People Preparing for Change: The "First Birds Off the Wire"
by Linda Schroeder

Society comments: The following three features all focus on people preparing for change.

As we begin to understand the complexities of water-related issues, our perception of water will have to change, and our use of water will have to change.

But change comes slowly. Most of us are waiting for motivation, for someone else to make the first move.

We needn't wait any longer.

The first birds are off the wire, and the first moves are being made. Three of these "early birds" are the Garden Club of America, the Girl Scouts of the USA and the Allied Associations of Golf.

And here's what golf is doing

Golf courses are an important part of maintaining one of nature's most precious and limited resources, water, while at the same time improving the quality of life for the millions of people who play regularly.

Golf courses and other green areas play a vital role in the water cycle. Turfgrass serves as a filter which removes impurities that would otherwise find their way into our rapidly dwindling groundwater supplies. It can also purify recycled water from factories and sewage treatment facilities and return it to underground aquifers.

Golf courses recycle water. The logo is only the first step, but it's a highly visible one that should bring the point home to golfers and non-golfers alike: Golf is one of the good guys.

It's a beautiful morning. Sunny. A slight breeze. A little cool. After a perfect tee shot, the green is within easy reach. You choose the correct club, stand over the little white (or orange) ball and execute a perfect swing... which ends up a not-so-perfect slice into the sandtrap, or perhaps into the only water puddle in sight for miles.


Never has that statement been truer than now. But what is at stake is not merely a whole sleeve of new balls in the pond or another three-putt on the scorecard. What is at stake is golf: the future of the industry and the future of the game.

Will There Be Leftovers?
Golf, the character-builder, is itself being put to a most severe test. By what? By water. Or, more precisely, by the lack of water. People need water to survive. So does golf. People and their needs will come first on the priority list for use of limited freshwater supplies. Golf will get whatever's left over, if anything.

There are 12,000 golf courses in the United States today: many of them lush, green, freshly watered, freshly mowed courses. They all use water, some of them a great deal of it, and almost all of them use freshwater: pure, drinkable, potable water. That's where the change must take place.

As more and more parts of the country have less and less water, and as more and more water supplies suffer from decreasing quality, drinkable water for everyone becomes a concern. All of a sudden drinkable freshwater can't be "wasted" for such "apparently unnecessary, recreational purposes" as golf.

Walter J. Wilkie, president of Wilkie Turf Equipment Company in Pontiac, Michigan, explains the extent of the dilemma: "If the continued shortages of water persist, golf will be one of the first things to do without water. For in the end, only after all other needs are met and provided for, will there be enough water to keep our fairways green — and to ensure the survival of golf... For it's not a question of how much water will cost. Rather, the real question is: Will there be enough water for us to buy?"

Wilkie's concern is echoed by Edwin B. Seay, vice president and director of design of Palmer Course Design Company of Jacksonville Beach, Florida: "It's a known fact that when the water restriction monster rears its head, golf courses are the first thing on his list."

To survive as an industry and as a game through the water crisis of the '80s, golf must change. The alternative is to resist, to fight, to lobby and to watch as one day soon the "water restriction monster" turns off the spigots for good.
**The “Good Guys” Get Together**

Golf has decided to change, to adapt to the new rules of a new game. Water is the issue of the ’80s, according to the Allied Associations of Golf (AAG), an association of 10 golf organizations in the United States, including the four playing associations and the six professional associations.* The AAG has initiated five task force projects, one of which is the Task Force on Technical Research. The objectives of this task force include improving both grass varieties and water use practices.

James E. McLoughlin, executive director of the Golf Course Superintendents Association of America, acknowledging that golf courses primarily use potable water rather than wastewater, explains the initial concern of the golf industry: “Golf has been labeled one of the ‘bad guys.’ It doesn’t need to be. One of the early goals of this task force is to... make golf part of the solution and not part of the problem in the water consumption area.” A new water reminder logo will encourage public awareness of this new image.

The golf industry plans to adapt now to future water-related changes in at least five different ways.

**Think Dirty**

First, the golf industry must begin to “think dirty.” This thought-provoking suggestion comes from Dr. Joseph P. Rossillon, executive director of the Freshwater Foundation in Navarre, Minnesota. Rossillon contends that we have become accustomed unnecessarily to using processed, drinkable water for virtually all purposes. His challenge: “There are all kinds of... the turfgrass serves as a natural filter to purify recycled wastewater as it returns to underground aquifers.

... nonpotable supplies of water that would be very acceptable for doing a lot of things, like making grass grow. Just start thinking dirty.”

