

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

Continued on page 11

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

Continued on page 10

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

Continued on page 9

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

Continued on page 10

TOOLS OF THE TRADE

Pollock staying on top of Eagle Run and Stone Creek courses

By ANDREW OVERBECK

OMAHA, Neb. — Richard Pollock, CGCS, came on board during the construction of Eagle Run Golf Club here in 1989 and has not stopped building since. In addition to Eagle Run, the superintendent oversees the 27-hole Stone Creek Golf Club and a new 270-acre lake project. Local real estate developer Horgan Development Co. owns all three properties.

Eagle Run is a nine-hole executive course and a nine-hole par-3 course built within a housing development. The course was developed jointly by owner Bob Horgan, architect Jeff Brauer and builder Bill Kubly.

"It was a matter of coming up with the lots that you needed to have to make the project profitable," said Pollock. "We sent the maps to the engineers, they laid out the housing and we built golf on what was left."

After nine years running that facility, Horgan came to Pollock with the plans for the Grant Wencel-designed Stone Creek.

"He handed me a set of plans and asked me if I thought I could build this," Pollock said. "I said yes and we started moving dirt in May of 1999."

Pollock acted as the general contractor and hired sub-contractors to complete the job. The course opened for play in 2000.



Richard Pollock

"I hired a shaper and an irrigation installer and we did a lot on our own," Pollock said. "It was my first shot out of the bag for construction management, and getting everyone to work together was the biggest challenge. If you don't keep everyone getting along, you don't move forward very well. It took a while because we had to put in 782 house lots."

The 596-acre project has more than 200 houses already and another 150 under construction. The golf course takes up 221 acres of the property.

"This is high-quality affordable golf," noted Pollock. "Everyone deserves a quality round and Grant [Wencel] went back and forth with our engineers to make sure the golf course would fit."

GOOD SUMMER, GOOD STAFF

Both courses have bluegrass and rye fairways and fescue and ryegrass roughs. Eagle Run features Pennncross greens and Stone Creek has L-93 greens. While a large part of the country battled drought damage, Pollock said the course benefited from the hot, dry conditions.

"Hot and dry conditions actually help," he said. "We have had a lot of wind, so I have sprayed fungicides on the greens only one time this year. We have plenty of water from three wells out here."

The two courses are two miles apart and Pollock has two assis-

stants who split time at each facility.

"I am over at Eagle Run at least two times a day," Pollock said. "They bought me a new truck a couple of years ago and I already have 60,000 miles on it."

Between the two courses, Pollock has seven full-time employees and his staff peaks in the summertime at 39. Pollock, who also fills the mechanic's shoes, attributes much of his success to maintaining a consistent staff.

"My average turnover is five to six years," he said. "I keep a blend of college kids and retired folks so I am never without staff that doesn't know anything."

Pollock attributes his low turnover rate to treating his employees like family.

"I treat them well because they take care of me," he said. "If they have a problem they can come to me and I help them solve it. I have a great team here."

MORE ON HIS PLATE?

In addition to thickening turf in the roughs and on lake banks and fixing wet areas that have settled out, Pollock has been busy supervising the construction of a lake at Horgan's Newport Landing.

"We built a recreational boating lake behind a dam," Pollock said. "I picked out the material for the sea wall, put in the pumping system and we are putting water in it now."

More projects could be on the way for the busy superintendent.

"Horgan is still building," he said. "There will be more to come."

POLLOCK'S TOOLS*

GREENS MOWERS:

4 Jacobsen Greens King IV

TEE MOWERS:

3 Jacobsen Greens King IV

FAIRWAY MOWERS:

2 Ransomes 250, 2 Jacobsen LF-100

ROUGH MOWERS:

1 Jacobsen 9016, 1 Jacobsen 5111, 1 Jacobsen 528

RIDING BUNKER RAKE:

3 Cushman Groom Masters

IRRIGATION SYSTEM:

Toro Osmac

GOLF CAR FLEET:

110 Club Car gas

FLAGSTICKS:

Par Aide

COMPUTER & ACCESSORIES:

1 Gateway

PRIMARY HERBICIDE:

Drive

PRIMARY INSECTICIDE:

Merit



The sixth hole at Stone Creek Golf Club in Omaha, Neb.

