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## Letting Nature Take

*Continued from page 40*

we made eight fungicide applications on greens, and three were spot treatments," Beckmann says.

■ Trying to solve problems naturally. For instance, when Beckmann joined Salishan the course had a severe crow infestation problem. Crows are infamous for damaging turf to catch insects, such as



▲ This area was formerly maintained turf that was in play at Salishan. Several areas on the course have been returned to their natural state.

crane flies. To combat the growing crow population, Beckmann introduced three owls on the property. "Owls are natural predators of crows," he says, noting the crow population dwindled from several hundred to less than 50 in about four years.

■ Creating homes for wildlife. A few years ago, Beckmann and his crew created a pond on the par-3 sixth hole out of a ditch dug to gain soil used for mounding on other holes.

"When the ditch was dug, it was left barren," Beckmann says. "So we created a water feature that attracts a lot of wildlife. We improved the course's look and helped the environment at the same time."

Beckmann also allows most dead trees to stand on the course because they make homes for birds, including woodpeckers.

■ Maintaining a solid relationship with state agencies, including the Department of Fish and Wildlife. "[The agency] understands what we're trying to do — achieve a balance between maintaining a golf course and keeping it natural," Beckmann says.

In conjunction with the nature walks, Beckmann also compiled a book, *Your Tour Guide to the Plants of Salishan*, for guests to use on self-guided jaunts around the resort.

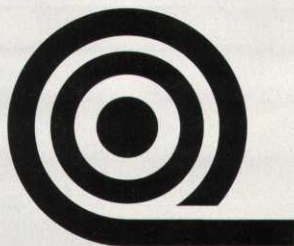
Beckmann says his biggest challenge is to improve the course aesthetically — but not at the expense of letting nature take its course.

"We have to fit in with the environment," Beckmann says. "That's why people come here — for the natural beauty." ■

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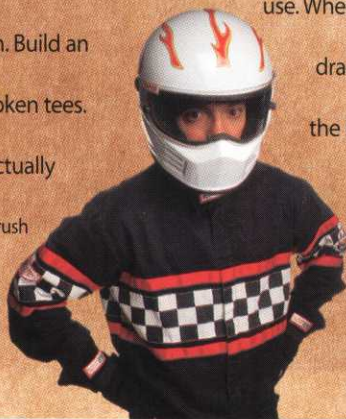
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# KEEP TABS ON YOUR Controller

BY FRANK H. ANDORKA JR.,  
MANAGING EDITOR

**Y**ou startle awake at 3 a.m., bathed in a cold sweat. You throw on a pair of sweat pants, stumble to your half-ton pickup and peel out of your driveway, headed straight to your course.

As you reach the street next to the third fairway, you notice beautiful plumes of water from your irrigation system glistening in the moonlight. Your heart rate slows and you breathe a sigh of relief. Your irrigation controller turned your system on properly after all. It was just a nightmare. All is right with the world.

With golfers pushing superintendents to keep courses in near-perfect condition, proper irrigation is vital. But superintendents have too many other responsibilities to spend their waking hours monitoring their irrigation systems. So the dependability and efficiency of their irrigation controllers play an enormous role in helping superintendents relax.

"Over the next 10 years, there will be less usable water available for any use, let alone for golf course irrigation," says Brian Vinchesi, president of Irrigation Consulting in Pepperell, Mass. "For all the focus on reduced water use, that's not nearly as important as using water more efficiently. Effective controllers go a long way to making that a reality."

