

# BRIEFS



## IN HIS GRIP CO-AUTHOR

### SPEAKING AT PRAYER BREAKFAST

NEW ORLEANS — Dr. Jim Sheard, co-author of *In His Grip* and *Playing the Game*, will speak at the annual Prayer Breakfast at the International Golf Course Conference and Show here at 7 a.m. Sunday, Feb. 20. Sheard, who wrote the books with former PGA Tour player Wally Armstrong, has written a third book, *A Champion's Heart*, which identifies the essential character qualities for success in life and sport. A former senior vice president for human resources and president with Federated Insurance Cos., and a former executive vice president with Personnel Decisions International, Sheard is co-founder of In His Grip Resources, headquartered in Owatonna, Minn.

### LAKE CITY STUDENTS FIRST IN IA

ORLANDO, Fla. — Steven King, irrigation instructor at Lake City Community College, and students recently attended the 20th Annual Irrigation Association Conference & Show here. The LCCC students and King were recognized as the first student chapter in the United States of the Irrigation Association. The newly formed Irrigation Association student chapter at LCCC recently elected officers for the 1999-2000 school year, including President Todd McMahon. He is joined by Vice President Rick Helbling, Treasurer Mike Mcvickers, and Secretary Richard Adams.

### TURF SCHOLARSHIP AWARDED

Brian Lentz of the Central Florida Golf Course Superintendents Association has presented Ricky Craig of Center Hill, Fla., with a \$1,500 Danny Burgess Memorial Scholarship at a ceremony at Windermere CC. Craig will attend the Golf Course Operations program at Lake City Community College to pursue a career in golf turf management. Craig worked last year at Disney's Magnolia and Palm courses and was nominated for the scholarship by Disney superintendent Scott Welder. Each year the Central Florida Superintendents Chapter holds the Danny Burgess Memorial Tournament at Windermere CC in memory of that club's former superintendent who died in 1994.

# Scientists: Threats of drought loom in future

By GARY BURCHFIELD

COLUMBIA, Mo. — Golf course superintendents not prepared for drought may want to institute a long-range management plan that includes the possibility of extended dry weather.

Climate models developed by researchers at the University of Missouri, Columbia, indicate a good probability of extremely dry conditions in the next four or five years, especially in the country's mid-section.

The past four years already have seen major droughts across Texas, Oklahoma and the Southern plains, much of the eastern Corn Belt and along the Eastern seaboard. Southwestern states suffered drought effects in 1996, 1998 and into 1999. Forest fires ravaged parts of Florida in 1997.

Across South Carolina, 1999 rainfall

## U.S. Drought Monitor



was 16 to 20 inches below normal. Farmers in several areas have suffered major crop losses. Lawns and golf courses have seen their share of stress in several regions. Now, forecasters are predicting a high probability of more dry weather ahead.

The Missouri scientists studied precipi-

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## Drought-proofing a golf course

As the old saying goes, "You can't control the weather. But you can be prepared for the possibilities."

Here are some tips to counteract drought effects, or at least lessen their impact on a golf course.

✓ Long-range, consider finding an effluent water source for irrigation. According to Roch Gaussoin, Extension turfgrass specialist at the University of Nebraska, using wastewater to irrigate a golf course usually means the course will not have

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## \$2 MILLION IN PROJECTS FUNDED

# USGA's new financing eyes owls to turfgrasses

By MARK LESLIE

FAR HILLS, N.J. — The United States Golf Association (USGA) has continued its 17-year-old financial commitment to scientific research, to the point where it has "maxed out" its manpower resources.

The USGA Green Section Research Committee has doled out another \$848,763 for 17 new turfgrass and environmental research projects. Combined with some 72 other continuing projects, the donations total \$1,998,241 in 2000.

In the meantime, Director of Research Dr. Michael Kenna said: "Our commitment to research is not a problem. If this [research] committee wanted to go after

more funding, we could probably get it. But I personally have reached a point where we can't add any projects."

The problem is finding the manpower and time to oversee the research and process the findings.

"We get 900 pages of research reports," Kenna said from his office in Stillwater, Okla. "When I came aboard in 1990 we had 23 projects, compared to 89 now."

