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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.

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.

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EDITIONAL FOCUS: Irrigation & Pump Stations

Technology and innovative ideas drive new irrigation product development

By JOEL JOYNER

RIVERSIDE, Calif. — The golf course irrigation industry has seen 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 reduce overirrigation. 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

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.

"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 sprinklers 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, leased 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.

Fertiligation 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

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 frequent 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.

Continued on page 12

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 a 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 clinics. Our clinic is lead by our director

Continued on page 11
he went before his local environmental board to gain approval to expand his existing irrigation holding pond. "We had no idea a water permit was required by law," said O'Neill. "One of the worst parts was learning that it may take three years to go through the full permitting process and run $30,000 to $40,000 in engineering fees."

So that the CC of Darien could continue to irrigate for those three years - without a permit - they signed a consent order to abide by a series of conditions:

- Limit the course's water use to 286,000 gallons a day;
- Meter and record water use on a daily basis from all water diversions;
- Provide pumping records and progress reports to the DEP annually;
- Retain a consultant during the consent order; and
- Conduct environmental analyses and evaluations.

The analyses and evaluations required: evaluating the impact, if any, on the fisheries habitat in the Goodwives River which flows through the property; conduct a hydrogeologic analysis of any existing well or proposed well to ensure it poses no threat to surrounding homeowner wells; and provide a comprehensive evaluation of the irrigation system, documenting water use needs as well as a conservation plan. The consent order also requires that the DEP be allowed to visit the golf course at any time to review records.

BEST MANAGEMENT PRACTICES

As challenging as the permitting process is, superintendents in the state have not been daunted. At a conference held in October at the Country Club of Farmington, information was made available on the state's water resources and how water diversion legislation will affect Connecticut golf courses.

Attendees also heard presentations about hydrology, efficient irrigation and irrigation system audits, the DEP permitting process and how to hire a consultant. The DEP's newly drafted Best Management Practices (BMP) was also made available for comment.

Heather Garvin, superintendent at the Canton Public Golf Course, was one of the four superintendents on the committee that developed the BMP document. "It originally was about conserving water, but we also added information on maintaining water quality," she said.

The committee was made up of DEP staff members, irrigation engineers, educators, and environmental associations and consultants, according to Garvin. "We provided input on how we use water on a golf course, the cultural practices, and how we can save water through our management practices," she said. "The document is to be a tool for golf course superintendents to use, and our participation was to make sure it was focused towards us."

Though comprehensive, the document shouldn't be considered a final work, said Garvin. "In a couple of years, or maybe annually, I'd like to see it updated," she said. "Especially when we get feedback from superintendents or as new technology becomes available to us."

**COMPREHENSIVE FOCUS**

John Ruzsbatzky, superintendent here at the CC of Farmington, also was on the committee. "The document concentrates on both the supply and demand side of water quantity, and water quality covers everything from evaluating the conditions that exist on a golf course right down to spill response and waste management plans," he said. "A lot of the issues in the BMP are fairly consistent with Integrated Pest Management practices," said Ruzsbatzky. "The research was in-depth, including investigating what other states had implemented and the broad scope of the people involved on the committee."

At the CC of Farmington, which obtained its water diversion permit back in 1983, the new legislation has proven to be a logistical issue. "We're constantly making upgrades to our existing irrigation system," Ruzsbatzky said. "The DEP is making a friendly push to have people come in to compliance rather than going out and targeting those who are not in compliance."

*Portions of this article were previously published in the Metropolitan Golf Course Superintendents Association's Tee To Green magazine, July/August 2001 issue.*

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**MAINTENANCE**

**Conn. water**

Continued from page 8

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