



## BRIEFS

### WOODHEAD HEADS BACK TO GCSAA

LAWRENCE, Kan. — The Golf Course Superintendents Association of America has hired R. Scott Woodhead, CGCS, as director of membership. Woodhead, who served as president of the GCSAA from February 2000 to February 2001, rejoined the association after serving as the director of golf course operations for the City of Dickinson, N.D. At the GCSAA he will be responsible for all membership recruitment and retention activities, the association's service center, the certification program, association governance and the golf championship held in conjunction with the annual conference and show.



Scott Woodhead

### ENV'L GOLF TEAMS WITH HORTON

CALABASAS, Calif. — Environmental Golf has formed a joint venture with environmental consultant and golf course agronomist Ted Horton, CGCS, of THC Consulting. Under the terms of the agreement, Horton will partner with Environmental Golf to share expertise on environmental stewardship, indigenous landscaping, and habitat protection at Pelican Hill and Oak Creek Golf Courses in California. He also will work on strategic business planning and project support.



Ted Horton

### CHARLTON JOINS INDIAN LAKES RESORT

BLOOMINGDALE, Ill. — Daniel Charlton has been appointed superintendent for the two 18-hole courses at Indian Lakes Resort. Prior to this post, Charlton was the assistant superintendent at Bob O'Links Golf Club in Highland Park. The resort's two courses were originally designed by Robert Bruce Harris in the late 1960s and early 1970s. Rick Jacobson started a redesign of the facility last year. The four-year, \$6 million project is part of the \$20 million renovation of the entire resort. The first nine holes of the new west course opened in August.

## Drought, heat and fire ravaging Mountain West

By KEVIN J. ROSS, CGCS

EDWARDS, Colo. — The western part of the United States, in particular the Mountain West, is suffering through its worst drought in more than 150 years. Water supplies throughout many areas are at critically low volumes and the prognosis doesn't appear to be getting any better.

Along with this drought came the worst fire season in decades. Major wildfires have been occurring throughout the west with Colorado and Arizona getting hit particularly hard. As of mid-summer, Colorado already had seen its worst wildfire year on record.

The impact on golf facilities has been dramatic. Water availability may be the most difficult problem facing courses to date. Most of the Mountain West depends largely (70 percent) on snowpack to fill ponds, reservoirs and rivers. After a year of below-normal snowpack and above-average temperatures and windy conditions, there is very little water to go around.

Kevin Cahalane at Telluride Golf Club has gone from using up to 1,750 gpm

in the spring to only 450 gpm during the summer to water his entire golf facility. "They will probably make a call on the water in the river soon and if that happens we will be able to water greens and tees only, and all resort/homeowner irrigation will be eliminated," he said.

Another example is the completely redesigned and renovated Snowmass Club near Aspen. As of press time, the club was debating whether to start seeding or to hold off until next year because of the low water supply.

"There is just not enough water in our streams to supply what's needed for a



Dillon Reservoir in Summit County, Colo. is down 35 percent.

Photo: Karen Ross

grow-in, and it appears that the situation is getting only worse," said project manager Al Ogren.

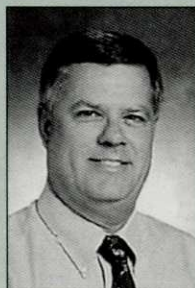
Another factor in the water supply equation is the demand for domestic use. Most golf courses own water rights from

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## Postemergence crabgrass control improving

By T.L. WATSCHKE, Ph.D.

The herbicidal possibilities that exist today for the postemergence control of smooth crabgrass are vastly improved compared to 12 to 15 years ago. There is still no silver bullet in the marketplace, but the potential for a single application with high efficacy is possible.



T.L. Watschke

The challenges involved in the process are proper timing (stage of growth of the smooth crabgrass), the addition of appropriate adjuvants, and possible sequential applications. Continued research is necessary to fine-tune the use of these newer materials to provide end users with consistent and highly efficacious programs for the control of smooth crabgrass.

One of the most important ingredients in controlling crabgrass, regardless of herbicidal tactic, is to have as competitive a turfgrass stand as possible. Crabgrass cannot invade and compete unless it has space.