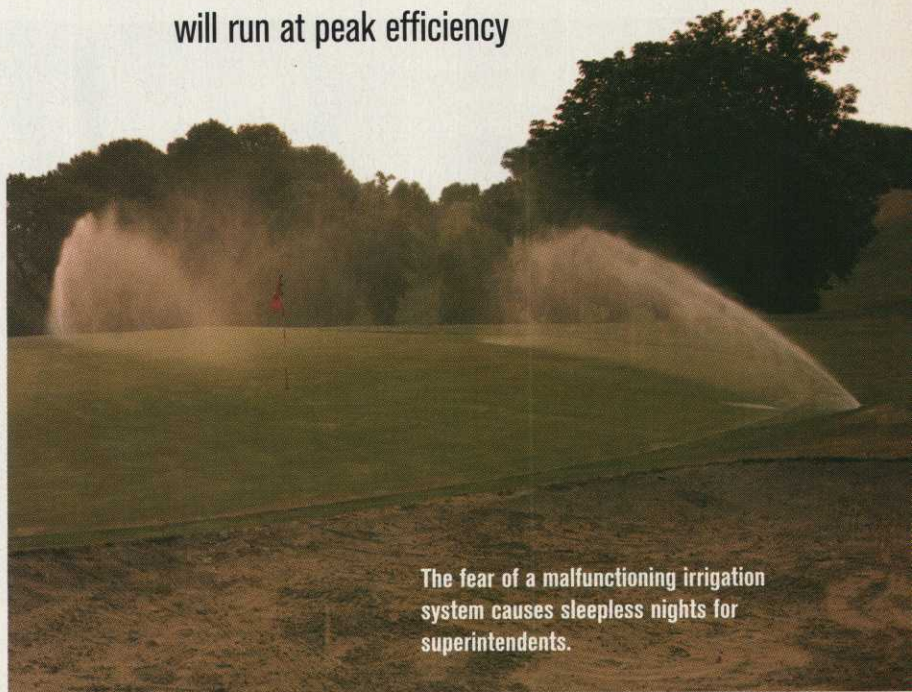
Here's what experts say you can do to make sure your irrigation controllers won't keep you up at night:

## **Budget for an irrigation audit to find out how much water your course actually needs.**

Jim Barrett, president of James Barrett Associates in Montclair, N.J., says you need to find out how much water you're actually using be-

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Proper monitoring ensures  
that your irrigation system  
will run at peak efficiency



The fear of a malfunctioning irrigation system causes sleepless nights for superintendents.

## **The Future Holds Hand-Held Controllers**

Irrigation consultants believe hand-held controllers, particularly those run through personal digital assistants (PDAs), are the wave of the future — at least at the high end of the market.

"In five years, hand-held controllers will become the standard," says Jim Barrett, president of James Barrett Associates in Montclair, N.J. "I know irrigation companies are researching how to create the proper software."

Instead of being tied to desktop computers, superintendents can monitor their pump stations and irrigation heads from fairways, their homes or even their trucks, Barrett says. "Hand-held controllers will be hugely powerful tools," he says.

PDAs offer the most flexibility when it comes to controlling irrigation systems remotely, says Brian Vinchesi, president of Irrigation Consulting in Pepperell, Mass. A PDA can cull information from weather stations, Global Positioning System maps and other information that traditional controllers can't process.

"The PDA will process information from disparate sources without you having to compile it yourself beforehand," Vinchesi says. "You'll be able to put water where you want it, when you want it, without having to stop doing other jobs that you need to get done."  
— Frank H. Andorka Jr., Managing Editor

MIKE KLEMM

## Keep Tabs On Your Controller

*Continued from page 45*

fore you can determine whether your controller is operating efficiently.

"It takes time and money to do an audit, but it's worth it in the long run," Barrett says. "You'll often find you're using too much water."

An audit calculates how much water a course should use based on evapotranspiration rates, weather patterns, percolation rates and turf types, Barrett says. Then it measures the amount of water a course ac-

tually puts down and compares the two. "The answer isn't always black and white, but an audit will help determine whether you're way off base," Barrett says.

### **Inspect sprinkler heads on a regular basis to ensure they run for the correct amount of time.**

Precision watering depends on controllers to calculate accurately the time a sprinkler head runs, Vinchesi says. But some superintendents assume if they program specific times into their controllers, their

irrigation systems will run that amount of time. If your controller isn't working, you're making a mistake with your assumption, Vinchesi says.

"You may set it for 10 minutes and it may run for 12 minutes instead," he adds. "If that's what your system is doing, then you're obviously wasting water."

