GOLF COURSE NEWS

THE NEWSPAPER FOR THE GOLF COURSE INDUSTRY

FIRST CLIENT FOR THE NEW LANDMARK NATIONAL EAST. SEE STORY PAGE 21.

VIEW OF THE FAZIO LAYOUT AT THE FOUR-COURSE BAREFOOT RESORT, THE

A UNITED PUBLICATION
VOLUME 13, NUMBER 7
JULY 2001 • \$7.00
www.golfcoursenews.com

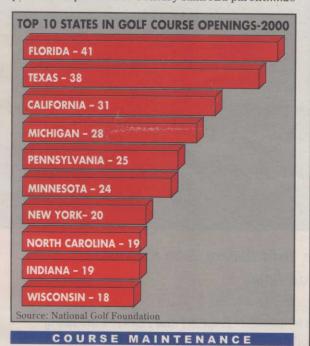
INSIDE

Rediscovering classics

Ron Forse is renovating four Donald Ross courses this year, from California to Maine......16

John Deere gets wet

Deere & Co. to enter irrigation market with the planned acquisition of Century Rain Aid parent.....25



Professor seeks to commercialize Poa						
COURSE DEVELOPMENT						
Mungeam breaks ground at Westchester	. 14					
New 54-hole complex near Palm Desert						
McBroom going international	. 17					

Florida's water 'disappearing'

COURSE MANAGEMENT	
Landmark Golf East lands Barefoot	21
Troon adds Black Creek	21
Donahue, Hamill promoted at Palmer Golf	21

S	UPP	LIER	BU	SIN	ESS	100	
New produ	cts ab	ound					20
Simplot T&	H for	ns interr	ation	al div	ision		25
Pennington	selec	ts Golf V	entur	es in	Fla		27

No downturn expected for fertilizer prices

Impact of high natural gas costs lingers

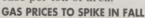
By ANDREW OVERBECK

Fertilizer prices, after their sharp recent rise, are expected to remain high, and industry experts say the record cost of natural gas is the primary culprit.

It has been a tough several months for fertilizer manufacturers, formulators and distributors as natural gas prices rose 500 percent to more than \$10 per million

British thermal units (MMBtu), squeezing already-thin margins.

Natural gas is a major cost component in the manufacturing of nitrogen fertilizer. As a general rule, every 50-cent increase brings a \$10 increase per ton of urea.



At press time, urea was averaging just over \$100 per ton in ports

along the Gulf of Mexico, a primary point of production and importation. Natural gas prices, meanwhile, had receded to below \$4/MMBtu. Fertilizer producers see no drop in prices in the coming months, however, because natural gas remains at double its historical levels and will likely spike again in the fall.

Moreover, manufacturers are still generating product using higher-cost urea purchased before prices softened.

Continued on page 26

Biotech turfgrass destined for market

By JOEL JOYNER

WEST KINGSTON, R.I. — Like it or not, generically engineered turfgrass is on the way. Not only that, but researchers say the possible varieties are all but endless.

"I believe there will be a continuous stream of

engineered turfgrass products by various companies," said Albert Kausch, visiting associate professor here at the University of Rhode Island. "It's possible now to clone any gene from any organism and introduce that into turfgrasses for various

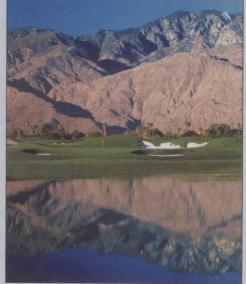


traits. The technology itself is so beneficial and useful that it will go forward.

"We expect to have products available, certainly within the next four to five years," added Kausch, who is also a research scientist for the bio-technology company HybriGene, headquartered in Hubbard, Ore.

In the last few years, genetically engineered crops such as corn and soybeans have taken over

Continued on page 13



The first hole at OB Sports-managed Cimarron

OB Sports shifts base to golf-wild Scottsdale

By JAY FINEGAN

SCOTTSDALE, Ariz. — Another golf course management company has joined the parade to Scottsdale, fast emerging as a center of gravity for the game.

OB Sports, until recently based in the Pacific Northwest, has set up shop in this golf-crazy town on the outskirts of Phoenix. The firm foresees operational efficiencies and increased national visibility from the more centralized location.

"Although we have received tremendous publicity for our success on the West Coast, we are now seeing opportunities to expand our image and delivery of services to more of a national level," said company founder and CEO Orrin Vincent.

In business since 1972, OB Sports has received heavy attention in the past few years for the successful development of new courses on the West Coast featuring unique "themes,"

Continued on page 23

PERIODICAL

Stone Tree brings public golf to Marin County

By DOUG SAUNDERS

NOVATO, Calif. — The new daily-fee Stone Tree Golf Club here in Marin County stands as a testimony to tenacity.

It took the developers eight years to run a permitting gamut involving 11 federal, state and local agencies. To meet some objections concerning wetlands, the owners donated 64 acres to the Nature Conservancy. The initial routing plan was rejected. More than 13,000 trees had to be planted.

But when the 7,000-yard layout opened last November, it marked the completion of the first championship golf course

Continued on page 18

MAINTENANCE

Biotech turfgrass

Continued from page 1

the market. "About 70 percent of the U.S. corn crop is now genetically engineered, and about 55 percent in the soybean market," said Kausch.

