

Tips

→ Creating a Naturalized Golf Course

Courses Can Become Habitats for a Variety of Plants, Wildlife

By Arthur Milberger

Landscape naturalization is an old concept that is receiving renewed attention, particularly as it relates to golf course management.

In the 1990s, a decade of heightened environmental awareness, the industry made advances in promoting environmental issues and reform. Some golf course design and maintenance professionals responded by naturalizing courses. Since then, naturalization has become more widespread.

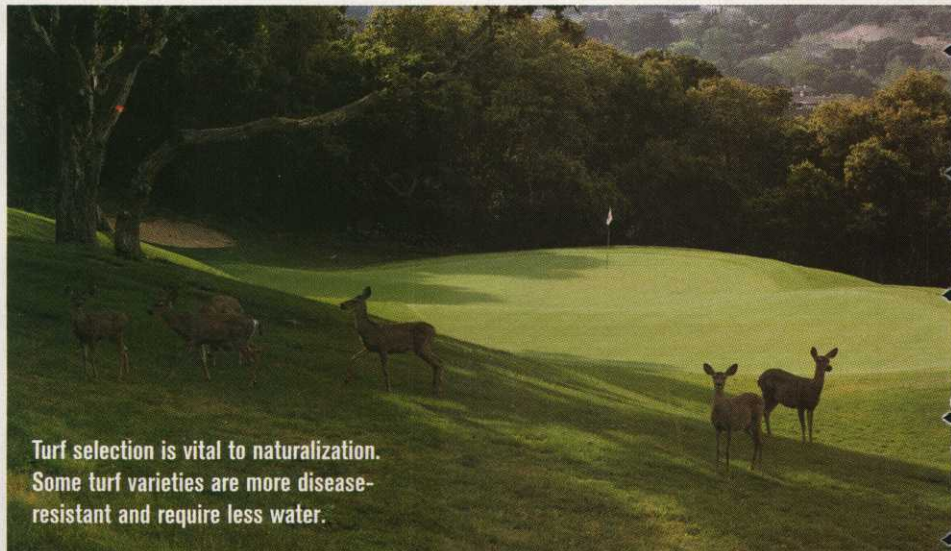
By carefully selecting and maintaining turfgrass, trees and other vegetation, course staffs have created natural habitats



on their courses for a breadth of flora and fauna. In time, these elements of a naturalized course become fairly self-sustaining — without interfering with golf. Besides being good for play and wildlife management, golfers often find this type of course to be an interesting and attractive alternative to the traditional course. Further, industry professionals appreciate it as an opportunity to reduce maintenance requirements.

“Since naturalization, golfer response to our course has been overwhelmingly positive,” says Dan Dinelli, superintendent of North Shore CC in Glenview, Ill. “We like that the course is more self-sufficient than it was before.”

A golf course has qualities that make it a prime setting for naturalization. Properly designed, it can be a sanctuary for bird species and an area of prairie or wetland preservation. Entire food chains can exist on and near it — from microor-



Turf selection is vital to naturalization. Some turf varieties are more disease-resistant and require less water.

ganisms and insects to amphibians, reptiles and mammals.

“Diverse wildlife is vital to a naturalized course,” says Mike Sandburg, superintendent of Lakeside CC, a naturalized course in downtown Houston. “Our course is home to opossums and armadillos, and birds such as great blue herons, peregrine falcons and Egyptian geese. We’ve found that golfers take greater pleasure in the course’s unique natural beauty and relaxing scenery.”

In addition to environmental benefits, a naturalized golf course offers financial benefits. Because a naturalized course attempts to preserve a region’s natural landscape, a superintendent can save money by reducing plant and turfgrass maintenance, as well as fertilizer use.

“Our course has reduced pesticide and labor requirements, making it cheaper to maintain,” says Mark Egan, superintendent of the naturalized course at Hyannisport Club in Hyannis Port, Mass.

Charting the course

Here are tips to develop a naturalized course. They are founded on common goals: to establish diverse plant and animal life and to let nature run your course as much as possible.

■ **Select plants that thrive in the area and are compatible with the soil type and exposure.**

Choose a variety of plants, since diverse vegetation is crucial to any naturalized course.

■ **Carefully research turfgrass to determine which will work best for your course.**

There are many sources of information, including sod producers, local universities with programs in turfgrass research, area extension services and other superintendents. In consulting these resources, consider the course’s geographic region, its climate and the course areas targeted for sodding. Be sure to inquire extensively as to each variety’s drought and insect resistances, as well as fertilizer and mowing requirements.