That number took a leap when the USGA Green Section added an environmental focus. Several years ago, it began its support of the Audubon Cooperative Sanctuary Sys-



tem and created Wildlife Links, which deals with wildlife habitat issues regarding species that live on and are affected by golf courses.

The mostly highly funded new projects each obtained approximately \$75,000. They are:

- Development of gray leaf spot-resistant perennial ryegrass through breeding and biotechnological approaches, by Mark Faman at the University of Kentucky.

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# Pellreene: Canada's best likes the old, loves the new

By PETER BLAIS

VANCOUVER, British Columbia, Canada — He's built new courses that went on to host Canadian championships. He's refurbished classics that legends A.W. Tillinghast and Stanley Thompson would still be proud to call their own.

Whether it be ringing in the new or restoring the old, Canadian Superintendent of the Year Dennis Pellreene (as recognized by the Canadian Golf Superintendents Association) is the man for the job.

"New construction is always exciting because there are so many things that come up that you have to solve," Pellreene said. "But being involved with an old course is exciting, too."

Pellreene started his career in 1960 on a nine-hole, oiled-sand greens course in Camrose, Alberta. He converted the greens to turfgrass and was named greenkeeper during his four-year tenure.

He moved east with stops at St. Catharines Golf & Country Club and Erie Downs Golf Club in Fort Erie, Ontario, before Reg Acomb, general manager at Toronto's Glen Abbey Golf Club, approached him about building the Jack Nicklaus-designed course that eventually became the home of the Canadian Open. Glen Abbey opened in 1976 and held the first of four Opens under Pellreene's watch in 1977.

The two people Pellreene said had the greatest effect on his professional development entered his life during his Glen Abbey years — Ed Etchells and Jack Eggens.

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Dennis Pellreene at Capilano Golf & Country Club near Vancouver.



**C**ORVALLIS, Ore. — An Associated Press report states the Environmental Protection Agency (EPA) says fertilizer levels that are safe for human drinking water can kill some species of frogs and toads.

In a new study, researchers at the Oregon State University found some tadpoles and young frogs raised in water with low levels of nitrates typical of fertilizer runoff ate less, developed physical abnormalities, suffered paralysis and eventually died. None died in

## Fertilizer safety levels in doubt

control tanks with normal water.

"We're looking at levels of nitrates so low we didn't think we'd get any effect," zoology Professor Andrew Blaustein told the AP.

In addition, the fertilizer runoff may be encouraging the growth of algae that feeds tiny parasitic flatworms called trematodes, blamed for causing deformities in frogs around the United States.

