

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.

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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Carlson works within CHAMP guidelines

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National in Illinois.

The Robert Trent Jones Jr.-designed course is nestled into a meadow at 6,200 feet at the base of Squaw Valley USA ski resort, the site of the 1960 Winter Olympics. Carlson must deal with the grave challenges of a short growing season, freezing temperatures in every month, and severe winters that av-

erage more than 500 inches of snow.

The Resort at Squaw Creek received approval in the late '80s after several years of hearings and challenges from environmentalists. The goal of the CHAMP was to make the course as chemical-free as possible through restrictions on the use of herbicides, fertilizers and fungicides. Ten years later, the bold experiment has shown promise, but also has

created agronomic problems.

Each spring Carlson deals with a golf course that struggles to survive the substantial runoff from the adjacent ski resort that, in some years, can literally carry away some fairways. Replacing sod on fairways averages \$30,000 annually and getting the turf to take in spring is challenging.

"The CHAMP spelled out that we could only use one brand of fertilizer, which is too tempera-

ture-sensitive for it to be effective in the early spring temperatures. My biggest challenge is to try to get this course in good playing condition by mid-May to generate income. Even as new and better products have become available in recent years, I have the burden of proving its safety and effectiveness to get it accepted by the review board. After trying to get changes for six years, last spring was the first year that I received approval to use some dif-

ferent products," Carlson said.

To get any alterations to the CHAMP, a review board must approve the requests for change. This board is composed of representatives from the Placer County Environmental Agency, The Sierra Club, Lahontan Water Control Board, Squaw Valley Water District and the Squaw Valley Homeowners Association. Carlson must present proof of economic impact to justify looking for new approaches and then let the group find a consensus to change the program.

Carlson also wages a summer-long battle with dandelions and red clover that he can only eradicate by hand. But this year he obtained permission to try roller applications of Confront and Lontrel as an alternative.

Trying to keep greens healthy without fungicides has led to an aggressive snow-removal program in spring.

"We shovel off the greens as soon as possible, but it is still tough to get soils up to good temperatures until June here. I am hoping to get the opportunity to begin to try some newer products on the greens, but it will take time," Carlson said.

Carlson also battles the golfing public's perception that green is good. He runs a lean program with strict maintenance practices on the fairways, but with no mowing or maintenance of the numerous wetlands that surround the golf course. This makes the course a challenging target course with several forced carries over the wetlands. Greens reach their peak in mid-summer, but the lean approach can't match the deep green look of a golf course that has the freedom to use any product available.

"The real issue for us here is that we continue to produce the best conditions possible under our less chemical program, but it is the public that has to accept that look. This creates an economic factor that can't be ignored," said Carlson.

Having to maintain a golf course under such a restrictive system hasn't become a standard for others to use. But the innovative ideas that shaped the Resort at Squaw Creek have produced some positive results. Most importantly, many of the design techniques used in construction at the Resort at Squaw Creek, including wetland mitigation, the creation of retention ponds to handle runoff, the use of large charcoal filters to cleanse runoff from greens drainage and the careful shaping of fairways to control runoff, have become standard techniques in many modern golf courses.

"This project worried some residents in that it would become an eyesore in the meadow," Carlson said. "Now 10 years later they can see how this course blends into the natural environment. The Resort is now looked at as an asset to the community that provides 600 jobs and has increased land values." ■

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