

# GOLF & ATHLETIC TURF

## Highlands unlocks \$\$ savings with environmental approach



"Environmentally sound" management practices save Highlands Golf Course about \$60,000 each year.

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### Golfers at this public course in Nebraska get beautiful views at every tee in spite of reduced mowing, water and pesticide use.

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by Ron Hall,  
Senior Editor

■ Native grasses growing six feet tall can swallow golf balls at his course, says Richard Neumann, CGCS. But this is a tiny price to pay for the beauty that these, and other native plants like staghorn sumac and flowering dogwood, add to his Highlands Golf Course.

Neumann sees another type of beauty at Highlands, expecting 50,000 rounds in this only its second full season—the beauty represented in real-life dollars and cents savings.

Neumann estimates that his municipal

course located in Lincoln, Neb., saves about \$60,000 a year because of "environmentally sound" management practices. Actually, it was designed for these savings by Parks and Recreation Director Jim Morgan and City Project Manager Bob Wright with input from the architects, Golfscapes, Inc., and the builders, Landscapes Unlimited, Inc. Construction on Highlands began in March 1992 and the course opened in September 1993, the City of Lincoln's fourth 18-hole municipal golf course.

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The savings, says Neumann, results from three complementary strategies:

- setting aside natural areas for zero or very low maintenance,
- implementing an "intense" IPM program, and
- using ET-based irrigation. (ET stands for evapotranspiration, a precise calculation of a plant's water needs as opposed to its perceived needs.)

"Just cutting down the mowings, figuring about \$20 an hour, we save about \$30,000 a year," says Neumann. Other savings at the 250-acre municipal course include: pesticides, \$5,000; fertilizations, \$5,000; and irrigation, \$20,000.

"Getting to do some of these things is the most fun I've ever had in golf," says Neumann convincingly of his role is helping convert some of Lincoln—admittedly a small part—back to its prairie past.

Prairie grasses, like indiangrass, big and little bluestem, switchgrass and sideoats grama, cover 10 acres of Highlands. These areas of tall grasses separate the holes in what Neumann describes as "our unique prairie links setting." Only native trees and shrubs like eastern red cedar, locust, American linden, green ash

"Sure, some golfers complain. For instance, some say it's 'too shaggy,' but not too many," admits Neumann.

Some former pasture at the course are being left as "undisturbed" areas. "Later they can be converted to true native areas. This is something we're playing with, and having a little bit of success with. We're getting excited about it," says Neumann.

The planting of new cultivars of buffalograss into several other hard-to-maintain sections of the course will not add to his crew's maintenance schedule.

"When this conversion is complete, we expect it to require zero fertility, zero pest treatments and zero irrigation except under extreme conditions," he says. On the down side, some native grasses take three to five years to become established.



Soil sampling at Highlands is helpful as Richard Neumann plans IPM.

require some maintenance. Neumann admits that wildflowers can look weedy once they're out of bloom. In fact, he reduced the size of the wildflower planting by the club house to three acres.

He's had to tame some other locations as well.

"We've backed off of some natural areas because what we thought was out of play, really wasn't," adds Neumann. "It'll take some time for us to get this the way it

should be. We're going to make mistakes."

Neumann's IPM program is basic, but multifaceted—starting with monitoring.

"We try to train our entire full-time staff in scouting techniques. I don't expect everybody on my staff to be an entomologist or a pathologist, but I do expect them to notice something that shouldn't be there," says Neumann. "After we identify a problem, we make a decision on which method of pest control to use."

By mowing "a little higher," Neumann feels he can avoid some pest problems and reduce pesticide use. Also, the Kentucky bluegrass fairways are overseeded with ryegrasses containing high levels of endophytes.

Increasingly, Neumann adds, he's dealing with turf diseases curatively rather than preventively.

"We do not ignore the use of pesticides, but we're trying to minimize their risk to the environment," he explains.

The same philosophy is used with fertilizer. The Highlands' crew regularly monitors the fertility of tees, greens and fairways. It applies fertilizer only when the turf indicates that it's needed.