At Lakeside CC, common bermudagrass in fairways and roughs was replaced with a hybrid 419 bermudagrass, which developed more rapidly and grew denser and greener than the common bermudagrass. The new turf provides more durable and instant coverage. It permitted golf play sooner and allowed Lakeside workers to focus more closely on naturalization practices instead of tending to the turf during its grow-in stage.

For out-of-play areas at Lakeside, course managers decided on buffalograss sod.

"Buffalograss is nature's turf of choice for our area," Sandburg says. "Between 150 and 200 years ago, this variety grew rampant across the Southern plains without any human assistance. It makes sense to use it on our naturalized course."

Buffalograss, with less need for fertilizer and pesticide, needs little maintenance and has a high drought tolerance.

Fescues are the grass of choice for the out-of-play areas at Hyannisport Club, Egan says.

"Our course is located on the saline Atlantic flyway of Cape Cod," Egan adds. "Because of their high tolerance for sea salts, fescues have thrived here."

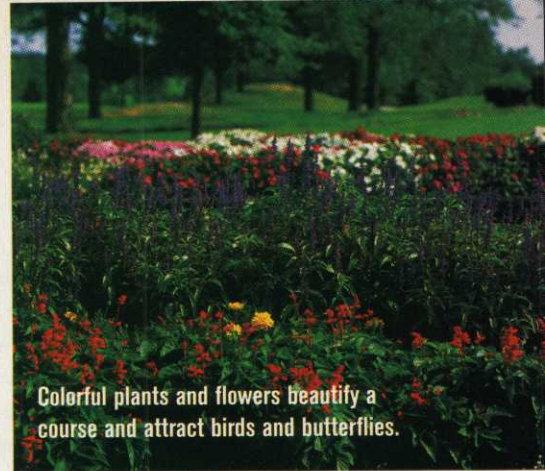
Designers of the Lakeside course replaced Tifdwarf on the greens with a newer Tifdwarf variety that grows more slowly, minimizing the disruption of habitats that frequent mowing can cause. It also means less maintenance.

An L93/Crenshaw blend was installed

on the greens at Carolina National GC in Bolivia, N.C. "This variety is lower growing, more disease resistant and more water thrifty than other varieties used on greens, which makes it a low-maintenance grass that's well-suited for naturalization," says Matthew Mays, the course's environmental specialist.

In some cases, a naturalized course will "decide" for itself what grasses work best. At Lakeside, Sandburg says workers planted zoysiagrass on bunker faces, thinking it would reduce mowing and maintenance requirements. But Houston's high humidity promoted disease in the susceptible zoysiagrass over time and weakened it. Eventually, the hybrid 419 Bermudagrass overtook the bunker faces because it has stronger resistance to the diseases common to that region, Sandburg says.

■ **In addition to selecting appropriate plant materials, take steps to attract wildlife.** Colorful plants and flowers should draw na-



Colorful plants and flowers beautify a course and attract birds and butterflies.

tive birds and butterflies. Mounted and monitored nest boxes will also bring birds to the area, and brush piles offer appealing shelter to larger animals.

"The unique ecosystems located at Hyannisport, coupled with our efforts to promote wildlife, have drawn various animals to the course, including rabbits, foxes and osprey," Egan says.

In some cases, wildlife residing on a naturalized course will contribute to the course's maintenance. "The wood ducks and mallards we released onto the course help keep our ponds clean by feeding on excess floating vegetation," Dinelli says.

Continued on page 64

ADVERTISER INDEX

104	Aadvanced Water Mgmt Inc	4
121	Agrotain Intl	51
106	BASF	5
115	BASF	33
108	Earthworks	9
110	Floratine Products	13
116	Foley Enterprises	37
105	Growth Products	4
119	J.R. Simplot	43
125	North American Green	53
117	Nutramax Labs	41
118	Otterbine Barebo	55
107	Precision Labs	7
122	Profile Products	11
102	Prosource One	CV3
124	Roots	47
127	Securall Cabinets	63
120	Standard Golf Co	44
101	Syngenta	CV2-1
113	Textron	21
114	Textron	24
126	Textron	56
103	Tee 2 Green	CV4
128	Top Pro	(reg)61
111/112	United Horticultural Supply	17-18
109	Versa-Lok Retaining Wall System	59
123	West Coast	42

This index is provided as an additional service. The publisher does not assume any liability for errors or omissions.

WHERE DO YOU STORE YOUR PESTICIDES?



SECURALL offers a complete line of safety storage buildings specifically designed for storing your turf chemicals safely and securely. All buildings are designed to help you comply with prevailing EPA and OSHA codes. Constructed of 12 or 16 gauge galvanized steel. Standard buildings come with many features or choose from several options.

