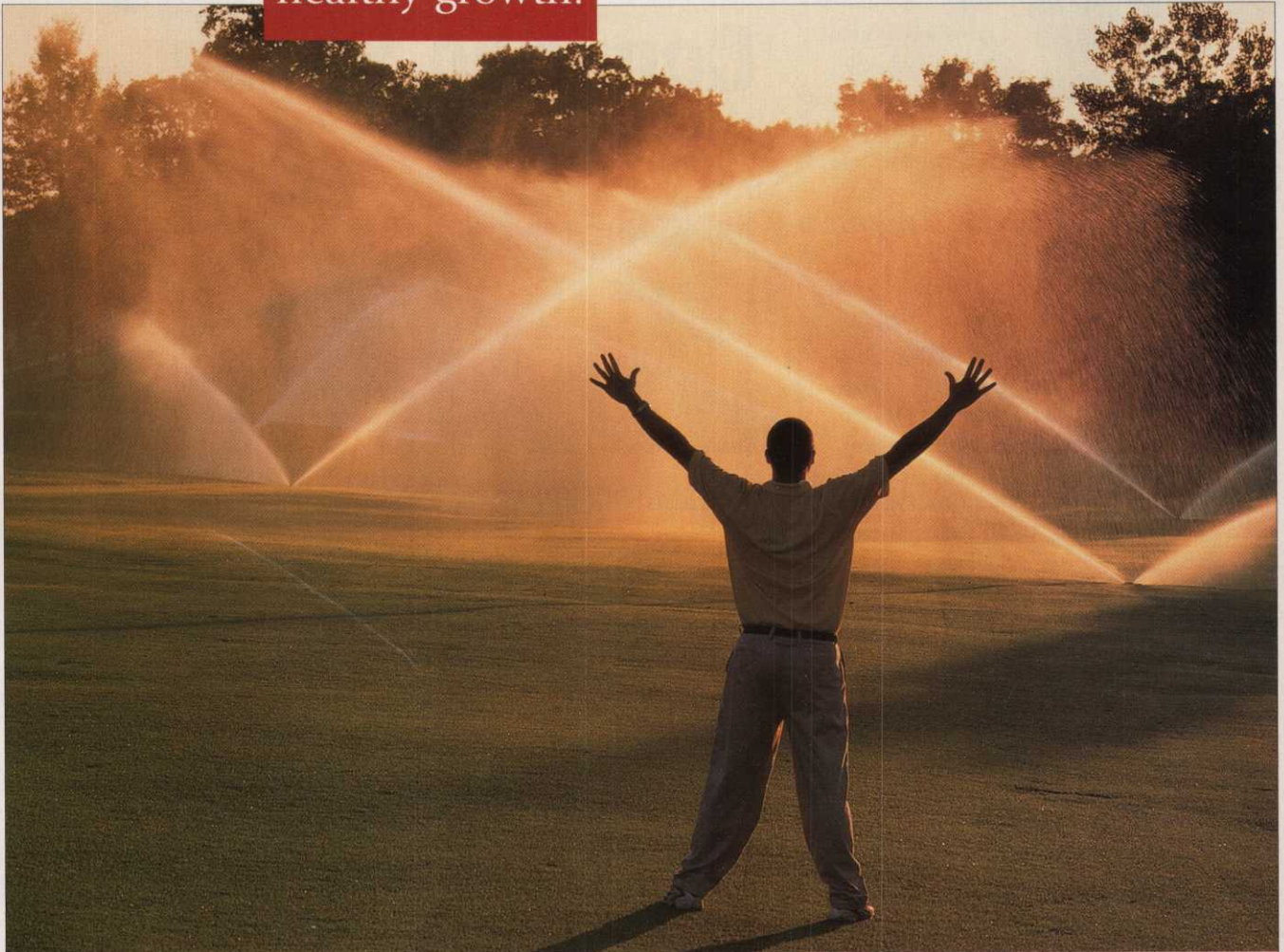


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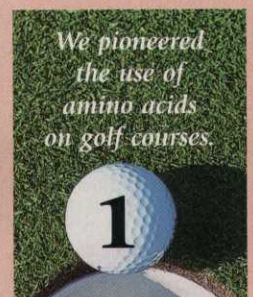
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**W**ater restrictions remain contentious in Florida as summer rains and Tropical Storm Gabrielle failed to raise aquifer and reservoir levels enough to lift the ridiculous day-of-the-week watering schedules set by many counties.