In addition to needing space, crabgrass seedlings need light. The shade provided by a dense turfgrass stand can compromise the competitive ability of crabgrass seedlings. Thus, proper fertilization programs, particularly with respect to nitrogen rate and timing, can influence the ability of crabgrass to compete. At times,

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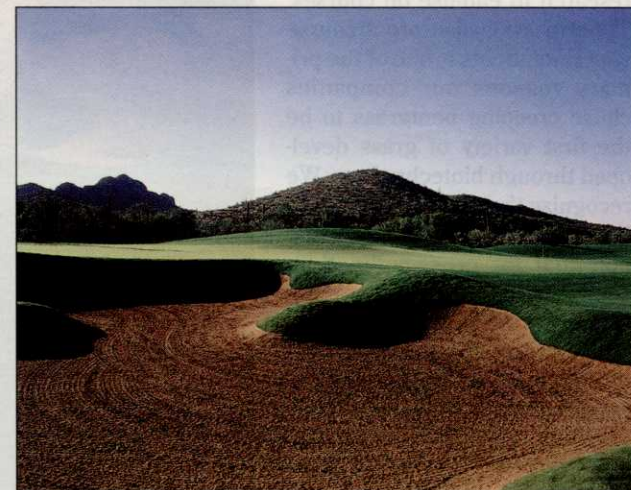
## Champion bermudagrass quickly becoming top dog in Arizona

By D. HUBBARD

HIGLEY, Ariz. — Over the last 15 years, as golf in Arizona's Sonoran desert has developed into an international attraction, the demand for premium-level golf courses has pushed bentgrass greens beyond their reasonable limits to cope in the desert.

In its five years at three Arizona golf facilities, Champion has proven its claim as the bermudagrass that most closely mirrors bentgrass in appearance and performance, while withstanding the ravaging from the dry summer heat.

As scores of high-end golf properties convert to such hybrids as Tifdwarf and Tifeagle, Champion is the ultradwarf of choice at Superstition Mountain Golf Club, The Pointe Hilton Golf at Lookout Mountain, and the Omni Tucson National



The 10th hole at the Lost Gold course at Superstition Mountain

Golf Resort. While maintenance philosophies and practices vary from one club to the next, everyone agrees that Champion is "high maintenance." Of course, the most notable advantage is the return to more normal irrigation practices. Though Champion may require more attention, maintenance crews

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## Delhi's course wins Audubon nod

DELHI, N.Y. — The Delhi College Golf Course has been certified as an Audubon Cooperative Sanctuary by Audubon International. The course is the 15th in New York to become certified.

The college's student chapter of the Golf Course Superintendents Association of America, with assistance from the course's assistant superintendent Vivian Walker, initiated Delhi's certification process in 1998. The 18-hole course serves as an educational lab for the college's two- and four-year pro-

grams in golf and turf management.

"This certification justifies the hard work of the college and the community members who have kept the program going for the past four years," said Dominic Morales, Delhi's applied sciences and recreation dean and member of the course's Audubon advisory board. "Besides offering village residents, golfers and visitors the opportunity to enjoy wildlife in a unique setting, the Audubon program also has provided an interesting facet to the college's programs."

## Mountain West hit by drought

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previous ranches before the golf course was developed, which can date back to the late 1800s to the early 1900s. These rights, in general, supersede the water districts and legally can rank above domestic processing.

In July, the Upper Eagle Valley Water District, which is responsible for a 30 mile stretch known as the Vail Valley in Colorado, met with all golf course superintendents and asked for their help in a voluntary 50 percent reduction in golf course water consumption. Depending on the particular water right, many golf courses don't have to comply.

Along with the drought has come the potential for wildfires. The fire danger is extremely high and golf courses have had to take aggressive action toward prevention. Many courses have established no smoking policies throughout their entire golf course and facility. One cigarette thrown in some native grass or wooded area could spell disaster. Another common fire prevention policy is the elimination of golf cars and course equipment from driving in native grass areas and wooded areas for fear of a muffler or machine spark creating a fire situation. Most courses have confined all equipment and golf cars to irrigated turf

areas and asphalt/concrete paths only.

With the fire danger and water problems, public and resort golf courses are feeling the pinch in the pocket. Vacationers have heard of the bad



Photo: Karen Ross

Ross has banned smoking on his course

times in many western areas and have stayed away. Some resorts have estimated a 50 percent reduction in hotel guests and rounds played. Damage to playing areas from water restrictions and less revenue from rounds makes for potential hard times ahead.

So where does this leave us? Watering practices will need to be evaluated along with sprinkler efficiency and design. Further research into drought tolerant strains of grass as well as alternative water sources will also be needed. And superintendents will have to educate memberships that everything green is not always good. ■

## Crabgrass control improving

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even though all cultural programs are in place, the need to use herbicides will prevail.

The postemergence control of smooth crabgrass has been possible for many years.

However, the first selective herbicides were not available until the commercialization of several organic arsenical compounds, e.g., monoammonium, monosodium, calcium, and disodium methylarsonate.

Organic arsenical materials are still available for use; however, they no longer dominate the marketplace. In general, organic arsenicals require a minimum of two applications, spaced 14 days apart, to have efficacy anywhere near that of most commercially available pre-emergence herbicides. To minimize the potential for phytotoxicity, organic arsenicals should not be applied when the temperature is above 80°F. This temperature limitation can create problems for the timing of the second application and increase difficulties for a third.

