From the company that brought you The Knock Out® Family of Roses comes a revolutionary family of hardy groundcover roses.

Drift® Roses are virtually maintenance-free with great resistance to rust, powdery mildew and black spot. Tons of flowers from spring to early frost with very attractive foliage. Their naturally dwarf, true groundcover size is perfect for small gardens and combination planters. Drift® Roses complement any garden in any landscape.

AVAILABLE IN PEACH, PINK, RED OR CORAL

From the company that brought you The Knock Out® Family of Roses comes a revolutionary family of hardy groundcover roses.
On the trail
As its name implies, Syngenta Flowers' Lantana Bandana Trailing Gold features a dense trailing habit with vibrant, golden-yellow blooms. Ideal for basket and landscape applications, this new vegetative annual features a large flower size, heat tolerance and an easy-to-grow mounding habit that spreads easily. Two other new-for-2009 colors in the Bandana series include red and pink, joining the existing varieties Orange Sunrise, Rose, Cherry and Cherry Sunrise. For more information, visit syngentaflowersinc.com.

Octopizazz
Terra Nova's Campanula Pink Octopus is a bellflower species with buds that open to weeping petals above strong, deeply cut foliage. Easy to grow and with a long bloom time, this herbaceous perennial thrives in full sun to part shade and in average, well-drained soil in Zones 5 to 9. It's equally at home in a border or container. For more information, visit www.terranovanurseries.com.

Dazzling dahlias
Fides' Dahlinova series of pot dahlias are well-branched, medium-sized plants with a medium-sized, well-shaped flower. Joining such established varieties of Alabama, Carolina, Colorado, Lisa, Montana and Oregon this year are the bi-colors California, Louisiana (pictured) and New York. With attractive foliage and a uniform habit, Dahlinova flowers from spring to fall and combine nicely with one another, although they each have their own beauty and shape. For more information, visit dahlinova.com.

Bring in the butterflies
Lo & Behold Blue Chip buddleia from Proven Winners is a deer-resistant, miniature butterfly bush that is easy to grow and maintain. Its height ranges from 24 to 36 in., and its width is about 30 in. The plant features a tidy, attractive habit that makes it an easy choice for container gardens, perennial beds and mass plantings. With loads of fragrant, long-lasting blooms, the drought-tolerant bush has a hardiness range of Zones 5 to 9. For more information, visit www.provenwinners.com.
Advanced chemistry that leaves caterpillars speechless.

DuPont™ Provaunt™ insecticide has earned high praise for its outstanding performance against turf and ornamental pests, including sod webworms and leaf-feeding caterpillars. Even with its low application rates, Provaunt™ performs extremely well. What's more, its active ingredient has an excellent environmental profile and was classified as reduced-risk by the EPA. Learn more by calling 1-888-6DuPont (1-888-638-7668) or by visiting us at proproducts.dupont.com.

THE MISSION
Kinsella Landscape creates a homeowner’s respite by combining natural stone and lush greenery.

When Kinsella Landscape’s John Algozzini and Baltazar Madrigal, the project designer and superintendent, respectively, first took on the neglected back yard in Chicago’s Lincoln Park neighborhood, they knew there was nowhere to go but up. The homeowners wanted a patio for entertaining and to function as an open space for children to play simply by moving furniture.

With a budget of less than $150,000 Algozzini, Madrigal and their design team of Kim Conerty, Renee Mercer, David M. Singler and Erin Canterbury went to work on the 1,200-sq. ft. space.

“The design focuses on a strong sense of geometry, with curvilinear raised beds and some repetition of plant material,” notes Algozzini, adding that the plantings included Japanese forest grass, Astilbe, lady’s mantle and Hostas. Several trees had to be dropped in by crane, including Parrotia, a weeping nootka false cypress and a weeping Japanese maple.

Working in a tight 40- x 60-ft. space required efficient planning and staging, he says, so a lot of focus was given to the large central space — raised planter beds with trees and subordinate plantings that added texture and warmth.

Another big challenge was drainage. “The patio surface was 11 inches below street level, which required a sophisticated and comprehensive drainage system,” Algozzini says. The clients required natural stone be use throughout the space, so the Kinsella team turned to Bright Ideas, New Lenox, IL, for lighting design. Rotund planters and other pottery accents were supplied by Laura Johnson of Chicago.
THE WORK

1 | STARTING FROM SCRATCH. This overhead view from an upper balcony shows the degraded condition of the back yard before the initial demolition.

2 | BLUESTONE TILING. The “after” overhead view shows a dramatic improvement. The warmth of the garden provides contrast for the clean lines of the precision-installed bluestone patio.

3 | NO SIMPLE TASK. An 80-ton crane drops a 14-ft. weeping nootka false cypress into the back yard.

4 | PATIO BUFFERS. This is one of five raised planter beds that break up the space around the patio.