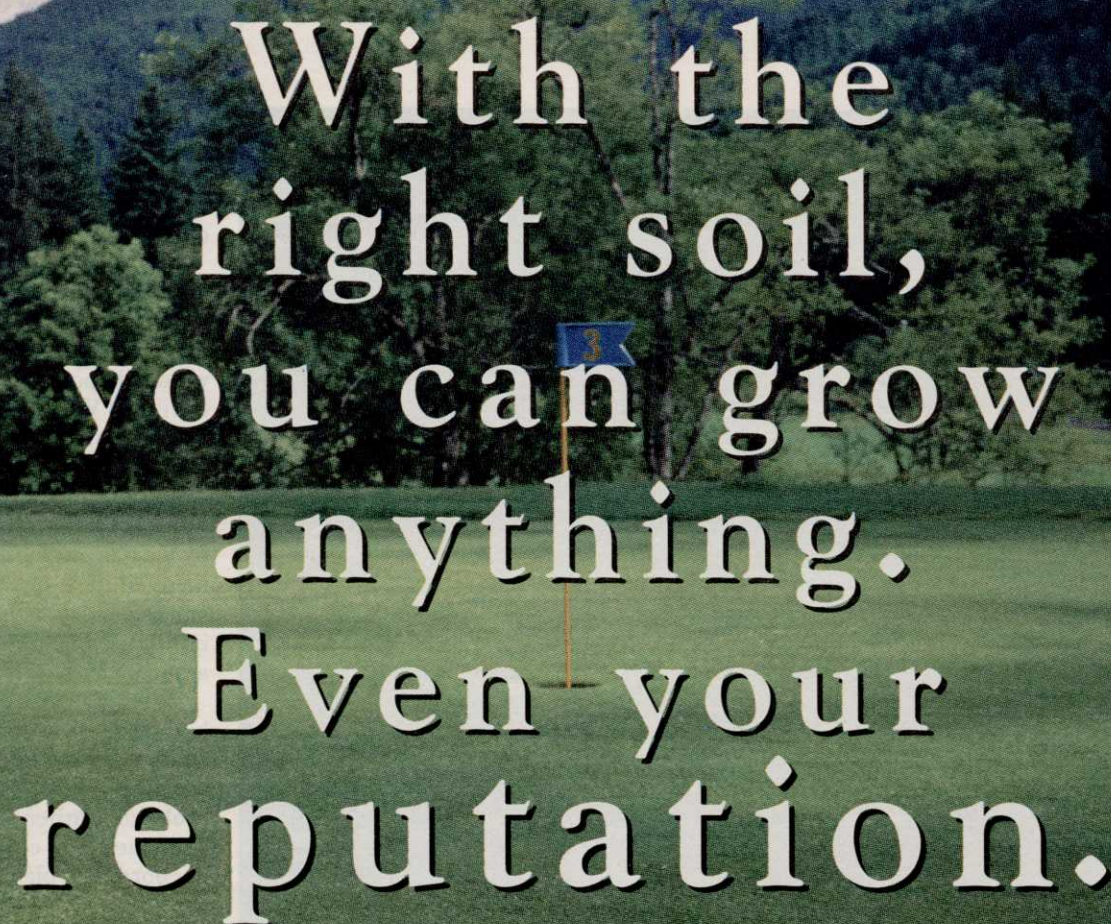
The study indicates EPA water-quality criteria does not guarantee the survival of some protected and endangered amphibians, Blaustein told the AP.

"I think this is clearly a significant problem," he said. "The question I have to ask is, are you comfortable drinking water with levels of fertilizer that kills off frogs?"

Officials at the EPA regional office in

Seattle would not comment until they have reviewed the study, published in November in the journal *Environmental Toxicology and Chemistry*.

Scientists internationally have reported a sharp decline in the numbers of frogs, toads and salamanders in many locations. Numerous explanations have been proposed, including water pollution and increased ultraviolet radiation from the sun because of a thinning ozone layer around the Earth.



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## Drought-proofing

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to contend with water-use restrictions in the event of an extended drought.

"Although still rare in the Midwest, tapping an effluent water source for turf irrigation is becoming more common on the East Coast," said Gaussoin.

✓ Another consideration is to minimize irrigated areas.

"One way is to decrease the amount of fairways and increase rough areas," Gaussoin added.

✓ Plant more native, drought-tolerant species in the roughs, and even in irrigated areas, if necessary.

"Kentucky bluegrass, for example, can go dormant under drought stress. It will turn brown, but it will be there and green up again when you get rainfall or irrigation water," he said.

Under water rationing or restrictive-use conditions, Gaussoin recommended these additional steps:

- Prioritize water use, starting with the prime pieces of real estate. That is, water greens first, then tees, then fairways and roughs if possible. Don't worry about grass around the clubhouse. It won't look pretty, but that isn't what the customers come for, he said.

- Consider retrofitting the irrigation system to make it more efficient. Valve-in-head systems, for example, provide better irrigation management and more efficient use of water. Water can be easily applied to those areas most critical to the course.

- Make subtle management changes. Raise mowing height slightly to give grass a little extra "insulation" from heat stress. Consider using a growth retardant to slow grass growth (and water use). The offset to this, however, is that grass will be slower to pull out of stress after its growth has been slowed.

- Limit traffic where possible. Heavily trafficked turf requires more water to recover and, when it is drought-stressed, won't recover as quickly. Keep carts on cart paths or limit them to roughs. Use the 90-degree rule to reduce wear on fairways.

- Move the cups more often to reduce greens stress. Move tees more frequently.

- Route traffic with physical barriers — artificial or plant material — to reduce wear and compaction on turf. For example, if golfers always exit the tees or greens in the same place, it increases turf wear. Use barriers to change traffic patterns occasionally.

"These are all pretty common management steps superintendents can take, but too often we don't think about them until we're into a drought-stress situation," Gaussoin added.