



## BRIEFS

### TULLY NAMED SUPERINTENDENT AT KEMPER LAKES GC

**NORTHBROOK, Ill.** — KemperSports Management has named Dan Tully superintendent at Kemper Lakes Golf Course in Long Grove, Ill. The Chicago-area native has over 15 years of experience in the golfing industry. Since January of 1998, Tully has been superintendent at the 27-hole, 650-acre White Hawk Country Club in Crown Point, Indiana. He also has worked at the Michael Jordan Golf Company in Aurora, Ill.



Dan Tully

### DELHI COLLEGE RECEIVES NYSTA SUPPORT FOR LIBRARY

**DELHI, N.Y.** — The New York State Turfgrass Association has contributed \$2,000 in support of reference materials for students of Delhi College's golf, turf management and landscape programs. The collections of materials will be available to students at the university's Resnick Library. According to Dominic Morales, dean of Applied Sciences, the grant is a good start in developing a resource room dedicated to students of these majors. Industry support has played a key role in the development of golf-related programs at Delhi. The college receives over \$100,000 in equipment and supplies for student use each year from the industry, along with more than \$15,000 in scholarships.

### SEVERANCE JOINS CRYSTAL MOUNTAIN

**THOMPSONVILLE, Mich.** — Scott Severance has joined Crystal Mountain here as the new superintendent. He will be responsible for managing turf conditions and maintenance on the facility's two golf courses and the Crystal Mountain Golf School's 10-acre practice center as well as overseeing renovation work being done on the resort's Betsie Valley layout. Severance previously held a superintendent position at the Florence Country Club in Florence, S.C.



Scott Severance

## EDITORIAL FOCUS: Irrigation & Pump Stations

# Technology and innovative ideas drive new irrigation product development

By JOEL JOYNER

**RIVERSIDE, Calif.** — The golf course irrigation industry has sunk millions into research and development to bring to market a slew of new products and services designed to improve efficiency, conservation and ease of operations.

Superintendents are continuously striving to conserve water and energy. Applying the right amount of water to turf where they need it, when they need it, is essential to course operations. Irrigation supply companies are looking to assist those efforts by developing products like wireless rotors, handheld control devices, upgraded central control systems and advanced software.



Toro's 720G

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products like wireless rotors, handheld control devices, upgraded central control systems and advanced software.

### TORO

Headquartered here, the Toro Co.'s irrigation division is preparing to launch its first line of new sprinklers in 10 years. The 800 series will eventually be replacing the 700 series line and offers new features like a low-power solenoid.



Toro's new 800 series sprinkler head

"It requires less than half the amperage that the current solenoid requires," said Kristina Spindler, golf marketing manager for irrigation. "It means that golf courses can run more heads simultaneously than what they could before. Or they can reduce the

size of their wiring."

The product also has more than twice the surge protection, according to Spindler. "Many currently offer up to 7,000 volts of protection. This product has been tested up to 20,000 volts and has yet to fail," she said.

Another new sprinkler, released last month, is the 720G series. "It doesn't spray as far, and superintendents can adjust the trajectory," said Steve Snow, director of golf renovation and sales. "It provides more precision and control."

"They can dial in the amount of water to be used, the trajectory and radius of the sprinkler with a twist of a screwdriver," explained Snow. "It's perfect for tee boxes, between cart paths and greens and where superintendents need to water 15 feet to 20 feet rather than 60 feet."

### SIGNATURE CONTROL SYSTEMS

Signature Control Systems, based in Irvine, Calif., is working to release software that integrates irrigation into more areas of the golf course. "We're now looking at our equipment as more of a management integrator rather than just an irrigation controller," said Bruce Smith, president.

Fertigation injection system software has been in testing for close to a year and is scheduled to be released toward the end of December. "It's capable of handling nine hole courses right through to 36-hole sites," said Smith. "As long as



Rain Bird's Freedom Pad pocket PC

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# Floodgates open in Conn. for permitting, water conservation

By JOEL JOYNER

**FARMINGTON, Conn.** — Superintendents here and across the state are getting another chance to comply before officials crack down on courses without water diversion permits.

The floodgates opened when a new Public Act for compliance was passed by the Connecticut General Assembly. It involved golf courses that use a private water supply for irrigation and have not registered for state permits for water diversions.

The Connecticut Water Diversion Policy Act, first initiated in 1982, requires any person or municipality pumping more than 50,000 gallons of ground or surface water a day to register each diversion. The state's Department of Environmental Protection estimates that there are at least 75 golf courses throughout the state — old and new — diverting water without authorization.



Tim O'Neill

If courses fail to at least begin the application process by July 1, 2003, officials are going to get tough — threatening a variety of enforcement actions. "Our intention is to reach out to superintendents and help them understand what they need to do to comply — without penalty — with newly enacted state laws," said Carla Feroni, environmental analyst for the Inland Water Resources Division of the DEP.