TURF UTILITY VEHICLES:

4 Cushman 658 Trucksters, 8 E-Z-GO Workhorses, 2 Kawasaki Mules

VERTI-CUT REELS:

Jacobsen

AERIFIERS:

3 Ryan GA-30, 1 Ryan GA-60

TOPDRESSERS:

2 Cushman TD-1500, 1 Turfeo SP 1530

GROOMING REELS:

Jacobsen

TOURNAMENT SPEED ROLLER:

Jacobsen

IRRIGATION PUMP STATION:

Flowtronex, 3,100 gpm

PRIMARY FUNGICIDE:

Banner Maxx

PRIMARY SLOW-RELEASE FERTILIZER:

SCU

PRIMARY WETTING AGENT:

Canteen

CANNOT LIVE WITHOUT:

Mustang 2070 skid loader

TOTAL SQUARE FOOTAGE OF MAINTENANCE BUILDING:

11,200 sq. ft.

ANNUAL ROUNDS OF GOLF:

50,000

NORMAL GREEN SPEED:

8.5' - 9'

* Equipment listed is for Stone Creek GC only

Editorial Focus: Winter Preparation

California courses take different overseeding approaches

By ANDREW OVERBECK

PALM DESERT, Calif. — As golf courses up north shut down for winter, courses in the Sun Belt are gearing up for more play by overseeding their soon-to-be dormant bermudagrass turf.

While every course that overseeds does so to provide green turf for winter play, approaches and techniques are different depending on locations and microclimates. Nowhere is this fact more evident than in Southern California.

Mike Kocour, superintendent at The Springs Club in Palm Desert, Calif., takes a more aggressive approach to overseeding than do the courses closer to the coast.

"We verticut it and scalp it with flail mowers to get the ryegrass seed down in there," said Kocour.

Taking this approach in such a dry area creates dust problems, so Kocour makes sure to water lightly to stay within the state's PM 10 air pollution regulations.

"We have found that a little bit of



A flail unit scalps the fairway at The Springs Club in preparation for overseeding.

watering before sweeping and before mowing and dethatching reduces PM 10 issues by 99 percent," he said.

Kocour will close the course for the entire month of October this year. He starts the process in mid-September by shocking the bermudagrass into dormancy. The course will re-open Nov. 5 with a mixture of Palmer, Prelude and Paragon perennial ryegrass in the fairways.

KEEPING UP WITH THE COMPETITION

Like an increasing number of inland courses, superintendent Kent Davidson at Industry Hills Golf Course in La Puente joined the overseeding ranks last year. Previously the course had only overseeded its tees and allowed its bermudagrass fairways to go dormant. The change was made to increase revenues in the winter season.

"With thin and muddy conditions January through March, we

decided to make the change and last year was very successful," said Davidson. "The cost of the labor, seed and time was offset by increased play and the satisfaction of our existing players. It is a competitive thing, you have to follow suit if the course down the street is doing it." Davidson estimated that 50 percent of the courses in his area are currently overseeding.

With two courses, Industry Hills has an advantage over other layouts because it can close one down while working on the other.

"We do one course in late September and the other course in mid-October," said Davidson. "The key for us was to minimize our turf renovation. We did just enough to get a good seed bed and get good germination. But we didn't do so much that we damaged the bermudagrass to the point where it won't recover the following year."

OUT ON THE PACIFIC COAST

Courses on the Pacific Coast face a similar situation. With daytime temps in the mid-60s most of the year, bermudagrass at Pelican Hill Golf Club in Newport Coast never really gets that strong. As a result, superintendent Steve Thomas treats

it lightly during overseeding.

"We don't get as aggressive as they get in the desert, because if we do it affects our spring transition. We don't want to knock it out," he said. "We scalp it lightly and cut the water back and put on plant growth regulators before we put the ryegrass seed out."

Thomas' main concern this year is lack of precipitation. Since he has clay soils that don't drain well and he irrigates with effluent, salts build up quickly.

"We are coming off the driest year in California history and we need rain to flush our soils because the salt levels in these soils are off the charts," he said. "I am contracting a company to come out and spread gypsum wall-to-wall, which is the best thing we can do right now."

Thomas also has two courses to help in the overseeding process. He closes the South course in September and the North course at the end of October. Each course is closed for two weeks, and then golf cars are restricted to paths for a month. Once the South course is back to normal, he gets to work on the North course.

Courses repair drought damage

Continued from page 7

irrigation applications for new seeding. Other drought regulations reduce total usage but allow the superintendents to determine distribution. In both cases, fall aeration and overseeding/regrassing plans can move forward, albeit in a somewhat restricted fashion.

