## Penn Pals Profile:

A portfolio of creeping bentgrasses perfect for your plans... from the world's foremost marketer

<table>
<thead>
<tr>
<th>Scientific name: Agrostis stolonifera</th>
<th>Growth habit: Spread by aggressive stolons</th>
<th>Shade tolerance: Fair</th>
<th>Heat tolerance: Good</th>
<th>Cold tolerance: Excellent</th>
<th>Traffic and wear tolerance: Very good</th>
<th>Seeding rate, greens: 1 to 1 1/2 lbs. per 1000 sq. ft.</th>
<th>Seeding rate, fairways: Up to 50 lbs. per acre</th>
</tr>
</thead>
</table>

### Penncross

**For tees and greens**

The standard for creeping bentgrasses since 1955 and still the most specified bentgrass for golf courses. Recovers quickly from injury and divots. Good heat and wear tolerance. First choice of golf course architects and superintendents.

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- The Vintage Club
- Troon North Golf Club
- Wolf Run Golf Club
- Eagle Crest Golf Course
- Kananaskis Country Golf course

### Penneagle

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- Butler National Golf Club
- Pumpkin Ridge Golf Club
- The Merit Club
- Inverness Club (Toledo)
- DesMoines Country Club

### PennLinks

**For new greens, green renovation and overseeding**


A few fine courses with PennLinks greens:
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- Inverness Club (Toledo)
- SandPines Resort
- Prairie Dunes Golf Club
- Baltimore Country Club
- Wild Wing Plantation

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- Riverwood Golf Club
- (winter overseeded greens)

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The key to maintaining a positive public image

June is a month when golf superintendents and landscape managers should strive to be visible—if for no other reason than to earn some well-deserved pats on the back from golfers or customers.

It’s a month when the grass is at its greenest and ornamental color is at its brightest. It’s a month—unlike the hustle and bustle of April and May—when you can settle down a bit and appreciate being at the “top of your game.”

It’s the month before the raging heat of summer ignites frazzled tempers among customers and employees, and it’s the month before the grass fries and the ornamentals wilt.

As you enjoy the accolades, though, don’t forget that they don’t last all year. And take note of the common thread running through this issue of Landscape Management: how you, as a professional in this “green” business, can improve your image among golfers, clients and the public at large.

One notion, prompted by Greg Petry, is that you should belong to a professional organization.

But just “belonging” and “playing an active role” are birds of a different feather. It’s easy to pay your annual membership dues to organizations like those listed at the left, just so you can say you’re a member. It’s quite another thing to attend the annual convention and/or volunteer for regional committees.

Every year, the attendance at the GCSAA convention is amazing. There are about 15,000 golf courses in the U.S., and attendance at the annual convention exceeds 15,000—in stark contrast to low attendance at other national trade conventions, which we find incomprehensible.

For instance, there are more than 40,000 landscapers and lawn care companies in the nation and goodness knows how many captive, in-house groundsman. Yet the Green Industry Expo attracts barely 4,000 each year.

If everyone working in the green industry took a hint from their golf course counterparts, we’d see the development of a much more professional industry very quickly.

Here’s the key, people: make sure the organization you work for—whether it’s your own or someone else’s—provides generous educational travel allowances. Many golf superintendents have a trip to the annual convention built into their contract.

As part of your continuing education and as you strive for ever more professionalism in your career, it’s only right to expect your employer to pay for at least one annual educational trip. And in these days when intelligent, productive employees are in high demand, you can justifiably request such extras.

These days, employee education is a cost of doing business. In most industries, generally speaking, it’s a “given”—as it should be in this industry.

So if you haven’t got a formal agreement with your employer (either verbal or written) to attend at least one national convention every year, you’re missing the boat. And if you are the owner yourself, you should have a healthy line item in your budget to send key employees to important national conventions.