With the commercialization of Acclaim in the late 1980s, herbicidal options for the post-emergence control of summer annual grasses were significantly enhanced. Acclaim has superior single-application efficacy compared to the organic arsenicals.

In most studies, one application of Acclaim has been shown to provide control of smooth crabgrass at a level comparable to that of the best pre-emergence herbicides.

However, if there is germina-

tion subsequent to the Acclaim application, sequential applications are required. Even though Acclaim is highly efficacious, there are a number of issues that must be considered. The efficacy of Acclaim declines once smooth crabgrass begins to produce basal

*'The potential for a single application with high efficacy is possible'*

— T.L. Watschke

tillers. As crabgrass plants continue to get larger and produce more tillers, control will continue to decline. Some Kentucky bluegrasses have sensitivity to Acclaim and applications to them should be avoided. The activity of Acclaim is also antagonized by some broadleaf herbicides, which limits the tank-mixing of combinations. Acclaim does not have any appreciable broadleaf weed control activity. Usage in a number of locations has shown that the efficacy of Acclaim can be enhanced by the addition of MacroSorb Foliar, a biostimulant product.

More recently, another postemergence herbicide, Drive 75 DF, for the control of smooth crabgrass, has been commercialized. This herbicide has one application efficacy comparable to Acclaim. It also has some variation in the level of control, depending on the stage of growth

of the smooth crabgrass. Typically, Drive will provide excellent control until the smooth crabgrass begins to produce basal tillers (much like Acclaim), at which point the level of control declines.

However, unlike Acclaim, the activity of Drive improves when the smooth crabgrass matures to the point of producing multiple basal tillers. At this advanced stage of growth, Drive is capable of good control. Research at Penn State has shown that several sequential applications of Drive, even at less than full label rate, can improve control across all growth stages. On the positive side, the ups and downs in control can be avoided through multiple applications. However, such control may require more trips over the site than is desirable.

The addition of MacroSorb Foliar has been found to enhance the efficacy of Drive (which has also been demonstrated with Acclaim). The activity of Drive is also best when the treated site is not allowed to dry out.

In research trials where Drive has been tank-mixed with broad-spectrum broadleaf herbicides such as Trimec and others, the control of white clover is improved and, when timed properly, the control of smooth crabgrass has also been excellent. All successful applications of Drive are supplemented with methylated seed oil. Drive does not work particularly well without an additive. ■

*Dr. Watschke is a professor of turfgrass science at Penn State University.*

## Champion catching on

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aren't out hosing down greens long after the sun has set, as was necessary with bentgrass.

At Superstition Mountain 30 miles east of Phoenix, the job of maintaining 50 Champion greens on the Prospector and Lost Gold courses, as well as the member's putting course goes to director of agronomy, Scott Krout. He and his crew prepare the courses for a growing membership sensitive to day-to-day fluctuations in mowing heights and the speed of the greens. Recognizing their preference for consistent playing conditions, Krout maintains a strict schedule of verti-cutting and topdressing twice a week and double-cut mowing everyday.

This past spring, the Champion greens on The Prospector met an even more stringent "trial by fire" when The Tradition, the first major tournament on the Senior PGA Tour moved to Superstition Mountain from Desert Mountain.

"The Tradition couldn't have come at a more crucial time. The greens are transitioning from winter rye and the Champion is waking up," Krout noted. "The Champion was at about 75 percent coverage, yet full enough to accommodate the more demanding play by the tour pros."

In 1997, anticipating an increase in rounds, the Pointe Hilton Golf Club at Lookout Mountain also converted to Champion. Superintendent Paul Smith had battled with bentgrass for nearly 10 years and welcomed the switch. While the Champion greens on this resort course in the Desert Mountain Pre-

serve in central Phoenix demand Smith's full attention through the summer, his maintenance regimen varies from Krout's to accommodate a clientele more concerned with the visual impact of the golf course on the day they play than with consistent playing conditions. Because of the heavier resort traffic, Smith does much less verti-cutting, if at all, utilizing groomers instead to control Champion's fast-growing root system.

"Our guests may not notice a difference in mowing heights from one day to the next, and putting speed can vary, but vacationing in the desert, they certainly respond to richly colored emerald green putting surfaces," says Smith.

At the Omni Tucson National Golf Resort, course superintendent Michael Petty's approach is similar, however, he must balance the look and feel of the greens to satisfy members as well as resort guests. Through the winter, the Champion provides a dense cushion for the lush rye overseeding, allowing a comfortable base for Petty to speed up the greens during the PGA Tour Tucson Open played each February.

If the opinions of the superintendents at these three facilities are any indication, the beauty and playing characteristics of Champion are well worth their extra attention given to growing in, fertilization, mowing, grooming, and routine watering.

Early on, we made our mistakes in the overseeding and transition periods," said Krout. "But what we learned in the process has convinced me that if it were my money, I wouldn't think twice about putting Champion on my greens." ■

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