Politicians and bureaucrats fail to grasp that managing living organisms isn't a matter of calendars but of proper soil moisture. Superintendents can accept water-use restrictions, but they need more flexibility in watering times than most politicians will allow.

As we approached overseeding season, Florida GCSA President Geoff Coggan called his local water management district to find out how much flexibility the district might allow golf courses under its "new sprigging and seeding" allowances. He was told by a clerk that the district wouldn't make broad accommodations, but that each course could file for a variance at \$50 a pop.

Then the clerk made a big mistake. He told Geoff, "You know some people don't even think golf courses should exist!" It's not that he told Geoff anything he didn't know, but I wouldn't want to hear that attitude expressed by someone who gets paid with my tax dollars.

The clerk's attitude is not, I fear, isolated. A recent exchange between a county water department, a water management district and our association made that clear.

The county commissioners instructed their local water service to impose an additional 5-percent reduction in irrigation allowances for 22 golf courses in the unincorporated area in the county. The county water department said the commissioners were responding to the public outcry over the "apparent" (the quotes are from the county staff) continued overuse of water by golf courses.

There are no facts supporting the charges forthcoming. No violations by golf courses were reported to the district. No inspections or flow-meter checks revealed golf courses hogging the water. You know what the most damning evidence was? People complained that the golf courses were green while their yards were brown, "so the golf courses must be breaking

## Restrictions Defy Common Sense

BY JOEL JACKSON



**SUPERINTENDENTS  
CAN ACCEPT  
WATER-USE  
RESTRICTIONS, BUT  
THEY NEED MORE  
FLEXIBILITY THAN  
MOST POLITICIANS  
WILL ALLOW**

the regulations." The water management district didn't fall for these false charges and asked the county for proof of overuse.

The county staff readily admits that superintendents are some of the most capable water resource managers, but they admit it to the district and to the superintendents. They don't say it to the commissioners or to the press. As a result, the old stereotypes and perceptions live on in the narrow minds of a vocal few.

We know the public sector is where the most water is consumed and wasted than any other group. They are voters, however, and they seem to be immune from tough regulations. We know homeowners, weekly lawn-care services and municipalities tend to set their irrigation systems to regular schedules no matter what conditions exist. At the same time, superintendents manage water resources daily to maintain good playing conditions.

A simple check of the water management district's Web site indicates that recreational water use is only 3 percent to 5 percent of the total water consumed in the district. Golf courses are a subset in that category, so it's clear golf courses aren't using much water.

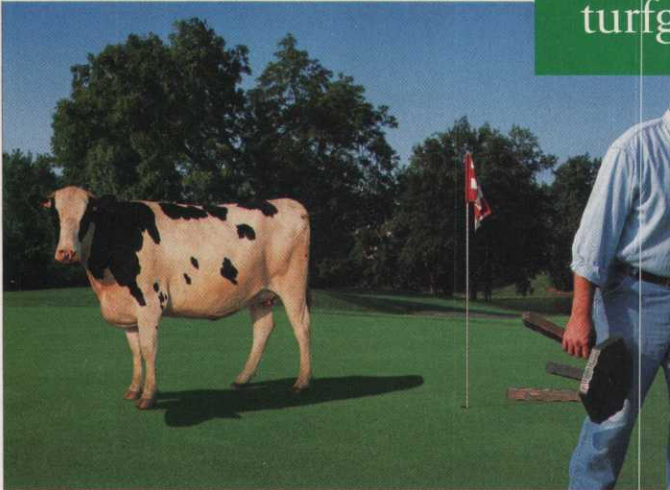
All this ranting by residents about golf courses wasting water really focuses on a small slice of the pie. Politicians can try and squeeze more water out of golf courses so consumers don't have to pay the price for their waste. But the real-world numbers show they are not going to get very many gallons for all their politically expedient but totally misdirected efforts.

Of course, the truth is, they're not looking to save water. They're just trying to save face by cooling off the squeaky wheels with phony water restrictions.

---

*Joel Jackson, CGCS, retired from Disney's golf division in 1997 and is director of communications for the Florida GCSA.*

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**W**ith the need to conserve water becoming a necessary component of 21st century golf maintenance, one of the best ways to cut down on irrigation is through the use of native grass or meadow areas.

But too often, golfers hear “meadow” and think that translates to a wet, tall grassy area. These native areas are becoming more popular on new designs and older courses, however, where the look of wispy prairie grass instantly adds that rustic, rugged quality that so many modern layouts lack.