Anything less would be an injustice to the green industry and—more importantly—to your own organization.
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Two types of Poa annua exist. You should vary your control procedures according to which kind you have.
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Look, look and look some more, says pathologist Richard Buckley of Cornell University. Then begin to ask questions.
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A special Task Force's six-year test should wrap up by year's end. Data shows no evidence linking the herbicide with ill health.
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Steam-sterilized horse manure with mineral additives is a great moisture-holding element in the soil.
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The Fertilizer Institute has been inundated with phone calls after it was determined that fertilizer was used as an explosive in the tragedy in Oklahoma City.
Terry McIver
Returning clippings to turf
Problem: The pickup and disposal of turfgrass clippings present a problem with our contract mowing operations. We have thought of leaving the clippings in the lawn. What are your comments, and are there any other options to manage clippings and recycle nitrogen? (Pennsylvania)
Solution: Reports suggest that grass clippings, when left in the turf, tend to reduce turfgrass quality over time, when it is intensely managed. Clippings should be removed when the grass is too long, or they will have a higher potential for further development and spread of disease.
If the turfgrass is growing too rapidly, excessive clippings or heavy deposits of clippings should be removed.
This is particularly important with golf courses because heavy deposits of clippings may interfere with play. However, on lawn turfgrass, clippings may not present a problem unless they remain as large clumps on the surface.
Do not let the turfgrass grow too tall. Mow regularly at the recommended height, depending on the particular turfgrass cultivar. You may have to mow more often within different months of the growing season. For example, in the spring and fall, you may have to mow more often than you do during summer months.
As a rule, mow the turf when the blades grow a half-inch above the recommended cutting height and do not remove more than a third of the growth at a given time.
Avoid mowing the grass when it’s wet.
Generally, properly cut clippings do not contribute to thatch development. Instead, they can decompose, release nitrogen and help reduce the total nitrogen needed for the season. Turf grown under a low-intensity fertilizer program can benefit by returning the clippings. Clippings should be removed if the blades are too long to decompose quickly, or have the potential for spreading diseases.
Mulching mowers are another option. Mulching mowers shred the clippings so they can decompose and release nitrogen quickly.
Mulching mowers are more difficult to use when turf is too tall or wet. The nitrogen content of dried clippings normally ranges between three percent and five percent. The source of the nitrogen from clippings would be a slow-release from microbial decomposition of blades. Proper moisture and temperature will enhance this process.
When possible, consider using growth regulators, such as Cutless 50W, Embark 2S or Primo, to reduce turfgrass growth and reduce the total amount of clipping biomass. Growth regulators are used more often on low quality turf such as banks and along roads.
However, these can also be used on residential and commercial turfgrass. For contract mowing, Primo is particularly helpful in recycling clipping volume while maintaining turf color. These plant growth regulators can play an important role in a yard waste clipping disposal problem.

Avoiding degradation
Problem: We recently learned that Oftanol can be broken down by certain bacteria in the soil, and that scientists recommend that you not use the product each year. How often do we switch or rotate these insecticides. Do we rotate every year or once in a while? (Michigan)
Solution: Bacterial degradation of sensitive organophosphate insecticides has been known in the scientific community for a number of years. It is best not to use any one organophosphate insecticide such as Oftanol or Dursban year after year.
Switching products every year or every two years should reduce bacterial buildup and the insecticide degradation problem. To alternate with sensitive organophosphates, which are subject to bacterial degradation, consider using products such as Dylox (or Proxol), which are not known to be affected by rapid bacterial degradation. Reports have indicated that carbamates, such as Sevin (carbaryl) may be affected by the same bacteria that degrade Oftanol.

Will oils work against woolly adelgids?
Problem: We have severe problems with hemlock woolly adelgid in our area. How effective is horticultural oil? (Missouri)
Solution: Hemlock woolly adelgid can become a destructive pest if not managed. The adelgids can cause premature leaf drop and twig dieback, and cottony sacs are found attached to twigs. A two percent solution of highly refined horticultural oil will help. Treat the hemlocks in late April to early May and again in mid-July. Or try two percent insecticidal soap. Neither has a long residual, so provide additional applications as needed.
Avoid treating when the plants are under drought stress to reduce phytotoxicity.

