Since we replaced our Bluegrass fairways with Penneagle, player satisfaction is up 500%!

Bill Byers completely renovated all 36 fairways at Des Moines Golf and CC over a period of three years...nine in 1985, nine in 1986 and the remainder in 1987.

Three days after spraying the existing bluegrass/Poa annua fairways with a non-selective herbicide, Penneagle was slit-seeded into the surface. When play resumed in seven days, members had the option of playing from the germinating fairways or taking a drop in the rough.

Bill finds that lightweight mowing keeps the Poa population in control. "I used the clippings for garden mulch one year, that resulted in a terrific stand of Poa. This illustrates the effectiveness of removing clippings and seed heads."

Overall, the new Penneagle fairways require less water than trying to maintain the old bluegrass/Poa fairways, and Penneagle proved to be drought tolerant during the dry summers.

"Bentgrass fairways are in demand in our area. Other courses in Des Moines have made the switch," says Bill, "And we find that our player satisfaction is up 500%.

Oregon Certified  PVP 7900009
Penneagle is one of the "Penn Pals"

Bill Byers, CGCS
Des Moines Golf and CC, Iowa
You would think that *Mother Earth News* magazine would be the last place you would see an article complimentary to some of the professional landscaper/golf course superintendent's tools.

"Tools," in this case, refers to fertilizers and the various pesticides used to maintain healthy, beautiful trees, shrubs and turfgrasses.

Yet, in the June/July issue of the aforementioned environmentally-oriented publication aimed at consumers, an article by Lane L. Winward titled "The Natural Lawn" painted a pretty accurate picture.

"Many individuals define...synthetic...as something that is unnatural and therefore undesirable. In the case of fertilizer, this is not quite true," Winward correctly points out in the article. "Most synthetic fertilizers are made up of the exact same elements as natural fertilizers. The only difference is that synthetic fertilizers are more concentrated."

Winward goes on to accurately describe the foibles of turf maintenance. He says that biological pest controls have yet to be perfected, and that "organic methods of weed control [hand-weeding, cultural controls] are simple to recognize but difficult to put into practice."

Most importantly, Winward sums up the article by saying: "The beauty that is presented by deep green carpets of grass is too great to risk its being lost because such methods [fertilizer and pesticide use] are not ecologically responsible."

It sounds like he's saying the risk/benefit scales (the ones we hear so much about when discussing pesticides) clearly tip toward the use of pesticides to preserve our beautiful lawns.

This, unless I miss my guess or am misunderstanding him, is the point we in the green industry have been trying to make for years.

Winward, incidentally, knows whereof he speaks. He is author of "The Healthy Lawn Handbook...with Practical Tips from a Professional Landscaper."

He is also owner of Action Mowing, Lawn & Landscape in Salt Lake City, Utah. He claims to have had more than 7,000 clients over the years, including about 150 regular clients this year. Though "Action" doesn't apply any fertilizers or pesticides, the company does make recommendations to its customers.

"I've worked with extension service people across the United States to get my information," Winward contends. "I've also tried everything in my book."

Even though Winward says he has occasionally been taken to task by some fertilizer and pesticide manufacturers, he is very pragmatic about pesticide applications. In a telephone conversation with LANDSCAPE MANAGEMENT, he casually mentioned a nearby city that was forced into aerial insecticide applications because of overwhelming mosquito populations. This is okay, he told us, because mosquitoes are vectors for many diseases, and the public had to be protected.

"[Nonetheless], research needs to be done to find alternatives, and alternatives are being found," he said.

To re-state our point: We didn't expect to see such a well-balanced article in a publication like *Mother Earth News*, but—quite frankly—it's refreshing.

Perhaps—just perhaps—the industry is slowly making inroads toward getting the public to accept judicious use of fertilizers and pesticides in the urban setting.

And that's all we've ever wanted, isn't it?
Introducing the new 3365 with John Deere ESP

A lot of people talk about commitment. John Deere just did something about it by dedicating a new factory unit to engineer and manufacture cutting units.

You can see the results on our new 3365 Professional Turf Mower—the first product to feature John Deere-built ESP cutting units.

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Extra precision comes from an improved adjustment system that solidly holds cutting height adjustments through the bumps and shocks of everyday use.

Extra strength comes from new materials and components. Reels and bedknives are made...
ps, fewer grinds

The new 3365 Professional Turf Mower features John Deere-built ESP cutting units that deliver extra strength and precision.

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For the name of the nearest distributor, or free literature, call 1-800-544-2122, or write John Deere, Dept. 956, Moline, IL.
Cover Story: Seasonal Color
Landscape contractors and golf course superintendents reveal how they're satisfying clients' demand for reds, blues, yellows.