Using native grass in key open locations or to replace areas where problematic trees once stood hasn't been one of the golf industry's finest moments. There are some notable exceptions where native grasses were properly developed and water has been saved. But for the most part, meadows that were designed to save water and restore a rough look continue to receive too much irrigation.

Perhaps it's a developer, a green committee or — dare I even suggest — a superintendent's idea to install rows of irrigation to keep these areas lush. Whoever is to blame, the lack of common sense in maintaining native areas often makes them offensive to the golfers who have to play near or through them.

These grassy links-like areas should be crisp. They should receive minimal amounts of water, and should be irregular in coverage to promote the finding of balls (and to look genuinely natural). Most of all, native areas should take on colors other than dark green.

The only way to achieve the natural look is through careful watering practices, overseen by superintendents who understand natural areas. Nearby irrigation must stay away from native areas so that water is not hitting the first 15 feet of such areas. Using roller-based sprinklers to get them started and having nearby quick-couplers for occasional hand watering is all these areas usually need. Mother Nature's rain will handle the rest.

The common rebuttal from superintendents is that hand watering is too much work, but it's certainly a lot less work than the three-times-a-year fly mowing and clean up that courses go

## How to Achieve the Natural Look

BY GEOFF SHACKELFORD



IT STARTS WITH  
NATIVE GRASSES  
AND ENDS WITH  
SAVING WATER  
THROUGH PROPER  
MANAGEMENT

through when they overwater natives. This also doesn't address the money wasted in unnecessary water because someone wants lush meadows, not natural-looking prairies.

Besides managing how meadow grasses are watered, the proper selection of grass is key to making such a transition work from maintenance and aesthetic points of view. There are native grass nurseries throughout the country with specialists who have some perspective on which grasses are working (ask your USGA Green Section representative whom they would consult).

John Greenlee ([grnleensr@aol.com](mailto:grnleensr@aol.com)) wrote the definitive book on ornamental grass and owns one of the nation's finest nurseries for such grass. An excellent series of paperbacks published by the Brooklyn Botanical Garden ([www.bbg.org/gardenemporium](http://www.bbg.org/gardenemporium)) covers all aspects of natives, and many of the new drought-tolerant grasses that could come in handy for those out-of-play areas where irrigation and manpower are wasted.

If you find you're having trouble selling the concept of a prairie look, try to find photographs of famous courses where the natives appear beneficial and look like they receive minimal water and management. Show those pictures to your client or owner, who may claim the look is tacky.

The first step in saving water through the use of prairie grass is through management. Don't bother to develop the areas if you don't have the time, resources or golfer support to manage them with as little water as necessary. Otherwise, these meadows will become swamps and defeat their purpose — to add natural beauty to your courses while preserving precious resources.

---

*Geoff Shackelford spent his summer transplanting on-site native grasses to improve the look and maintainability of waste areas at Rustic Canyon GC in Moorpark, Calif. He can be reached at [geoffshackelford@aol.com](mailto:geoffshackelford@aol.com).*



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# Hole of the

An aerial photograph of a golf course hole, showing a green fairway leading to a green with a hole. The course is surrounded by lush tropical vegetation, including several tall palm trees on the left. In the background, the ocean stretches to the horizon under a clear sky. The overall scene is bright and scenic.

■ No. 11  
Mauna Kea Resort GC  
Kamuela, Hawaii

# Month

## Tight Squeeze

Accurate golfers are happy golfers, particularly when they're playing the 245-yard par-3 No. 11 at Mauna Kea Resort GC in Kamuela, Hawaii.

Golfers battle not only winds on the hole, which juts into the Pacific Ocean, but also a tight fairway that hides severe drops on both sides with trees and flowering shrubs. Superintendent Bob Itamoto says golfers better hit their balls straight if they want to find them.

"It's by far the hardest hole on the course," Itamoto says. "During our professional tournaments, the average score is 3.5 strokes. You have to hit it straight or you don't stand a chance."

Itamoto says the hole poses the same maintenance difficulties as the other holes on the Robert Trent Jones-designed course. His crew members face an undulating green that makes mowing more difficult and the four bunkers that surround the hole must be maintained by hand.

