The golf industry has faced substantial economic challenges over the past year. Many golf course owners and operators find themselves deep in the rough and struggling to stay in the game. In states such as California, Arizona, and Florida, about five percent of golf courses have exhibited overt signs of financial trouble, and the number of “at risk” courses is closer to 15%. Revenues have declined due to lower membership and green fees at most golf facilities.

Right now may be the best time ever for golf courses to take a good look in the mirror and review how their maintenance philosophy impacts the bottom line. There may never be a better opportunity to move forward and gather momentum toward a more sustainable approach to managing golf course operations. In fact, it is foreseeable that the golf industry in North America will see a paradigm shift toward focusing on golf course playability rather than lush conditions and overindulgent cosmetics.

The benefits of firm and fast playing conditions are many and far reaching. In order to adopt such a maintenance philosophy, one must define what “firm and fast” actually means and communicate that to golfers and non-golfers alike. Non-golfers should be included because homeowners adjacent to golf facilities often want to see lush and green turf, maybe even more so than golfers.

What comes to mind when you think of firm and fast playing conditions? Do you think of brown, unsightly turf, or do the conditions often found in the United Kingdom and Ireland come to mind, where firm and fast playing conditions are not the exception, but rather the norm. The myth associated with firm and fast playing conditions is that golfers will find brown or dying turf. That could not be further from the truth! Firm and fast simply means firm, fast, and green with some brown around the edges, rather than lush, wet conditions.

One of the best ways to define firm and fast conditions may be simply to talk about irrigation regimes. The deep-and-infrequent irrigation philosophy, written about by Ed Miller in a 1988 Green Section Record article, exemplified firm and fast playing conditions. In that article, Mr. Miller stated that irrigation was employed every three or four days by summing the computer-based evapotranspiration (ET). In Carefree, Ariz., where Mr. Miller was the superintendent at Desert Forest Golf Club, the sum of three or four days’ worth of ET may be 1” to 1.5” of water. Clearly, the irrigation system...
was able to apply that much water in one evening, and the soil conditions were such that an excess of one inch of water could be applied without surface runoff. Mr. Miller went on to state that his goal was to saturate the top 10" to 12" of the soil rootzone with each irrigation event.

Following discussions with superintendents employing the firm and fast approach, one common theme with regard to water management was evident: Hand watering is often the most appropriate method to remedy dry areas. The phrase “if you are not hand watering, then you are overwatering” with your automatic irrigation system should become the mantra. All the courses interviewed for this article reported an increase in labor for the purposes of hand watering, starting with greens and working their way out to approaches and fairways. But cost savings are appreciated elsewhere.

We may also find help in defining “firm and fast” from the editors of Golf Digest magazine, where the language used to rate golf course conditions was recently updated. The new language states: “We abandoned the idea that courses should have lush, green, perfectly uniform grass and adopted the position that dry, firm turf provides the best conditions for playing golf.” Ron Whitten, senior architectural editor for Golf Digest, further stated, “Great conditioning is not striped mowing patterns in the rough or uniform lies in the bunkers. That’s over-indulgent cosmetics. We think every club would benefit by adopting our definition as a standard for course conditioning.” The USGA Green Section staff fully supports such a management philosophy.

Although the benefits of firm and fast playing conditions are many, the primary hurdle for golf courses to overcome is that of golfer expectations. In fact, a search via the internet reveals many golf courses use language such as “lush and green” to market to prospective golfers. For example, one golf course in the southwest region of the U.S. stated on its website, “Our golf course is an oasis of green. The fairways show few traces of even the suggestion of brown.” In another example, one golfer offers his analysis of a recent golf experience: “The fairways were immaculate. The fairways were damp to the point that balls would bury into the ground as they were hit, but they were lush and green.”

There may never be a better opportunity to embrace and move forward toward a more sustainable approach to managing golf course operations. Offering firm and fast playing conditions is a step in the right direction.