Vinchesi says superintendents should also make sure that when their controllers turn the system on, it doesn't skip heads or fail to turn on at the proper time. Both scenarios indicate a faulty controller, he says.

### **Study the feedback your controller gives you.**

You know reams of paperwork pile up on your desk daily. But even if you don't read another report, pay close attention to the printout detailing your irrigation system's output, says Dan Benner, founder and principal of Hydro Environmental in Marietta, Ga.

"You need to get daily diagnostic information from the field about the operation of your irrigation system," Benner says. "If there's a huge disparity from one day to the next, there's a problem. Read the reports and keep tabs on vast fluctuations."

If your current controller doesn't allow for such two-way communication, Benner suggests upgrading to one that does.

### **Monitor the water pressure throughout the system.**

Proper pressure management is often overlooked as having an effect on irrigation efficiency, but it's vital to know how much pressure your system produces, Vinchesi says.

"A lack of pressure will make your irrigation system work harder with fewer results," he adds. "Run regular checks to make sure the proper amount of water is being pumped."

Although few systems currently allow it, Benner says he looks forward to the day when irrigation systems and pump stations can be run by the same controller.

"Pump stations have traditionally run independently from the irrigation system, and that's not the best way to manage efficiency," Benner says. "Unfortunately, irrigation companies aren't to the point where

Tony Mancuso, certified superintendent at Bellerive CC in St. Louis, solved his dry spot problem with the help of wetting agents.



## Wetting Agents Help Superintendents Conserve Water

Here's another vote of confidence for wetting agents. Tony Mancuso, certified superintendent at Bellerive CC in St. Louis, couldn't figure out what to do with the localized dry spot he often found on his greens. At first, he irrigated them. In areas where his greens rest on clay soil, however, the water pooled rather than penetrated. Mancuso often overwatered to ensure enough water reached the roots.

Overwatering, however, created moss and algae problems. But when Mancuso allowed the greens time to recover from the oversaturation, the dry spots cropped up again. He needed a way out of the predicament, which Mancuso found in wetting agents.

"We're always battling localized dry spot in this area of the country," Mancuso says. "If you treat the problem traditionally, you can create more problems than you

solve. Wetting agents can help immensely."

Wetting agents allow water to move more freely through the soil. They also help the soil retain water for longer periods, even when the surface of the soil dries out. For Mancuso, that means using less water.

"You have to know your soil and what problems you're dealing with," Mancuso says. "Wetting agents aren't a magic bullet for all dry soil problems, but they can help if you understand your soil profile."

Since he started using wetting agents on the greens, Mancuso says he has cut the amount of time he runs his overhead irrigation system in half. He only turns his irrigation system on the greens every three or four days. With minimal hand watering between applications, Mancuso says his greens are in good shape. — FA.

they would share the information to bring that to fruition.”

But having an efficient controller isn't solely about saving water, Benner says.

“If your irrigation system is operating properly, it won't use as much energy,” he adds. “You also won't be doing as much labor-intensive hand-watering. That's an additional savings on energy and labor.”

Not to mention the energy you'll save by getting a good night's sleep. ■

### For more information, try these irrigation-related sites:

#### CONSULTANTS:

■ [www.asic.org](http://www.asic.org)

The American Society of Irrigation Consultants (925-516-1124)

■ [www.irrigation.org](http://www.irrigation.org)

The Irrigation Association (703-536-7080)

#### COMPANIES:

■ [www.flowtronex.net](http://www.flowtronex.net)

Flowtronex International (800-786-7480)

■ [www.rainaid.com](http://www.rainaid.com)

Century Rain Aid (800-347-4272)

■ [www.rainbird.com](http://www.rainbird.com)

Rain Bird Irrigation (626-963-9311)

■ [www.syncroflo.com](http://www.syncroflo.com)

SyncroFlo (770-447-4443)

■ [www.toro.com](http://www.toro.com)

The Toro Co. (800-664-4740)

■ [www.signaturecontrolsystems.com](http://www.signaturecontrolsystems.com)

Signature Control Systems (949-580-3640)