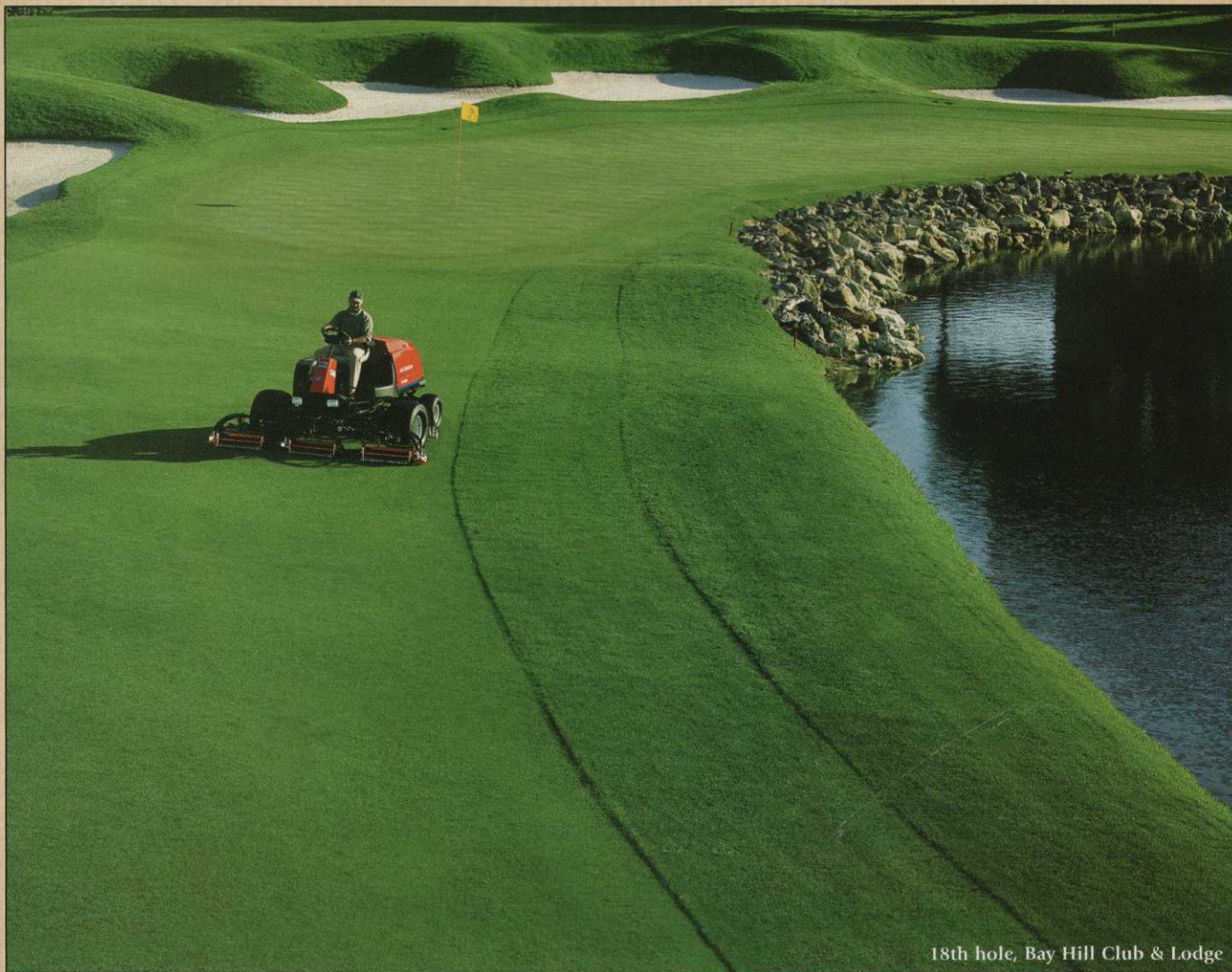
"Jones was an architect who made life difficult for those who maintain his courses," Itamoto says. "What results from his work, however, are some of the most challenging courses in the world."

Golfdom's Hole of the Month is presented in partnership with:

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18th hole, Bay Hill Club & Lodge

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Here's what you need to know  
*before you lay pipe*

BY FRANK H. ANDORKA JR.,  
MANAGING EDITOR

# BUILD A BETTER Irrigation System

**P**at Gradoville, superintendent at Palos Verdes GC in Los Alamitos, Calif., refuses to call himself an irrigation expert, despite his extensive experience in both renovating and constructing systems during his 15-year career. He has supervised installations on new courses and overseen renovations on systems that outlived their usefulness.

Gradoville says building an ideal irrigation system is as much art as science.

"To call myself an irrigation expert would be a misnomer," Gradoville says. "It takes time and research before you can install a system to serve your course's needs effectively."

No matter how much experience you

have, it's always good to review the steps you should take to avoid creating irrigation headaches for yourself in the future, he says.