### COMPLIANCE IS NO PICNIC

Unfortunately, even voluntary compliance is no picnic. Superintendent Tim O'Neill at the Country Club of Darien first became aware of his club's need for a water diversion permit in July of last year when

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# So-called 'native' plants offer no guarantee of water conservation

**TEMPE, Ariz.** — Superintendents take note: using plants identified as 'native' may alter your water conservation objectives.

Reported studies from the American Water Works Association Research Foundation and plant biologists at Arizona State University here both found that so-called xeriscape or native landscapes were actually receiving more water than traditional style landscapes.

ASU scientist Chris Martin, Ph.D., found that desert plants such as acacia, brittle bush, creosote bush and mesquite could use two to three times as much water as flooded alfalfa or turfgrass.

According to the findings, the problem is not necessarily with the plant, whether it's a desert plant or lawn, but with watering management

practices. Desert plants survive because they are capable of absorbing large amounts of water very quickly in order to survive in an area with infrequent rainfall.

When landscape water is made available, most plants act as "water pumps" and absorb the resource rapidly while growing at tremendous rates.

The studies recommend that landscape managers learn the growth cycles and true water requirements of managed plants to conserve water effectively.

According to researchers, even properly established turfgrass can survive on very limited water if it is allowed to go dormant during hotter, dryer times of the year, as long as the plant's crown is kept hydrated with as little as one-quarter inch of water a week.



# Superintendents should embrace Hispanic workforce

By KEVIN ROSS

As the labor market continues to tighten, more golf courses are relying on Hispanic labor for staffing needs. As this trend continues, course operations must develop relations that will ensure a cohesive, hard-working team.

An important factor is integrating Hispanic crew members into the overall operation and making them feel comfortable. Also, taking time to recognize cultural differences will benefit both workers and employers.

Here at the Country Club of the Rockies, I have created a system that pulls from both my working knowledge and ideas gleaned from other superintendents.

### GOLF LESSONS

Educating Hispanic staff about golf will not only teach them the game but will also increase their understanding of their duties on the course.

The best way to do this is to have your professional golf staff give an employee golf clinic. Our clinic is lead by our director

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## Irrigation

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there is a pipe in the ground with water in it, we can put fertilizer in it."

There are superintendents across the nation professing that fertigation is the next step for agronomic engineering, said Smith. "Fertigation is a very sophisticated entity," he added. "It's very well to have a product, but without an experienced user there could be trouble."

Once established, the fertigation system can literally be put on autopilot and run, according to Smith. "But there's a lot of education provided up front," he said.

Costs are dependant on the size of the site and the fertilization regime the operator wants



Rain Bird's RVDU

to maintain. "It can range from less than \$10,000 upwards to \$25,000," said Smith.

### RAIN BIRD

The new wireless rotor by the Rain Bird Co. is set to be released in coming months. It will be a first generation product that communicates from a central control or hand-held unit without the use of underground wiring or additional satellite controllers.

The wireless rotor operates through a commercial paging system. "The electronic board is inside the head of the rotor," said Paula Knop, rotor brand manager. "There will be a small monthly cost paid to individual paging companies, and it will operate like a hand-held pager. There are around 700 to 800 heads that can operate off what we call a cap coder which is basically a pager number."

As far as storage capability, a superintendent may program the rotor to a 14-day schedule retaining up to 16 start times per day, according to Knop. "There's been discussion on the costs, but there hasn't been a price release yet," she said.

New accessories and mobile devices also have been added to Rain Bird's central control product line. The Freedom Pad pocket PC allows activation of the system from anywhere on the course with a range of two-to-five miles depending on terrain.

"It includes a map of the layout that allows a customer to identify a specific sprinkler, take notes, and make adjustments to the main central control system database," said Pat Loper, manager of central control. "When they return to the office, they drop the device into its cradle where it automatically makes the changes to the database."

The product has a list price of \$5,000 and was made available in September. Another product called the Remote Video Display Unit [RVDU] functions like the Freedom Pad but works in real time. "It offers a larger screen

and can be mounted to a maintenance vehicle," said Loper. "The exchange of data occurs as you are in the field."

The cost is between \$10,000 and \$15,000, according to Loper.



Hunter's Genesis III site map

"We have them at pilot sites today, and we anticipate having them at full release for the GCSAA show in Orlando."

### HUNTER GOLF

The continuation of the 800 series is one of the main projects for Hunter Golf – in particular the 870 sprinkler. A glimpse of the product was shown at the



Hunter's 870 sprinkler

GCSAA show in Dallas this year, but now it is in full production.

"It's the first gear-driven, electric valve and head where everything is serviceable from the top without disturbing the turf," said Rich Dunn, product manager.

"The inlet valve, pop-up riser,

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## Embracing Hispanic workforce

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of golf and his assistants. The clinic is taught on the driving range with all staff being required to attend. It starts with a group discussion of the golf swing. Then individual attention is given analyzing everyone's swing while hitting balls. After the instruction is complete, the staff is allowed to stay on the range to hit balls and practice.

