion control for highway departments and municipalities. If you are looking for an edge on your competition or a new business venture that will bring a high rate of return, the Express Blower is the key to expanding your possibilities.

For more information about the Express Blower log on at expressblower.com or call toll free 800-285-7227

A Division of Rexius Forest By-Products, Inc.
750 Chambers St., Eugene, Oregon 97402