Dr. Balakrishna Rao is Manager of Research and Technical Development for the Davey Tree Co., Kent, Ohio.

Mail questions to “Ask the Expert,” LANDSCAPE MANAGEMENT, 7500 Old Oak Blvd., Cleveland, OH 44130. Please allow two to three months for an answer to appear in the magazine.
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Sam Grassle couldn't understand what was happening. He hadn't changed anything about his lawn/landscaping business in 10 years, but his customers seemed to be deserting him one by one this spring. He'd dutifully cared for every lawn on the route, painstakingly applied just the right mix of fertilizers and herbicides, and by the beginning of May he thought they were all looking pretty good. Yet 15 of his best customers had cancelled.

Mel Truturf, in another part of town, was also perplexed. His golf course looked better than ever: green, weed-free, immaculately groomed. Yet he was hearing initial rumblings of disapproval from some club members.

What Sam and Mel didn't realize is that, on an almost subconscious level, the public's confidence in synthetic fertilizers and pesticides could be slowly eroding. Sam's customers, especially, were worried about the effects of the materials on their children, most of whom weren't even born 10 years ago.

In today's America, one of your priorities should be heading off the confusion and despair created among customers by the media and environmental alarmists.

In the Public Eye

The green industry is facing an identity crisis. The public is confused over the conflicting messages it's getting from professional turf specialists on one hand and the mass media and environmental alarmists on the other. Homeowners and golf enthusiasts are even beginning to question the value of high-end land maintenance.

Radio commentator Paul Harvey hounds the golf course industry. The Wall Street Journal runs a headline that reads "Golf Courses Denounced as Health Hazards." USA Today exorts its readers to "Be Wary of Lawn Chemicals."

As Dr. Frank Rossi of the University of Wisconsin told golf course superintendents earlier this year, "The media focuses on the controversial and the sensational...events that may be very isolated. And somehow this is filtered into a fair amount of confusion and despair. The impact of information about the environment and golf can be devastating, and it's caused us to rethink many of the things we do in this industry. The environmental literature—particularly the sensationalized media—have forced us to explore the benefits of what we're doing."

The dawn of the 1990s brought a more judicious attitude among professional users of synthetic fertilizers and pesticides—even though those products are, beyond a shadow of doubt, not harmful to humans when properly applied. Neither are they generally harmful to the environment; most biodegrade naturally after a few days or weeks.
Landscape potshots—Newsweek magazine was one member of the media that jumped on the bash-turf bandwagon last summer with an article titled "The New Turf Wars: A Plague of Critics Bushwacks the Venerable American Lawn." In the article, reporter Malcolm Jones Jr. told readers: "Biologists, social critics and even gardeners are charging that the billions we annually spend on lawn care and gardening waste water and petroleum, pollute the environment with pesticides and fertilizers, and destroy animal habitat."

To answer some of the critics, more lawn and landscape companies are letting customers define their individual levels of service, whether it's using strictly biological (natural) controls, or just one application of fertilizer and weed control, or the whole gamut of five to six rounds.

"We apply broadleaf weed control only where there are broadleaf weeds," says Jack Robertson of Robertson Lawn Care, Springfield, Ill. "We're using about 20 percent of the pesticides we'd use if we were doing a broadcast spray.

"We want customers to know that it's okay to have a couple of weeds. If they want 100 percent weed control, we can do that, but it's basically a trade-off."

Another way to answer the public's skepticism is to use newer pesticide brands that are effective at lower rates. Robertson reports excellent customer acceptance of products such as Barricade for crabgrass control, Merit for white grubs and Manage for yellow nutsedge.

"Without a doubt, we're doing more customer education than ever before," says Robertson. "We are telling our customers that we're trying to use the newest, most advanced products that we can, products that are better for our applicators—who use them every day—and better for the environment."