Where overall water consumption is curtailed, turf managers needing to regrass must make hard choices where to cut back regular irrigation for use on seedling establishment. With reduced fall play, tees can be consolidated, irrigation and mowing can be stopped once turf goes dormant and practice facilities can be closed in order to ration water.

GREEN RECOVERY

Where water restrictions are still in place, efforts should focus on putting green surface recovery since weak turf is more susceptible to winter injury. Fertilize more often or at higher rates to increase density and strengthen plants and plan a heavy application for late fall. Aeration and overseeding will be needed to recover turf quality but a decrease in aeration tine size may be appropriate. Communicate these limitations to course officials and prepare for an aggressive spring aeration schedule.

Despite water restrictions, overseeding of greens must be done this fall to regain density and putting quality. Frequently done in conjunction with fall aeration, overseeding can proceed as a stand-alone practice. Proper seed placement (approximately a half-inch deep), seed to soil contact and post-seeding maintenance will be especially critical. Light sand topdressing and brooming will help to work seed into the holes. Reduced mowing frequency, light frequent syringing, and bi-weekly applications of starter fertilizer will all enhance seed establishment. If possible, use temporary greens for several weeks after seeding. If you must regrass bare spots, try plugging (cup cutter, hex plugger, etc.) instead of sodding. Plugs stand a better chance of survival because of root depth.

KEEPING FAIRWAYS IN PLAY

Putting any recovery efforts toward fairways, especially landing areas, should come second to greens. If water use is severely restricted, consider spot aeration and overseeding. Wholesale fairway aeration can be delayed until late fall or the following spring. Alternatively, solid tine aeration, deep tine aeration or slicing later in the fall will effectively cultivate soils with minimal moisture loss or clean-up. If thatch is problematic, consider deep vertical mowing to limit moisture loss. Fertilize aggressively to encourage seedling growth and turf stand density and schedule a late fall fertilization to

improve winter hardiness.

GETTING OUT OF THE ROUGH

Since most drought regulations prohibit any irrigation of the rough, timely fall rains will be needed to reestablish turf cover. Overseeding this fall is prudent, despite the probability that inadequate (or untimely) rainfall will limit germination. Broadcast seed at slightly higher rates, then solid tine aerate (shallow and in two directions) to work the seed into

the soil. This tactic will minimize playing surface disruption and moisture loss. If it rains, seed is ready. If not, little harm is done and seed may still be viable in the spring.

If various factors make rough seeding a poor choice for your facility this fall, then weed control should be emphasized. Herbicide treatments are very effective in the autumn, provided weeds are actively growing; one adequate rain

can rehydrate drought-stressed weeds. Be prepared to treat weeds one day or so following rainfall – keep products in stock, calibrate sprayers ahead of time and pre-calculate tank rates. Finally, plan on more weed control next year, too. Weed populations explode the year after a drought due to turf thinning. ■

Kathy Antaya is an agronomist for the USGA Green Section's Northeast Region.

ADDITIONAL IDEAS TO CONSIDER FOR DROUGHT REPAIR AND WINTER PREP:

- Have an aerial photo taken of the course as documentation of poor irrigation coverage.
- Analyze sprinkler coverage and determine if a change of heads or nozzles might be helpful.
- Identify tree root competition and plan to root prune.
- Drain tile installation (especially trenching) is easier when soils are dry.



BUNKER RENOVATION: CASE STUDY #27

Jack used to struggle with his maintenance budget.

He always looked for ways to control costs yet deliver results.

Over the years, he implemented many new methods and routines.

His bunkers always eluded him.

After most storms, he would spend \$1,800 to \$2,500 on labor, repairing water damage on his bunkers. Jack was looking for answers to his bunker problem and found a solution that works.

TOUGH DECISIONS ... SERIOUS SOLUTIONS

He turned to an advanced technology from IVI-GOLF. Sandtrapper™ lines the bunker and ends the routine of sand trap maintenance. It prevents washouts, sand contamination and eliminates short renovation cycles.

Jack made the right decision. Now, he spends a lot less money on labor.

This keeps the course owners satisfied and leaves room in the budget for other important items. He's happy to have found a serious solution to his elusive bunker problem.

Stop struggling with tough decisions and contact IVI-GOLF.

We'll send you a product information guide to learn more about Sandtrapper.

888 - 970 - 5111

www.sandtrapper.com



Ask about IVI-GOLF's new NO-RISK product trial for Sandtrapper