Features

- High Security Lock
- Fiberglass Insulated Walls
- Fluorescent Interior Lights
- Corrosion Resistant Enamel Finish
- Steel Shelves With Raised Edges
- GFCI Protected Electrical Wiring

Options

- Heating / cooling / ventilation
- Dry chemical fire extinguisher
- Fiberglass floor grating
- Liquid level detectors
- Water sprinkler system
- Ramps

SECURALL®

5122 North State Road 39 LaPorte, IN 46350
1-888-326-7890 FAX: 1-888-324-3780

Email: securallsales@csinet.net

www.securallproducts.com

Tips

Continued from page 63

"There used to be a massive nutria [a water-dwelling rodent] population that was destroying our lake banks, but the presence of natural predators like coyotes has solved that problem," Sandburg says. "Likewise, purple marlins and bats have almost eliminated our troubling mosquito season."

■ **Don't forget to use the resources that nature provides.** Retain indigenous vegetation that will enhance the course, and minimize disturbance to pre-existing earth and water formations. Such formations may be useful in shaping the course. During construction, minimize wildlife disruption.

Making the process simpler

Golf and environmental organizations are taking steps to encourage the naturalization practice, and research and technology are making the process simpler.

Since 1991, Audubon International, a non-profit environmental organization, has worked in cooperation with the U.S. Golf Association to promote the Audubon Cooperative Sanctuary Program for golf courses. The program shows superintendents how to include environmental solutions in their management practices, and has helped more than 2,300 courses further their benefits to local environments without detracting from the advancement of golf.

Another major step in promoting naturalization has been creation of the "Environmental Principles for Golf Courses in the United States." A collection of organizations, including the USGA, the GCSAA, the National Wildlife Federation and the EPA, developed this set of voluntary guidelines for environmentally aware golf course creation, maintenance and operation.

Recent advancements in mapping and imaging technology allow designers to preserve a course's natural ecosystem. Modern satellite remote-sensing technology creates precise relief images of an area. A designer uses these models to plan a course that fits the site's topography, preserves waterways and minimizes disruption of habitats.

Turfgrass development also is making progress. The USGA Green Section funds the Turfgrass and Environmental Research Program, which is the world's largest private turfgrass research effort. The project promotes development of new turfgrass varieties with improved properties, such as higher water retention, reduced pesticide requirements and more efficient fertilizer use.

Independent turfgrass breeders, too, are working to cultivate grasses that are better suited for applications such as naturalization. "For example, breeders are contributing by developing grasses with endophytes, which have natural insect-controlling properties," Dinelli says. ■

Arthur Milberger is a sod producer with Turfgrass America and a board member of Turfgrass Producers International in Rolling Meadows, Ill. He can be reached at arthur@milberger.com.

The Company Line

■ PRODUCTS & SERVICES



▲ Surfactant

A new omni-directional surfactant with enhanced kelp, Aqua-MAXXT, is available from **Aqua-Aid**. The surfactant is developed to put down water, wetting agent and growth stimulant in one application. It's formulated from a highly stable enhanced kelp extract. When combined with a wetting agent, it produces maximum root growth and root density in minimum time, the company says.

For more information, contact 800-394-1551, www.aqua-maxx.com or

CIRCLE NO. 200

Aerator

Aquamaster Fountains and Aerators

offers a floating surface aerator, capable of creating a random boil or bubble effect on the water's surface. This low-profile aerator is easily installed and works efficiently with any depth. It's available from one to five horsepower with a three-year motor warranty.

For more information, contact 800-693-3144,

www.aquamasterfountains.com or CIRCLE NO. 201

Perennial ryegrass

Ampac Seed Co. introduces Amazing Perennial Ryegrass as part of its Turf Perfect ideal turf line. The variety is notably darker than other ryegrasses, according to the company. Bred from Rutgers University, Amazing scored statistically equal to the highest rating in over 18 categories including genetic color, winter color, athletic field quality, home lawn quality, leaf texture, traffic tolerance, leaf spot, dollar spot and melting out.

For more information, contact 877-778-7880,

www.ampacseed.com/amazing or CIRCLE NO. 202

Algaecide/fungicide

TerraCyte from BioSafe Systems

will soon be registered as a broad spectrum algaecide/fungicide. It is an environmentally friendly granular that can be added directly to soils and turf areas for the prevention and control of moss, algae, slime, molds and their spores. Its peroxygen chemistry allows for the oxidation and prevention of these pathogens.

For more information, contact 888-273-3088 or

CIRCLE NO. 203

Overseeding attachments

Milona Turf Products

introduces Jobsaver overseeding attachments to fit the Cushman/Ryan GA30 and John Deere 800. Jobsaver attachments prepare an ideal seedbed without affecting the putting surface, the company says.

For more information, contact 800-456-4351,

www.milona.com or CIRCLE NO. 204