#### WETTING AGENTS:

■ [www.aquatrols.com](http://www.aquatrols.com)

Aquatrols (800-257-7797)

■ [www.planthealthcare.com](http://www.planthealthcare.com)

Plant Health Care (800-421-9051)

■ [www.clearychemical.com](http://www.clearychemical.com)

Cleary Chemical (800-524-1662)

■ [rootsinc.com](http://rootsinc.com)

Roots (800-342-6173)

■ [www.precisionlab.com](http://www.precisionlab.com)

Precision Laboratories (800-323-6280)

■ [www.lesco.com](http://www.lesco.com)

Lesco (800-321-5325)

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# Jawing with Jack

Golden Bear says superintendents need to understand playability  
and architects need to aim for more than just top-rated tracks

BY LARRY AYLWARD, EDITOR

**I**f there's *one* thing superintendents need to improve, says Jack Nicklaus, it's learning the playability of their golf courses. So if you're a superintendent who doesn't know how your golf course plays, Nicklaus advises you to learn its tendencies — from the thickness of the grass in the rough to the firmness of the sand in the bunkers.

Many superintendents don't understand what playability should be because they don't play their own courses enough, Nicklaus asserts. The Golden Bear is not afraid to imply that many superintendents don't know how their courses should play because they ain't got game. "A lot of superintendents aren't very good players, and a lot of them don't play golf," he adds.

Who's going to argue with a guy who won 18 Majors? But don't stew if you don't agree with Nicklaus' observation. He's not trying to be antagonistic. Nicklaus realizes many superintendents don't have time to play their own courses, but he also knows golfers appreciate superintendents who maintain their courses according to proper playability.

Nicklaus says superintendents don't necessarily have to play a lot of golf or be decent players to understand playability — but it helps. Nicklaus says his long-time employee Ed Etchells, president of Golfturf (a division of Golden Bear International) and the company's head agronomist, doesn't play golf, but he learned how Nicklaus prefers his courses to play.

"I had to hammer it into his head," Nicklaus says of his 29-year employee. "It took a long time for him to understand what I was interested in."

Etchells, a former superintendent, was more interested in how courses appeared, says Nicklaus, who stresses that there's a difference between agronomy and playability. "Playability is about how a course plays, not about how pretty or green it is," he adds.

While Nicklaus is not afraid to criticize superintendents, he also recognizes their importance to the industry.

"What did they make 25 years ago? \$20,000? And what do they make today?" Nicklaus asks, aware of the answer. "Obviously, superintendents are a big deal. But there aren't enough good superintendents to fill all the golf courses that want high-profile maintenance."



Nicklaus sympathizes with superintendents who are under pressure from green committees and golfers to keep their courses in near-immaculate condition. He knows upscale courses must also have the hefty maintenance budgets in place so superintendents can do their jobs effectively.

"What most golfers want is a good putting surface, a good tee surface and reasonably good fairway grass," Nicklaus says. "The rest of the golf course isn't as important to them."

Until Tiger Woods unseats him, the Columbus, Ohio-born Nicklaus will carry the greatest-golfer-ever label. But these

days, Nicklaus is garnering a lot of press and prestige for his golf course design.

"He has left a very large Golden Bear footprint on golf course architecture around the world," says fellow architect Rees Jones.

Dublin, Ohio's Muirfield Village GC, which Nicklaus designed with Desmond Muirfield in 1974, is regarded as one of the nation's top modern courses. So is Harbour Town Golf Links, which Nicklaus helped Pete Dye design in 1970 in Hilton Head, S.C. Nicklaus says Dye gave him his

start in architecture about 35 years ago.

"He called me up and said, 'Jack, I'm doing a golf course on the other side of town, and I'd like you to come out and take a look at it to see what you think.' I said to him, 'What would I know?'"

The course was The Golf Club in New Albany, Ohio, one of Dye's and golf's greatest tracks, which opened in 1967. Nicklaus went to the site, and it's a day he remembers vividly. "It was the first time I'd ever been on a golf course that was under construction," Nicklaus says.

Nicklaus recalls standing with Dye near the second hole.

