

# MAINTENANCE



## BRIEFS

### HIGHFIELDS HIRES BARNES

GRAFTON, Mass. — Highfields Golf & Country Club has named Thomas Barnes as its golf course superintendent. Barnes previously served as the assistant superintendent at Coral Ridge CC in Fort Lauderdale, Fla. Highfields G & CC is part of Highfields of Grafton, a master-planned golf and residential housing community developed by Magill Associates Inc. The 18-hole Cornish, Silva & Mungeam-designed course opened 10 holes this fall. The entire layout will open in mid-2003.

### PENN STATE UNIVERSITY ACCEPTING APPLICATIONS

UNIVERSITY PARK, Pa. — Penn State University is now accepting applications for its two-year golf course turfgrass management program for the class beginning in September 2003. The deadline for applications is Dec. 31, 2002. Applications can be obtained by calling 814-863-0129 or by visiting [www.agronomy.psu.edu/academic/turfgrass.html](http://www.agronomy.psu.edu/academic/turfgrass.html).

### BAYER AWARDS SCHOLARSHIPS

KANSAS CITY, Mo. — Bayer ES has awarded scholarships to 11 university students pursuing turf-related degrees at several different universities. This year's recipients are: John Wilhoit, University of Kentucky; Joel Randall, Iowa State University; Pat Immel, University of Wisconsin-Madison; George Barth, University of Nebraska; Brian Johnson, Mississippi State University; Brian Doup, Purdue University; Gregory Zumdahl, University of Illinois-Urbana Champaign; Bryan Taylor, Kansas State University; Ben Catlett, University of Arkansas-Fayetteville; Graham Carey, University of Arkansas; Justin Smith, Louisiana State University.

### WILEY BUYS GOLF TITLES

NEW YORK — John Wiley & Sons has purchased 50 turfgrass management and golf course design titles from Sleeping Bear Press/Clock Tower Press. The list includes "Golf Course Architecture" by Dr. Michael Hurdzan and "Turf Management for Golf Courses" by Dr. James Beard. Wiley plans to publish four to six new titles per year in the newly acquired segment.

## Ten years later, Squaw Creek still largely chemical-free

By DOUG SAUNDERS

OLYMPIC VALLEY, Calif. — When the Resort at Squaw Creek opened in 1992, it was hailed as one of the first largely chemical-free golf courses in the country. The course was built during an era when golf courses were under intense scrutiny and suspicion as being toxic polluters, and these concerns ground golf development in California to a standstill.

The Resort at Squaw Creek became a test course for new ideas to control the use of chemical applications as well as promote new course management techniques. To obtain final approval, the developers and governing agencies attempted to address these concerns by compiling a Chemical Application Management Plan (CHAMP) that spelled out a specific turf management program for the golf course to follow. Today the course still functions under these restrictive policies under the direction of su-



At The Resort at Squaw Creek in Olympic Valley, Calif., use of herbicides, fertilizers and fungicides is highly regulated.

perintendent Mike Carlson, who is only the second superintendent to care for this mountain course.

"I had very good knowledge of the

course as I profiled its strict environmental policy and approach in my master's thesis at the University of Wisconsin. The last seven years have

been very challenging, but also very rewarding," said Carlson, who came to the course in 1995 from Butler

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## Air Tech rolls out Air Boom sprayer for turf

By ANDREW OVERBECK

WINTERHAVEN, Fla. — After 12 years concentrating exclusively on the orchard and nursery markets, Air Tech Sprayers has entered the golf course market with its Air Boom sprayer.

The low-volume unit uses a high-speed fan to spray chemicals out of sheer nozzles



The Air Boom sprayer in action

at speeds up to 180 miles per hour, allowing for greater penetration of the turf canopy and increased plant surface coverage. The nozzles are 24 to 36 inches above the ground and the spray particle size is 50 microns.

"There is very little wind drift or side drift," said president Dale Schaal. "You can run it right next to houses without worrying about it and use it in windy conditions."

Air Tech has been field testing the unit this year and is now actively marketing it to golf courses. Superintendent Lars Marohn at Warrior Golf Club in China Grove, N.C., is in charge of golf distribution.

"My neighbor at Warrior GC is one of

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## Editorial Focus: Winter Preparation

## East Coast courses face winter prep challenges

By KATHY ANTAYA, CGCS

Maintenance activities on golf courses throughout the Northeast and parts of the Mid-Atlantic states this fall will be doubly focused on recovery from summer stresses and preparations for winter survival.

The extended drought (with attendant water restrictions) and high disease incidence this summer have dramatically increased the need for regrassing and turf recovery work. Unfortunately, many municipalities face continued water-use restrictions. Without regular fall rains, these ongoing irrigation limitations will compromise superintendents' efforts to recover turf density and quality.