LM Reports: Soil testing
A basic soil test gives the landscape manager a fertility blueprint and opportunity for profitable add-on offerings.

Aeration: a breather for tired turf
You should be willing to try anything that makes the turf look better. And that includes—especially—soil aeration.

Being a better boss
These ideas might help your employees want to go to work, rather than making them feel they have to.

Read contracts before signing
It's not necessary to be an attorney to smell a rotten contract. You may not have ready access to an attorney, but you can still take some precautions on your own.

'The working superintendent'
More than half-a-lifetime caring for golf courses hasn't changed this superintendent's approach to his job—he loves being a hands-on kind of guy.

Managing busy turf
Basic issues must be addressed to help heavily trafficked turf recover from injury.

Healthy turf and iron
Researchers have studied for years the link between iron and healthy turfgrass. Iron has been popular for several years with other members of the green industry, especially nursery growers. Only recently has it become a valuable resource with golf course superintendents.

White grub control
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**Controlling Dutch elm disease**

**Problem:** What progress has been made in controlling Dutch Elm disease? (Minn.)

**Solution:** There is no major new information that I am familiar with on Dutch elm disease management. The current most popular approach is to monitor for disease activity, bark beetle insect activity and management; sanitation; and systemic trunk injection of Arbotect fungicide.

Monitoring for early flagging symptoms on the crown and selectively pruning at least 10 feet into the clear wood without vascular discoloration is recommended for sanitation purposes. Trees showing more than 20 percent crown infection need to be removed promptly. Reports also indicate that elms should not be pruned during insect vector, the elm bark beetle flight period.

Insecticide treatment is recommended for managing elm bark beetles which transmit the fungus during feeding in the crotch area. However, insecticidal treatments are now being questioned because of the difficulty in providing thorough coverage, potential drift problems (chemical trespass), and the need for several treatments (for multiple insect generations). An alternative management approach which involves Arbotect fungicide treatments in place of bark beetle treatments is now being researched.

University of New York researchers reported that several pyrethroids provided better protection from twig feeding than methoxychlor insecticide in laboratory studies. Reports indicate that a three-year injection rate of Arbotect fungicide at or slightly below the root flare would give better distribution of fungicide and protect the susceptible elm from Dutch elm disease infection. Root flare treatment is found to be better than injecting elsewhere on the trunk.

**Do sulfur-coated fertilizers affect pH?**

**Problem:** What is the effect of sulfur-coated fertilizers on soil pH? Should this be a consideration in their application? (Pa.)

**Solution:** Richard Rathjens, senior agronomist on our staff, made the following comments regarding your question:

Sulfur-coated ureas used for turfgrass fertilization can range from 32 to 37 percent nitrogen and 12 to 18 percent sulfur. One-half pound of sulfur would be applied if a sulfur-coated urea containing 37 percent N and 18 percent S was used at a rate of 1.0 lb. of N per 1,000 sq.ft. If sulfur coated urea was the only source of N used, and four applications were made throughout the year, then 2.0 lbs. of sulfur would be applied annually.

If the objective is to lower the pH to 6.5. Rather than using sulfur-coated urea, a better approach would be to use elemental sulfur which contains 85 to 99 percent sulfur.

Our soil testing laboratory does not recommend using elemental S to acidify alkaline soils for these reasons:
- many soils in the eastern U.S. are alkaline because they are derived from calcium containing rock which resists acidification;
- unless turfgrasses fail to respond to normal fertilization practices and elements like iron are deficient, the benefit of acidifying the soil is questionable; and
- when added to the soil, sulfur forms sulfuric acid, which can be toxic to plants. For this reason, extreme caution must be used when applying concentrated forms of sulfur, such as elemental sulfur.

**Bentgrass injury related to weed control?**

**Problem:** Last summer we experienced quite a bit of injury on bentgrass after we made a broadleaf weed control application. We have used the herbicide as suggested using a liquid spray system. We feel that part of the problem is drought related. Could it be chemical related, too? (Pa.)

**Solution:** You mention that the injury symptoms became evident after the broadleaf herbicide application. This would suggest that either the herbicide alone could have been responsible and the appearance of injury symptoms was coincidental with the herbicide application. It may help to inspect other lawns with bentgrass in the immediate vicinity to determine if injury occurred and, if so, what combination of factors was involved.

Bentgrass requires relatively short mowing and plenty of water for good growth. The turf is often stressed in the summer as the temperature increases and moisture decreases. Turf which is drought stressed is more susceptible to injury from herbicides. Broadleaf herbicides containing 2,4-D are particularly injurious to bentgrass. Review and follow label specifications for best results.