The true impact of this clinic can be measured in the days ahead, as many lively discussions in the lunchroom involve who hit the ball the farthest, who took the biggest divot, and who has the best swing.

In October, our club has one day set aside for a complete staff tournament. All departments are divided in a scramble format with dinner and prizes following golf. Each member of the foursome is from a different department, so everyone can get to know each other over the years.

### THE LITTLE THINGS

Investing time in the little things can go a long way in maintaining crew relations.

- Break down the language barrier. For those who can't speak Spanish, you can show your dedication to the staff by

continually improving your Spanish speaking skills. This works both ways. Hiring someone to teach your staff English or simply having a word-of-the-day can improve communication. You can also give them incentive to learn English by increasing wages to

those who show improvement.

- Many course operations are arranging housing in advance for the Hispanic staff. Some operations even pay for the housing as part of their compensation package.

- A separate conference and training facility offers a great place for the crew to be educated, in a private setting, concerning the work requirements of the job. Spanish training videos are also a great way to bridge the language barrier while showing concern for employees' proper job execution.

- Providing shirts, windbreakers, pants, hats and rain gear are a great way to build morale. This year at my club our Hispanic employees chose the style of golf shirt for the season's uniforms. Having this type of input contributes to a team feeling.

- Each employee should

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Workers learn the game at Ross' course

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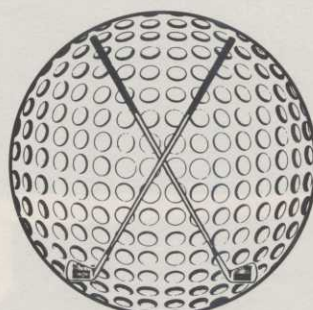
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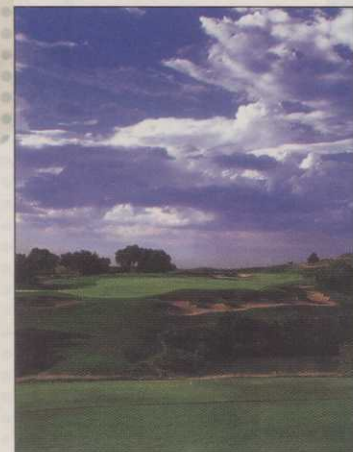
## Pesticides

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treated with pesticides. "Normally, if clippings are scattered over existing turf areas, the pesticides degrade relatively quickly," said James Snow, national director of the USGA Green Section in Far Hills, N.J. "The one thing not to do is dump clippings into ponds or streams."

### RECYCLE AND REUSE

For the most part, golf courses return clippings to the soil to be recycled by soil microbes, according to Todd Lowe, USGA agronomist in Hobe Sound, Fla. "Clippings are removed from greens only on most courses, but the topic of clipping disposal is an especially important issue around



A view of the sixth hole at Colbert Hills

equipment washing facilities."

More and more facilities are installing systems that separate clippings and recycle and reuse the water following a filtration and treatment process. "The clippings can then be transported to a compost heap to recycle nutrients back to the environment," said Lowe.

Dave Gourlay, course manager here at the Colbert Hills Golf Course, makes use of Landa's Waterstax wash-water treatment system to reduce potential runoff of pesticides when equipment is cleaned at the facility.

## Team building

Continued from previous page

have his or her own locker. Also, putting the employee's name on the locker instills a sense of belonging.

- The typical American lunch, sandwiches, is no match for the elaborate dishes of the Hispanic workforce. Their lunches are more like most American's dinners. Having a minimum of three microwaves and sufficient refrigerator space available is a big plus.

- Taking yearly crew photos and displaying them in the lunchroom is a nice touch. We have our crew photo enlarged and give one each to the staff members. The staff takes these photos home and can explain to their family about the people they worked with and about the work they did. ■

GOLF COURSE NEWS

"We have a contained wash pad station that was installed when the course was built," said Gourlay. "The Waterstax unit uses a process called bioremediation to treat the wash water."

After equipment used on the course is washed, the system removes dirt and turfgrass clippings. "The wash water is then treated with a solution of microbes that break down the waste into carbon dioxide and water," Gourlay said.

The water enters a separate tank and is further cleansed with aeration and additional treatment before it's made available for reuse. "It's capable of treating a thousand gallons a day at a rate of 15 gallons per minute," Gourlay said. "The grass clippings are either dried and redistributed to the course or composted."

### PERSISTENCE OF PESTICIDES

Gerald Stephenson and colleagues at the University of Guelph

in Guelph, Ontario, Canada, published a study on the persistence of pesticides in turfgrass clippings this summer. Stephenson recommends not to collect clippings for composting for about four weeks following pesticide treatments.

The research focused on 2,4-D, Mecoprop, Dicamba, Chlorpyrifos and Chlorothalonil in controlled "once-loaded" and "multiple-loaded" compost scenarios.

"Basically, we treated a large



A view of the 7th hole at Colbert Hills

area of turfgrass with these different pesticides, and then we harvested a large quantity and mixed

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