5 | FEELING CURVY. Curved walkways lead into the back gardens from both the alley and the street. Note the soft lighting added along the wall for evening enjoyment of the space.

Based in Blue Island, IL, Kinsella Landscape operates on the principle of “providing exceptional service using the best practices in the Green Industry.” The $12 million firm was founded in 1994 and currently employs 120 people. Services include design, construction, maintenance, seasonal flower rotation, holiday decoration and snow removal. For more information, visit www.kinsellalandscape.com.
Every day you see horticultural problems. Sometimes the solution is obvious, but others are much more difficult to solve. Brickman Group Senior Horticulture Specialist H. Bruce Hellerick tackles these issues each month in Problem Solver. He can be reached at Hellerick@BrickmanGroup.com.

**Problem**

Many landscapes have vast daylily plantings, which are spectacular when in bloom. But after the daylilies have finished blooming their dead flower stems and yellowing foliage detract from the landscape’s image. What would you do to improve the appearance of these beds?

**Solution**

Some contractors prune or pull out the individual spent flower stalks and remove the dead foliage, but this is too time consuming. With this method, you need to return on a weekly basis to continually remove other dead foliage and frankly, I’ve got more important things to do.

The most effective and efficient way to detail these daylily beds is just as the daylilies have finished their bloom cycle prune the whole plant 3- to 6-in. from the ground. With this process you remove all the dead stems and plant material at one time creating tidy green mounds. The process works particularly well with the early flowering, re-blooming types of daylilies like Stella d’oro, Happy Returns and Pardon Me, which will quickly flush out with new clean foliage and new blossoms for the remainder of the season.
By Chris Kujawa, President  
Project EverGreen Board of Directors

Just four years ago, with the support of our contributors, staff and industry partners, Project EverGreen launched an effort to educate consumers about the environmental, economic and lifestyle benefits of responsibly managed green spaces. We are happy to report that as consumers have learned to think of landscapes as “lifescapes,” the landscape of our business has also become a “lifescapes.”

This past year, our mission was refined: “To preserve and enhance green spaces in our communities for today and future generations.” We remain committed to winning the hearts and minds of consumers by using local grassroots efforts to carry the resonating message about green spaces throughout America—ultimately sustaining the vibrant green industry that makes it all possible.

Highlights from 2008:

- We have been working closely with other green industry associations to help educate consumers about how we are positively impacting green spaces.

- Elements for a green industry curriculum were provided to the National FFA organization and will be developed in 2009 for 8,000 schools across America.

- We enhanced our affinity club web site, Yard Enthusiasts of America (YEA), for consumers.

- We officially launched Project EverGreen in Canada and plan to hire a staff person there later this year.

EverGreen Zone Grassroots Education Program Launched in Akron, Ohio

- Independent research verified we increased consumer awareness about the benefits of green spaces by 22 percent. By educating consumers through the EverGreen Zone concept, we are changing consumer attitudes.

- Program expanding to a second EverGreen Zone in Milwaukee, Wisconsin, in 2009.

Change in Awareness:

- 22%  
- 14%  
- 20%  
- 54%

GreenCare for Troops Grows by 25 Percent

- Approximately 7,000 military families and more than 2,000 volunteers are involved.

- A two-minute story on NBC Nightly News and the weekend Today Show highlighted our national media campaign, and consumer media impressions exceeded 25 million impressions in 2008.

Help Us Spread the Good News About “Managed Green Spaces”

1. Continue your financial support of Project EverGreen because “a rising tide lifts all boats.”

2. Consider joining a unique contribution support program that includes valuable benefits for you and your family. The $1,000 contribution you make to Project EverGreen through this program is returned to you in-full in the form of monthly gasoline and grocery vouchers—and your gift to the organization is tax deductible. Please go to www.ProjectEverGreen.com and click on Greenback Payback Program for more information.

For more information about Project EverGreen go to www.ProjectEverGreen.com or call us toll-free at 1-877-758-4835.
SPRINKLER TECHNOLOGY ADVANCES

New nozzle types join tried-and-true favorites to give landscape irrigators more choices

BY RON HALL EDITOR-AT-LARGE

THE GOAL OF any turfgrass irrigation system is to provide the precise amount of water to meet plant needs — no more, no less. While this may be possible in a manufacturer's sprinkler testing chamber, it's a bigger challenge on customers' landscapes.

Factors such as wind, slopes and depressions within an irrigated area, and the design of the landscape itself, test any system's efficiency. To address these and other variables, manufacturers offer a range of sprinklers to irrigate landscapes, which themselves, of course, vary greatly, from small ornamental beds to acres of turfgrass.