**Dr. Balakrishna Rao** is Manager of Technical Resources 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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IT'S A WHOLE NEW BALLGAME.
Seasonal color: Separating good from great

Landscape contractors and golf course superintendents reveal how they're satisfying clients' demand for reds, blues, yellows.

Today's landscape customers and golfers want to put color into their daily lives. They want it for more than the few months of summer and early fall.

These clients increasingly are asking green industry professionals to provide this color with plant material, either flowers and/or interestingly colored/textured woody plants. Color isn't just strictly beds of annuals, as eye-catching as they almost always are. More and more customers—property managers, homeowners, golfers—want more imaginative uses of colorful plant material.

Here are the comments of some landscape professionals on the changing role of color:

Tom Deml, Somers Companies of Wisconsin, Stevens Point, Wis.—“More customers are asking for plants that keep their color longer, and plants with different leaf colors and textures,” says Deml. Examples: red barberry, gold mounded spirea, and gold flame spirea.

Also, some clients specifically ask for plantings that retain color and interest (red twig dogwood) or plants that provide food for wildlife/songbirds in winter.

Clay Crosley, Findlay Country Club, Findlay, Ohio—“Most of the club’s landscape color is in the clubhouse area. Crosley and his wife Sandy (course horticulturist) are trying to spread the effect around. ‘We’re trying to establish more beds on the course,’ he says. ‘We’ve got lots of impatiens and marigolds, and I’m trying tiger lilies along creekbanks. We try as many new things—like some of the stuff I see in magazines—as we can. But you have to remember that color is more expensive, time-consuming and labor-consuming.’ The Crosleys put in 475 flats of annuals this spring. ‘People don’t have to be good golfers to enjoy the course,’ says Crosley.

Kathy Valentine, The Plant Professionals, Lansing, Mich.—Demand from the company’s interior plantscape business forced it to offer outside bed plantings too. This spring, a research/manufacturing client hit hard by layoffs, demanded cheerfully bright annuals in its landscape—for the first time. ‘They wanted to improve the morale of the remaining employees,’ says Valentine.

Kurt Kluznik, Yardmaster, Painesville, Ohio—“People are looking at the money they’re putting into annuals. Once they’ve looked at it for a couple of years, they’re more apt to plant perennials,” says Kluznik. Yardmaster routinely offers flowering plants, as an add-on sale, and promotes bulb sales and plantings each fall also. ‘People expect the grass to be cut and the plants to be pruned, but it’s the color they remember from year to year,’ says Kluznik.

James W. Zindel, Zindel’s Tree and Lawn Care, Decatur, Ill.—Two recent examples of customers asking his company to turn up the color include a woman asking that the evergreens on her property be replaced by deciduous shrubs, and a priest helping plan a colorful display of flowers at the entrance to his church. “He was definite about what he wanted. ‘I want it to be a beautiful sight,’ he (the priest) said,” recalls Zindel. “So, we put in some bright and vivid colors.”

Jerry Merrill, Merrill Quality Landscapes, Rexburg, Idaho—“A lot of people have been telling me they want to get away from the solid green look,” says Merrill. “Usually, they say they’d like to see something like flowering shrubs. They seem to be a hot item right now, and I kind of like some of the new spireas with their different blossoms and shapes.”

Mark Smith, Bobby Byrd Lawn & Landscape, Charlotte, N.C.—“People still like annual flowers; something that we can change for them every spring and fall,” says Smith, a manager at this busy maintenance firm. In the spring: begonias, impatiens, geraniums. In the fall: pansies. They bloom all winter in Charlotte.

Kenneth Gerlack, Contra Costa Landscaping, Martinez, Calif.—“Our customers seem to really like to spruce up their entrances and focal points of their landscapes. Here in California, we change annuals twice a year, summer and winter.” Winter color means pansies and violets; in summer, it’s marigolds and petunias. The extra water needed by some of the plants, however, is a drawback, considering the current water shortage in this state. “If we had a normal year, and water wasn’t quite so scarce, the demand for color would just go crazy,” Gerlack notes.

Warren Klink, Urith Inc. (Urban Thickets), Hamilton, Ohio—“There is more interest in seasonal displays,” believes Klink. More customers are moving toward perennials. Customers are more sophisticated, and they want to be a part of the “process of color” from the first tender, green shoots of the plant, through its blossoming, and even into its decline, says Klink.

“Some dormant plants in winter are almost as interesting as when they’re blooming. It’s our job to make the customer aware of alternatives in addition to the impatiens,” he adds.