**Some problems**—Not everything at the course has gone as smoothly as Neumann would have liked. Irrigation is an example. "In a lot of respects we succeeded, and in a lot of respects we failed," says Neumann.

The course could not use either ground or available surface water for irrigation because both sources are too high in salts. Effluent water was ruled out because the

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Wildflower plantings at Highlands Golf Course were modified slightly so as to not interfere with play.

were added to the willows and cottonwoods already on the property. Apart from golfers who can't shoot straight, the most common critters in these areas are jack rabbits, ring-neck pheasants and quail.

**Fescues & flowers**—About five acres of Highlands, including the clubhouse and the area surrounding the parking lot, were initially covered by a mixture of wildflowers and low-growing native grasses. They

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cost of laying a pipe to get it to the course was too expensive.

The course did experience some runoff problems during grow-in. Once, Neumann recalls, he was roused from a deep sleep by a caller informing him that the course was flooding the municipal airport located across the highway. Rushing to Highlands, he discovered one stuck sprinkler head.

Neumann says he was skeptical when the course's ET-based control irrigation system began operation.

"However I find myself relying more and more on it," he says. "I've also found that we can save



Kentucky bluegrass fairways at Highlands are overseeded with high-endophyte ryegrasses.

somewhere in the neighborhood of 25 to 30 percent of our water costs by relying on the ET-based system to make the decisions that I had been making in the past."

Neumann says he's pleased, and a little bit surprised by how well golfers have accepted the changes at the course.

"Areas that we didn't think would be acceptable at a municipal golf course have become the talk of the golfing community," says Neumann.

"I firmly believe that environmentally sound management practices are economically sound management practices, too."

## Supers included in new cooperative buying alliance

■ If a cooperative purchasing program can work for colleges and universities, why not for country clubs? Or for professionals at those clubs, like golf course superintendents?

Why not indeed, wondered Jeffery Dykehouse who, earlier this year, formed the United States Country Club Association (USCCA) to do just that.

In 1994, he worked with a similar program administered by the Midwestern Higher Education Commission for post secondary schools. "I saw how the process worked and, being a golf fanatic, I did some research and found out no one is offering a comprehensive cooperative purchasing program to private clubs," Dykehouse tells LM.

As its name indicates, the USCCA is accepting membership applications from private country clubs for charter membership through August 31. It's marketing services to a 10-state region: Minnesota, Wisconsin, Illinois, Indiana, Michigan, Ohio, Pennsylvania, Virginia, New Jersey and New York. Dykehouse says there are about 1450 private clubs with golf courses in the 10-state region, but private clubs from elsewhere can join too.

Dykehouse tells LM that interest from



Jeffery Dykehouse says private clubs are responding to cooperative.

country club general managers is strong for USCCA's Cooperative Alliance for Purchasing (CAP).

Fundamental to making CAP work will be the development of member advisory committees. Separate committees will be set up for each product or service provided. The committees will be made up of general

managers, golf pros, superintendents, and other leaders responsible for each area of business.

A Maintenance Equipment Committee made up of superintendents would then, for instance, assist with developing a survey for other member superintendents that determines just what types of products or services they would like to pursue for costs savings.

Initially, Dykehouse says, general managers and superintendents have indicated interest in insurance programs, maintenance equipment, fertilizer and chemicals, and golf cars. After the membership says just what it wants, USCCA takes that information into the marketplace and negotiates with purveyors and manufacturers.

"It's real important for us to include our members in every step of this process," says Dykehouse.

USCCA will also be building a Resource Sharing Program whereby superintendents can share the cost and use of maintenance equipment that would otherwise be too expensive for a single club.

Another benefit to members will be USCCA-coordinated regional meetings for member clubs and their staffs.

The USCCA strives to compliment other industry organizations rather than compete with them, adds Dykehouse, founder and president.

For further information contact: USCCA, 500 Cascade West Parkway, Grand Rapids, MI 49546; (616) 949-9411.