The strategies applied to corn and soybeans can also be applied to improve turfgrasses.

"We can change pigment to offer more variety, provide drought- and disease-resistant grasses, and provide pest-resistant as well as salt-tolerant turfgrasses," he said. "Not only does it introduce traits that don't exist in grass, but it does it faster than conventional breeding. It's really amazing. The wish list is extensive."

WORK AT RUTGERS

At Rutgers University, bio-tech work started in turfgrass by analyzing DNA to identify one strain from another and examine the variation.

"We discovered we could transform bentgrass by introducing clone genes or foreign DNA," said Peter Day, director at the university's Institute of Biomolecular Research. "We initially introduced some genes for Roundup resistance." But Roundup ready turfgrass has not been perfected.

"More recently, we have focused extensively on various constructs that confer resistance to turf diseases, particularly dollar spot," he said.

Preliminary trials look promising, according to Day. "Once an engineered variety satisfies the eagle eye of the turf breeder, it will go through performance trials," he said. "It would be very foolish to release anything prematurely.

"One concern is outcrossing and how

'The industry should be concerned about companies testing with open-pollinated, engineered grasses.'

- Albert Kausch

introduced varieties are likely to be spread through pollination," he said. "The question arises: are these altered species hazardous to the environment?"

EXPERIMENTING WITH STERILITY

Male sterility is one option being studied as a means of controlling a released, transgenic grass variety in nature. "It's still experimental," said Day. "The technology is difficult, with limited success in some grasses. It has been done in tobacco and there's also extensive work being done on rice."

Male sterility in genetically altered turfgrass is a primary focus at Kausch's lab in Rhode Island. "It's an expensive procedure," said Kausch. "It's not something you do in your garage over the weekend or in a Dixie cup.

"Moving one gene requires a great deal of technical experience and anywhere from eight months to a year before you have a plant with an introduced gene in it," said Kausch. "We've had some positive results. We'll probably have something on the market in three to four years."

POLLEN TRAVELS 3,000 FEET

Turfgrass pollen is known to travel up-

wards of 3,000 feet and outcross with other grasses, said Kausch.

"The industry should be concerned about companies testing with openpollinated, engineered grasses. You don't have to worry about corn, because corn doesn't outcross with anything. Turfgrasses are capable not only of outcrossing

with wild relatives, but other species of grass as well."



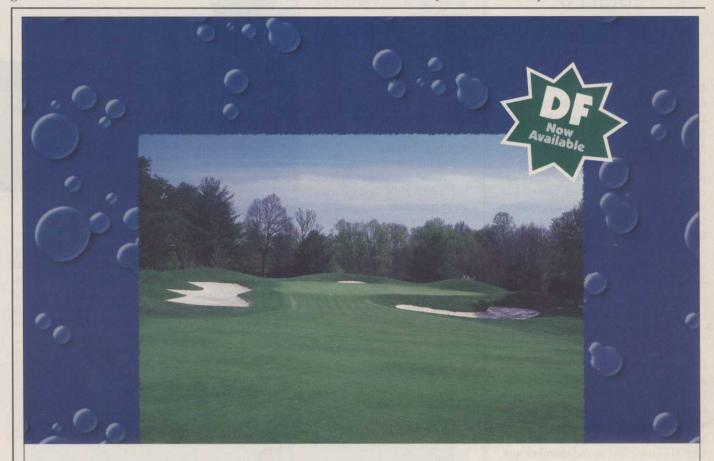
Transgenic turfgrass research is clearly contentious. "Critics argue that we're making superweeds," Kausch said. "Genetic modification in plants, or anything right now, is controversial. Largely, I think the controversy is stirred by a lack of education."

SAFETY FIRST

Bio-tech will give researchers and breeders extensive tools to improve grasses

"There will be a lot of testing, just like with any other technology, but ultimately we will have genetically engineered turfgrasses on the market, just as we have genetically engineered food crops now," said Melodee Fraser, research director for Pure Seed Testing-East in Rolesville, N.C.

"It will also require a lot of research and evaluations to learn how to use the new turfgrasses safely and responsibly," she said, "and to make turf products that are affordable and manageable for golf course superintendents to use."





Concorde SST

Super Stick Technology For All Seasons...All Major Diseases

New Concorde SST offers proven disease control with maximum staying power. This formulation includes new Super Stick Technology (SST™), with adhesion properties that are bound to set an industry standard for tenacity. A contact fungicide you can use all season, Concorde SST will control 14 turf diseases, including algae, brown patch, dollar spot, leaf spot, melting out, anthracnose, rust and red thread. Its multisite mode-of-action helps prevent fungicide resistance and is ideal for all turf disease programs. Use it now and all year long. **Find it at www.griffinllc.com**



When you purchase Concorde, you support The GCSAA Foundation's "Investing in the Beauty of Golf" Campaign.



Griffin L.L.C. 1-800-237-1854

Always read and follow label directions. ©2001 Griffin L.L.C. Concorde ™, SST ™ Griffin L.L.C.

6025-01-4/01