Basic manufacturers are getting into the act, too. DowElanco (which markets such materials as Dursban, Balan, Team and Gallery) bought a four-page supplement in the July, 1992 issue of Flower and Garden magazine. Its title was "The Pesticide Decision," and its purpose was to present scientifically-proven facts to homeowners about DowElanco's products.

Rough on golf—More golf course superintendents are letting roughs and out-of-play areas "go natural" and adding environmentally-friendly features like birdhouses and nesting areas. More than 400 courses have signed into the New York State Audubon Society's Cooperative Sanctuary program, including all 11 TPC courses.

"You've got to reach out to the community and remind them that your golf course is an (environmental) asset," says Peter Leuzinger of The Ivanhoe (Ill.) Club. "Once you get involved with something like the Audubon program, it's just a matter of showing off. Eventually, your words will spread. You want to set the tone of, 'We're lucky to have that golf course next to us.'"

Gordon S. White Jr., in the May 3, 1993 issue of Business Week, puts the Audubon's program in perspective:

"Instead of solving a temporary problem such as white grubs in the fairways by using... pesticides. [New York Audubon executive director Ron Dodson suggests the superintendent 'move some roses to another location on the property so that the white grub or Japanese beetle also moves.' People should think of alternatives to dropping that bomb [applying pesticides].]

Golf courses are becoming environmentally friendly in other ways. The Natural, located in Gaylord, Mich., maintains just 17 percent of its total surface area as manicured turf. The rest is undeveloped, untouched natural (not naturalized) land.

Skip Wade of the Cherry Valley Club in Garden City, N.Y., decreased the amount of fungicides he's using from 1000 pounds in 1987 to 240 pounds in 1992 by culturally controlling diseases. He's using biological products to control insects, too, and has continued on page 10
decreased his insecticide use from 460 pounds in 1987 to a low of 18 pounds in 1990.

Wade doesn’t schedule treatment for some problems like leaf spot disease. “Don’t panic,” he advises other superintendents. “Learn to live with it. I’m not the greenest course in the world, but the membership is fully supportive.”

“We’ve only got about five more years to make our courses environmentally friendly.”

What to do—Education and research are the keys, say experts.

“It’s essential that every person become aware of environmental issues and do everything possible to enhance the environment,” says USGA Green Section director Jim Snow.

He believes the public has four main concerns—most of which apply not only to golf courses but also to home lawns and landscapes:
- use of some water resources;
- pollution of water;
- loss of natural areas; and
- effects of fertilizers and pesticides on people and wildlife.

“We have a more environmentally-aware industry,” observes Snow, who says the USGA Green Section will concentrate even more effort and money on examining the effects of golf courses on wildlife. “We’ve come a long way, but we haven’t reached the top of the hill yet.”

Rossi believes that the green industry is not yet reaching the public with the right information.

“Up to recently, we have had very little impact on the decision-making process,” says Rossi. “We still have a public loaded with USA Today, which has] a very large impact on the decision-making process.

“Environmental issues are not at the top of the list nationally; taxes, crime, welfare and jobs are. This doesn’t mean that you can stop worrying. A lot of information needs to be put in a format that the public can understand. Our job is to take the complex and make it so people can understand it.”

Rossi likes to quote William Reilly of the Environmental Protection Agency: “Huge sums of money are spent on hypothetical risks experienced by a few people while ecological matters affecting millions of people are being overlooked.”

The bottom line? Hal—Michael Fumento, author of the book “Science Under Siege,” sees environmentalists (which he calls “Greens”) as the real opponent, not the media.

“The Greens blindly trust Mother Nature and blindly contest anything made by man,” Fumento contends. “They are trying to blame every evil on the planet to technology, so I have proposed the banning of all environmentalists to the North Pole where they can spend the rest of their lives contemplating the ozone hole.”

Realistically, that may not be the answer. But it brings a smile to the faces of those of us in the green indus-