A number of courses across the country are already using effluent, or wastewater, as part of their water supplies. Not only does such a practice protect potable water supplies, but also the turfgrass serves as a natural filter to purify recycled wastewater as it returns to underground aquifers.

The idea of using effluent to irrigate golf courses is not new, having been in existence for nearly a half century. Courses in such states as Arizona and California have been using effluent water for years.

In St. Petersburg, Florida, local golf courses are on a list of “green areas” that receive treated wastewater from a city-wide network branching from the city’s four sewage treatment plants. Estimates of how many U.S. courses now use wastewater range from 1 percent to 10 percent, whichever is the more accurate, the number will certainly be growing.

**Don’t Touch That Dial!**

A second change in water use requires the practice of a very simple manual maneuver: not turning the water on. A number of leaders in the golf industry speak of the negative results of overwatering.

Frank “Sandy” Tatum, Jr., past president of the USGA, points out several of them: soggy fairways that grab and hold sliced tee shots that deserve to bounce wildly into the woods; reliably slow (and thus very safe) greens; and elimination of the phrase “bounce and roll” from the golfer’s vocabulary.

Tatum is hopeful that a limited water supply will force a return to the “true game” golf once was, where nature “played an appropriate part in setting the conditions.” When nature chooses to be perverse, course conditions will be tougher, and the golfer’s only choice will be to improvise, to calculate, to concentrate, to test his capabilities and most important, to recognize human limitations when confronting nature head-on. Tatum considers these challenges to be healthy reminders of “golf in the golden olden days.” Along with others, Tatum pleads with the irrigation system managers to resist, to give the buttons and dials a rest, and to save precious water supplies as well.

**Tougher Turfgrass**

A third adaptation, a necessary result of the first two, concerns research. New turfgrasses must be developed which can thrive on wastewater and on less water. New drought-tolerant, effluent-tolerant species are being sought and engineered now, but such results may be 10-20 years away. As an intermediate measure, scientists on international “grass-finding tours” are seeking natural drought-resistant groundcovers already in existence, most recently in Africa and soon, in China.

**“Back to Nature”**

Modifying course designs represents a fourth way that the golf industry can adapt to coming changes. According to Jim McLoughlin, the golf course of the 1990s will be different, but not noticeably so. New turfgrass varieties will cover smaller fairways, roughs will be more natural, and the percentage of groomed, manually maintained, irrigated area on any course will be smaller.

*Member organizations of the AAG:
American Society of Golf Course Architects
Club Managers’ Association of America
Golf Course Builders of America
Golf Course Superintendents Association of America
Ladies Professional Golf Association
National Club Association
National Golf Foundation
Professional Golfers Association of America
Tournament Players Association
United States Golf Association

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The important thing to note, McLoughlin emphasizes, is that the golf course of the 1990s will not have deteriorated. Changes will have occurred, of necessity, but the course will still be an inviting refuge.

Edwin Seay restates McLoughlin's prediction as a goal: "Our objective is to continue to create and maintain a beautiful, viable and playable golf course...water or no water." The AAG is actively pursuing that goal through the cooperative efforts of its 10 separate organizations.

Don't Hit the Sheep!

A fifth way that the game of golf will adapt to water-related changes involves attitude: the attitude of the millions of golfers themselves who rely on golf, be it for relaxation, recreation, challenge or even character-building.

In the United States, on-course distractions are usually limited to occasional trees (which seldom move) and small patches of water and sand (also stationary). In Scotland, sheep grazing on the fairways are a common and accepted sight. Imagine a flock of sheep stationed halfway between the teebox and the green at your favorite local course. Could you handle the challenge of the unpredictable?

Traditional British golf "links," as opposed to American "courses," are more natural, unpredictable and challenging: nature at its best. Dr. Rossillon laments the effect of quality-controlled courses on this country's golfers: "We have so improved the quality of the golf course that we have permitted the golfer to decrease his skills. Less refined golfing conditions may require more refined skills by the golfer." The survival of the game as we know it may well depend on the golfer's accepting this "different kind of challenge."

The AAG: Thinkers and Doers

The AAG recognizes the water crisis, has predicted its probable effects on golf and sees the need for change. The game of golf must adapt if it is to survive, and the 10 organizations of the AAG fully intend that it not only survive but also thrive. These organizations, working together out of a common need and toward a common goal, illustrate well the conclusion of Edwin Seay: "Professional dedication, pride, study and honest hard work is the answer. As bad as it is, a limited water environment has made better thinkers, designers and doers out of all of us." The challenge is there, as the game of golf continues to build character, both on and off the course.

About the author: Linda Schroeder is a member of the editorial staff of the Journal of Freshwater.

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