

# Real-Life Solutions

MANAGING NATIVE AREAS

## The Natural Look

Colbert Hills features an array of prairie grasses and wildflowers, but managing the native areas is like a judo match with Mother Nature

BY CURT HARLER

It's the constant interplay between weed and wildflower that makes Colbert Hills GC a key part of the distinctive prairie environment in and around Manhattan, Kan.

Colbert Hills, a track owned by Kansas State University's Golf Course Management and Research Foundation, was designed in part and named after KSU alumnus and current Senior PGA Tour pro Jim Colbert. The course, which opened in 2000, is a living



PHOTOS BY CURT HARLER

laboratory for KSU researchers. That's because more than 800 acres of the course are maintained in native prairie grasses and wildflowers.

At first glance, the course, while one of the more stunning looking in the Heartland, is typical: L93 bentgrass comprises the greens, fairways are Meyer zoysia, and the perimeter rough is a combination of Kentucky Bluegrass varieties.

However, most holes feel isolated from each other, thanks to the sharply rolling topography and wide expanses of native grasses surrounding them, which iso-

lates one fairway from the next. Players can easily believe they are the only ones on the course.

"The original idea was to minimize the environmental impact and soil erosion at the site," says certified superintendent David Gourlay, Colbert Hills' director of golf operations and general manager. "It cost us a little more money in the beginning, but it made a big difference environmentally."

The course is not without its challenges, however, that are directly related to the native grasses and indigenous plants.

**More than 800 acres of Colbert Hills GC are maintained in native prairie grasses and wildflowers.**

### The problem

When the decision was made to go natural with native and indigenous plants, species like Johnsongrass, nutsedge and a host of woody invaders didn't get the message they would not be welcome at Colbert Hills.

Managing native grasses is like a judo match with Mother Nature. One parlays Her strengths and moves to meet the needs of a premier golf course while trying not to get

### Problem

Can a golf course commit to extensive use of native grasses without inviting a full-scale weed invasion?

### Solution

A combination of controlled burning and selective herbicide use can keep weeds to a minimum.



tossed for a loss by an unexpected twist of fate.

The natural areas begin just 10 yards beyond the rough. While the near-in areas are mainly turf-type tall fescue for perhaps 10 yards, there's a full array of native species beyond that.

"We had Kansas State come up with a blend of native grasses: fescues, little and big bluestem, Maximilian sunflowers, other sunflower species and native plants," Gourlay says. A seed supplier provided for the blending, but species not in the original mix are thriving, too, Gourlay adds.

The native grasses received a boost of fertilizer when they were planted, since they can take up to two years to mature. However, Gourlay says the native grasses don't need a lot of supplemental assistance. "We found if we overfertilize native areas, the grasses tend to become too dense and over the

winter lay down from snow and are smothered," Gourlay says.

After more than two years, the native grasses are mature and prospering. But around tee boxes, native species gulp the irrigation water that drifts to the wild areas. This doesn't help Gourlay's management program because the native grasses are getting denser all the time. Hence, golfers are losing more balls.

In a way, Gourlay works against himself. He wants to increase native areas in nonplaying locations, but not lost golf balls. Native species are allowed to creep in closer in areas not in play.

A good example is the "Little Amen Turn" at Nos. 10, 11 and 12. No. 12 is a 434 yarder and trends a bit uphill. Nobody hits a ball 350 yards from the tee. So in that area, Gourlay is allowing native grasses to move in behind the fairway bunkers. "It re-

duces maintenance costs, irrigation costs and gives a better backdrop for the tee shot," he feels. "The wildlife sure likes it."

But while turf-type fescue does its job along the margins, Gourlay stresses that it's not impervious to invaders. Johnsongrass, nutsedge, and other grassy species are constantly on the move. So something has to be done.

### The solution

The best way to assure continuity of native grasses is to burn the prairie, and that's what they do at Colbert Hills. The City of Manhattan Fire Department does a controlled burn of the course in late March or early April. The burn serves as a learning lab for firefighters and helps control the sumac and evergreen woody plants.

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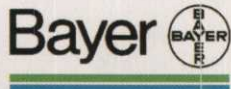
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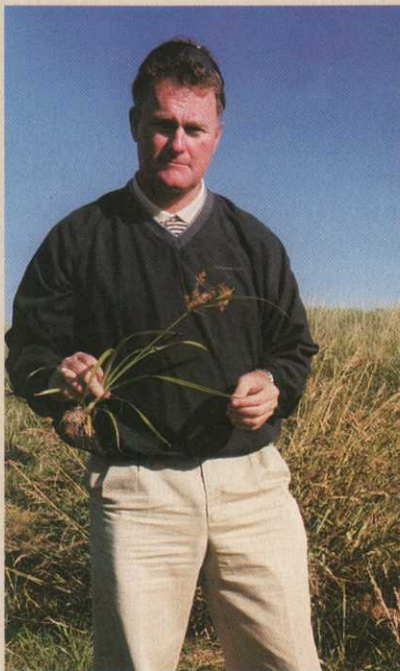
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The fire department burns 450 acres in three to four days. Yet even fire does not seem to slow down some species. Red sumac, for example, is aggressive. "It's a good soil stabilizer, especially in shallow soils, but it's tough to eradicate," Gourlay says.

The burning strategy is to hit the more visible areas hard and eliminate invading perennials and annuals.

Noting that Colbert Hills is a laboratory, Gourlay says he will experiment with both mechanical and chemical control of noxious and woody invaders. Some areas will be mowed, and some areas may be treated with pre-emergent and post-emergent herbicides.

"Our biggest concern is to make [the course] more uniform and not too weedy-looking," Gourlay says.



**David Gourlay says he wants to make the course more uniform but not too weedy-looking.**

## Outlook

In addition to staying on top of the many native species of native vegetation and plants, the program run by KSU at Colbert Hills monitors water and soil quality, aquatic ecosystems, wildlife and insects. The course has plenty of room for coyote, deer, birds, snakes and other indigenous species.

It's the natural areas that give Colbert Hills the unmistakable look and feel of playing on the great prairies of the Midwest. Colbert Hills is one of a handful of Audubon's Silver Signature courses in the world, boasting everything from lark sparrows and Eastern meadowlarks to hawks.

Like a partner in any good marriage, Gourlay knows Colbert Hills and Mother Nature are in a long-term, give-and-take relationship. ■

*Harler is a free-lance writer from Cleveland.*



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