## Hire an irrigation consultant

Bob Wren, superintendent of Chantilly National Golf & CC in Centreville, Va., says most superintendents have a difficult time designing irrigation systems on their own.

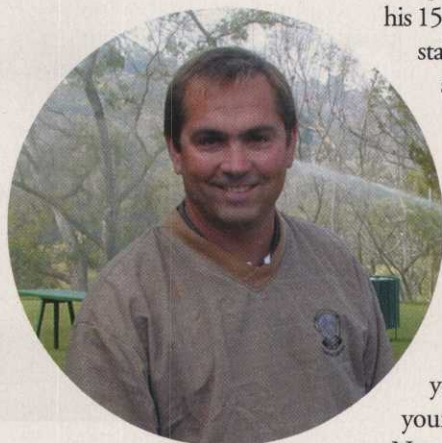
"Spend the money and hire an outside consultant," Wren says. "They're the experts. They'll be able to look at projects and point out potential problems you never considered."

Wren says irrigation consultants possess experience with a variety of systems, so they can recommend a system to fit your budget. (*For more on the advantages of hiring a consultant, see "Smart Design Pays Dividends," page 31.*)

## Insist on the largest pipe you can afford

Pipe size, particularly on the main line, can define the success or failure of an irrigation

*Continued on page 30*



**Pat Gradoville, superintendent at Palos Verdes GC in Los Alamitos, Calif., draws on his vast experience when he installs irrigation systems.**

MIKE KLEMM

## Irrigation System



PAT GRADOVILLE

**Pull enough wire while trenches exist so future expansion doesn't force a similar disruption to the course.**

*Continued from page 29*

system, says Steve Kurta, superintendent at Tuscarora GC in Macellus, N.Y. He suggests installing pipe large enough to handle water speeds of 3 feet per second.

Gradoville recommends using nothing less than 4-inch pipe for the mainline and preferably nothing less than 6 inches. At his course, the mainline consists of 10-inch pipe, with successive branches getting smaller by 2 inches. The pipe at the smallest branches is 4 inches.

"Sizing your pipe should be the first item on your agenda when you're talking to your consultant about design," Gradoville says. "If you pick the wrong-sized pipe, you're setting yourself up for major problems."

### **Plan for further expansion from the start**

Whether you're doing a renovation or installing a new system, you should know your club's 10-year construction plan, Wren says.

"A common mistake is building a system that serves your course now without accounting for future expansion," Wren says. "If the course wants to add another nine holes, you need to plan for it. You need to be thinking 10 or 15 years down the road."

Pull enough controller wire throughout the course to accommodate future system additions,

## Companies Say They Haven't Abandoned Affordable Irrigation

**T**he irrigation industry has come under fire recently from superintendents, consultants and developers for focusing on high-tech gadgets for high-end courses. Critics say the industry has forgotten about providing affordable irrigation systems for low- and medium-budget clubs.

Steve Snow, director of golf renovation and sales for Toro Irrigation, admits high-end golf courses received most of the attention during the recent course construction boom from 1997 through 1999.

"During the hey-day of new golf course construction, when people built 400 to 500 courses per year, the majority of the courses were high-end projects," Snow says. "Irrigation companies found themselves caught up in the building boom. Now that it's over, it's time to reassess our strategies so that we can appeal to all golf courses."

If superintendents research different systems, they will find that low- and medium-budget products exist, says Phil Robisch, marketing and promotions manager for Hunter Industries.

"The reason you don't hear about them is that marketers must talk about the new stuff with all the bells and whistles," Robisch says. "After all, it's where you've spent all your research and development money. That doesn't mean, however, that lower-end products aren't available."

Robisch says the less-expensive alternatives, such as controllers without features like satellite control, are available in commercial applications, which can be adapted.

Matt Zirkle, marketing manager for Rainbird Corp.'s Golf Division, says the industry's new focus will be renovating older systems rather than installing systems at new

courses. He says companies realize they must do a better job of segmenting their products to reach all market levels.

"Many courses would love to buy irrigation systems that don't have all the fancy add-ons," Zirkle says. "We have to make sure we reach them as well."

Snow says the industry is developing lower-cost personal-computer control systems for the lower-budget courses. He also says Toro is giving courses the option of financing the systems over five to seven years. But Snow says some of the criticism his industry has received about the expense of its technological innovations is unfounded.

"We don't introduce technology just for the sake of introducing technology and driving up the price," Snow says. "We follow the market."

— Frank H. Andorka Jr., Managing Editor