"There was a beautiful round green with four round bunkers around it," Nicklaus says. "Pete said to me, 'What do you think of it?' I said, 'It looks awful.' He said, 'I think it looks awful, too. What would you do?'"

Of his first experience with design, Nicklaus remarks, "I had a blast." He says Dye called him a few weeks later and offered him a consulting job.

"Working with Pete and Alice [Dye, Pete's wife] was one of the greatest experiences I've ever had," Nicklaus says. "That started something for me that has been very special."

Designing golf courses enables him to leave a legacy, Nicklaus says. Muirfield Village, perhaps, will be Nicklaus greatest gift to the golf world. "It represents what I believe and love about the game," Nicklaus says.

The notion to build a "special" golf course near his hometown struck Nicklaus during the 1966 Masters. He was inspired by Georgia-born Bobby Jones, who pursued his goal of building a dream course, Augusta National, in his home state in the 1930s. Jones teamed with famed architect Alister MacKenzie.

*Continued on page 50*





AMERICAN SOCIETY OF GOLF COURSE ARCHITECTS

*Continued from page 49*

"I was thinking, wouldn't it be neat to create something like this in Columbus?" Nicklaus recalls. "The idea was to bring golf back to my hometown."

Nicklaus went looking for a course site in the Columbus area in the mid-'60s. Muirfield was eventually built on land where Nicklaus hunted as a kid.

It was fitting that Nicklaus received the American Society of Golf Course Architects' most prestigious honor — the 2001 Donald Ross Award — in the dining area of Muirfield's homey clubhouse on a cool spring evening in May. More than 150 of Nicklaus' architectural peers, including Dye, Arnold Palmer, Tom Fazio, Robert Trent Jones Jr., Rees Jones and Geoffrey Cornish, were in attendance, clad in their traditional red-and-black plaid member jackets. Nicklaus received the award for making "significant contributions to the game of golf and profession of golf course architecture."

Nicklaus addressed his colleagues candidly and humbly. He said architects should stop aiming for trophies when designing golf courses.

"It's a shame, but everything seems to be about what your golf course is rated

and who's going to get the best award," Nicklaus says, adding that architects often conveniently pass the prices of their lavish designs on to owners. "I'm as guilty as the rest of us, but I don't think we need to be outdoing each other."

Nicklaus probably was preaching to the choir when he told fellow architects that the far-flying golf balls used on the PGA Tour are hurting the game. Too many courses have to be lengthened because players are using balls manufactured to travel to the next town, he says.

"When I first came into the ASGCA about eight years ago, we had a poll in which 93 percent of you said the golf ball was the biggest problem in our profession," Nicklaus says. "If that was the biggest problem then, what do you think it is now?"

Nicklaus says average golfers should be allowed to use "improve-your-distance" balls. But he insists a regulation ball — and not a specialized solid-core ball — be designated for tournament golf.

Interestingly, there is talk that Nicklaus isn't a full-fledged architect. Nicklaus and other golfer/architects use their eminent names to command big projects, but they aren't heavily involved in them

**A Who's Who of golf course architects helped Jack Nicklaus celebrate his reception of the Donald Ross Award in May. Pictured from left to right are Arthur Hills, Pete Dye, Mike Hurdzan, Nicklaus and Arnold Palmer.**

as designers, some critics say.

Damian Pascuzzo, president of the ASGCA, disagrees with the critics, and says Nicklaus brings a distinctive perspective to design.

"He has played golf all over the world, and he has played under intense, competitive conditions," Pascuzzo says. "That's a viewpoint I could never bring to a client."

Pascuzzo admits that Nicklaus' name gives him a marketing leg up.

"Would we love to command his fees? Absolutely," Pascuzzo says. "But Jack brings a lot to the table that a lot of us can't in terms of name recognition. My name does not sell real estate."

Nicklaus told his peers that he's a "lucky guy" to have had found success in two careers. He advised the architects to work together.

"This is a cooperation, not a competition," he told them. "If there's anything I can ever do to help any of you, please feel free to ask." ■