Alternative agronomic strategies, flexible plans, and good communication with course officials will be needed to accomplish crucial



Areas of intense play, such as this approach, will require reseeding this fall.

chores. Some drastic measures may be necessary, some work will have to wait and compromise will be key.

### BEATING THE DROUGHT

Although drought restrictions vary by locality, some regulations provide for supplemental

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## If you can't beat Poa annua, imitate it

By KEVIN J. ROSS, CGCS

Successful sports teams analyze the strength of their opponents and make adjustments to eliminate or minimize that strength. In turfgrass management, we also use that philosophy. We look at diseases and minimize their effects by taking away a component that makes a particular disease thrive (moisture, nitrogen, etc.).

Poa annua, however, has a primary strength that is very difficult to eliminate or minimize. In this case, we need to think outside the box and imitate it.

What makes Poa successful is its amazing ability to produce seed, even at extremely low heights of cut. Bentgrass does not possess the ability to seed at the desired heights of cut used in golf course management. But what if it did have the ability to seed? Would this ability make it more competitive against Poa annua? It seems logical that it would.

Then again, the seeding of Poa annua is also a drawback when it comes to consistent putting surfaces. It makes sense then not to breed bentgrass to have the ability to seed at

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## Fight Poa by seeding more bentgrass

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low heights of cut. But what if golf course managers physically imitated *Poa annua*'s strengths by seeding greens more often?

### THROW DOWN MORE SEED

Seeding bentgrass more consistently throughout the season may improve the ability of bentgrass to out-compete *Poa annua*. Some may argue that it is a waste of money because a good seedbed needs to be created for good germination. There is certainly some credence to this, but *Poa annua* does just fine all year long with no creation of any special seedbed. Others may say that the seed will not remain viable in the soil very long, but according to Dr. Joseph Duich, bentgrass can easily remain viable in the soil for up to 10 to 15 years. This being said, we can imitate *Poa annua*'s seed bank by creating our own

bentgrass seed bank.

How can this program be initiated? First, analyze your budget. The next question is how many times a year to seed. Incorporating a seeding program with your existing topdressing program is a perfect way to add seed whether it is once or twice a month.

One of the more critical times for seeding would be in late fall as

part of a dormant seeding program for winter preparation. It has been proven that late-fall seeded areas are ready to germinate in the spring approximately four to six weeks ahead of any spring-seeded area. This is a great tool to give bentgrass the jump over slower *Poa annua* in the spring, and also as a preventive measure for any winter damage.

How much bentgrass should be seeded? A seeding rate of as low

as one quarter of a pound per 1,000 square feet will equate to 14 seeds per square inch based on an eight million seed count per pound. Using a 100,000-square-foot average of green surfaces for an 18-hole golf course, 25 pounds is used per seeding, which, depending on the cultivar, equates to \$150 to \$250 per seeding. A bi-weekly program for a six-month season would cost only \$1,800 to \$3,000 per year. ■



Seeding more often could help fight Poa

## Air Boom sprayer

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the largest tomato farmers on the East Coast," said Marohn. "When I saw what one of these sprayers could do I contacted Dale [Schaal] and asked if he could develop one for use on turf."

The Air Boom turf unit has 14- to 18-foot spray booms and features a low-volume five- to 50-gallon tanks. As the chemicals are sprayed they are positively charged with copper ions to improve efficacy and aid in keeping the tank, nozzles and lines clean. Air Tech manufactures a trailer type, three-point hitch for tractors and a skid mount unit for utility vehicles. A 24-hp Honda engine powers the utility vehicle unit. The Air Boom retails for around \$23,000, although Marohn is cutting deals to get more units in the market.

### LESS IS MORE

"The unit is twice as expensive as conventional sprayers, but it will save you 40 to 50 percent in reduction of chemicals and labor," Marohn said. "You can fill up one tank and do seven acres, and it is designed to spray from one to 10 miles per hour."

Superintendent Fred Biggers at the 27-hole Wintergreen Resort in Wintergreen, Va., started using an Air Tech Air Boom on his course this year.

"I have nine holes that are all bentgrass," said Biggers. "We used to stretch fungicide spraying intervals to three weeks, but I'd get hammered in the third week. Now I have tightened that to two-week intervals at half rates and I have gotten wonderful control."

Biggers especially likes the speed. "It has been easy to mix because it is low-volume and uses less water," he said. "We can go five miles an hour and spray fairways in five minutes. Spraying is a pain and you need to get out there before the golfers get out there. The faster you can do it the better." ■

## OTHER PREEMERGENTS TALK WITH PENDULUM, IT



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