Sprinklers are generally divided into two categories:

1. **Fixed spray heads** disperse a fan-shaped pattern of water. Interchangeable nozzles determine the pattern and the distance the water is thrown, although generally not beyond 15 to 20 feet. Spray heads need 20 to 30 psi of water pressure to operate properly.

2. **Rotors** are usually spaced farther apart than spray heads and operate by rotating streams of water back and forth across the turfgrass. Of the several different types, the most common are impact and gear-driven rotors. Rotors need more water pressure to operate than spray heads — 45 psi or a little higher — and they irrigate a larger radius of landscape than spray heads.

**Too much pressure?**

A landscape's size and design often dictate the installation and use of both spray heads and rotors. Therefore, controlling the pressure within the optimum pressure ranges at the nozzles of the sprinklers is a challenge, yet crucial to efficient irrigation. Too
much pressure breaks up the spray pattern, causing small droplets (misting) that reduces the radius of the spray pattern. Too little pressure, and the drops of water are too large, and the area immediately surrounding a sprinkler gets too little water.

“The big challenge when installing systems is that the water pressure can vary all over the place,” says Jeff Marcinowski, rotor product manager for Rain Bird, “from neighborhood to neighborhood, from property to property, and even on the same property, from the top of a hill to the bottom of a hill, for example.”

There are several ways to control pressure delivered to sprinklers, but that’s a subject for a future article. Instead, let’s address sprinklers and nozzles, specifically their role in delivering irrigation uniformly across turfgrass.

How well they do this is known as distribution uniformity (DU). Poor DU causes some areas of the landscape to receive too little water, resulting in dry (brown) spots. Customers don’t like dry spots, so they run the system to green them and over-water the rest of the landscape.

DU breakthrough

The design of the sprinklers is not the culprit behind poor DU; rather, it’s improperly spaced, poorly maintained or broken sprinklers. In fact, a number of sprinklers on the market have proven their reliability over time, and continue to be offered for sale and provide high levels of irrigation efficiency, like Hunter Industry’s MP Rotator and the sprinklers that fall under Rain Bird’s Rain Curtain Technology and MPR Series Nozzles to name just two.

This spring a new nozzle technology promises to improve irrigation efficiency even more. Toro Irrigation’s Precision Series Spray Nozzles drew a lot of attention at this past fall’s Irrigation Association Conference, and was selected as the best new product competition in the Turf/Landscape category.

These spray nozzles dispense water by creating one or more high-frequency oscillating streams to achieve desired radius and arc. The nozzles reduce water flow to 1 in. per hour — about one-third less than competing products, says Jeff Fisher, a product marketing manager at Toro Irrigation. They also feature matched precipitation rates.

“The nozzle is a one-to-one replacement for what is already in the
Toro’s new Precision Series Spray Nozzles feature unique oscillating spray action. "You just take out the old ones and put new ones in. It’s like replacing a light bulb with a new compact fluorescent bulb. You can easily train technicians to do this."

The new nozzles will save 30% to 40% of irrigation water over competing brands without the need to change run times,” claims Fisher. Production began in February, and the nozzles will be on the market this spring, he says.

Quality engineering
Tour an irrigation product manufacturing facility, and you will appreciate the challenges of designing and producing products that deliver landscape irrigation water where it’s needed — and in consistent, precise amounts.

On a recent tour of the southern California campus of Hunter Industries, we witnessed irrigation products being manufactured and tested. Our mid-

afternoon visit gave us a glimpse into the engineering that goes into every spray head or rotor, the products you typically see operating during testing.

Our tour through the Hunter molding shop revealed the care taken in production of the company’s MP Rotator rotors, a popular product line introduced in 2002. During the molding and assembly process, these matched-precipitation-rate rotors undergo multiple cycles of quality control. In all, 19 critical dimensions of these rotors are measured — many via magnification — to guarantee that they’re defect-free and meet the company’s claims of high uniformity and lower application rate.

Proven technology
Another proven and popular technology is the Rain Bird Rain Curtain Nozzle Technology that is featured on all of the Azusa, CA-based manufacturer’s rotors. Two patented nozzle designs — one for small- to mid-range nozzles and the other for long-range rotors — are used to deliver water for even distribution.

Rain Bird’s Marcinowski says the design of the nozzles ensures the delivery of large droplets for accurate longer-range irrigation, while also providing excellent close-in watering for even water distribution.

This technology, along with the company’s MPR (matched precipitation rate) Nozzles and its PRS Stems and Dials complete what Marcinowski describes as the “three-legged stool of irrigation efficiency.”

Referring to his company’s wide selection of spray heads, rotors and nozzles, Marcinowski comments it provides end users “the ability to use the right product for the right application.”

The comment, in fact, fits the product category as a whole, regardless of manufacturer. There’s a variety of highly engineered products from which to choose; the challenge being to match the right products for each site’s unique irrigation challenges.

PHOTO COURTESY TORO