How does the golf industry overcome such misguided expectations? One idea may be to look to other industries, such as energy conservation. A study was conducted in San Diego County in the early 2000s to evaluate what message would motivate homeowners to conserve energy. In the study, four different fliers were handed out to homes in a large neighborhood. The four fliers read:

1. “Conserve energy for the environment.”
2. “Conserve energy because a majority of your neighbors have already reduced their energy bill.”
3. “Conserving energy will save money.”
4. “Conserving energy is socially responsible.”

After six months, the energy consumption was evaluated for each of the homes. Which flier do you think resulted in the greatest energy reduction? As it turns out, the houses receiving flier number 2 conserved the most energy. Those homes were motivated to conserve energy because, as psychologists put it, “That message tapped into two human impulses: First, to be like one’s neighbor and, second, to beat your neighbor at something!” The take-home message from the study is that, as more golf courses realize the benefits of employing a first and fast philosophy, neighboring courses will be motivated to do the same. We offer the following list of first and fast courses that may be in your neighborhood:

• Ballyhack Golf Club in Roanoke, Va.
• Bandan Dunes in Bandan, Ore.
• Calusa Pines Golf Club in Naples, Fla.
• Lahontan Golf Club in Truckee, Calif.
• Southern Dunes in Maricopa, Ariz.
Sagebrush Golf and Sporting Club in Quilcena, B.C.
The Club at Clear Creek in Minden, Nev.

Probably the quintessential firm and fast golf course is Bandon Dunes in Bandon, Ore. Bandon Dunes was built on sand dunes in the northwestern part of the U.S. and grows fine fescue turf on tees, fairways, and greens. Less than $20,000 per year is spent on fertility, and less than $10,000 on pesticides. The course benefits from a strict cart policy, restricting carts to only two per day. It is interesting to hear that the majority of golfers appreciate the first and fast conditions; however, like any golf course, they are not immune to golfer complaints. Some golfers don’t like the tight lies, and some came to the resort expecting lush, green, and resort-like conditions.

Another example is Ballyhack Golf Club in Roanoke, Va. This course operates on a modest budget and grows bentgrass on heavy clay soils. This is a stark contrast to the sandy soil found at Bandon Dunes. Fairways at Ballyhack are irrigated about every third day during the growing season, with only about six minutes of irrigation. Furthermore, fairways are mowed only about twice per week during the growing season. Golfers at Ballyhack appreciate the firm, fast playing surface offered by the agronomy team, and they expect to see some blemishes on the course.

Lahontan Golf Club near the famous ski resorts in Truckee, Calif., is managed by superintendent Kevin Breen. Although tees, fairways, and greens at Lahontan are healthy and green, members like to refer to Mr. Breen as the “brownkeeper” and the putting greens as “browns.” The members at Lahontan are clearly proud of their golf course, their excellent playing conditions, and the manner in which the golf course is operated. Mr. Breen shared that there was a definite learning curve for members and guests to understand and appreciate not only the different playing characteristics and qualities of this club, but also the benefits of such a maintenance philosophy. Mr. Breen attributes much of the club’s success to one simple thing: communication. Club officials at Lahontan are always present and available and communicate with members during daily play, on the driving range, and at member-attended events and meetings. Furthermore, Mr. Breen contends much of the success and consistency of the club to the development of maintenance standards, as well as a comprehensive long-range plan.

A final example of a first and fast golf course comes to us from Sagebrush Golf and Sporting Club in Quilcena, B.C. Again, this site does not fit the mold of first and fast golf courses, as this course is laid out in an arid, desert-like climate and on heavy clay soils. Richard Zokol, former PGA Tour player and chairman at Sagebrush Golf and Sporting Club, offered the

Courses making the decision to eliminate overseeding realize substantial economic savings, but in some markets they may see reduced revenue when neighboring courses continue to offer lush, overseeded fairways.
following comments with regard to the playing experience at Sagebrush:

- The golf course offers multidimensional playability, which especially helps the high-handicap players.
- Women golfers love to play the course, as it is typically much more playable and offers better scoring chances than typically found at their home clubs.
- There is definitely a learning curve involved when players are first introduced to a golf course that favors the ground game.
- Golfers do adapt, though, and the net result is a more creative and intriguing game of golf.

At this point, you may be wondering how best to implement a firm and fast maintenance regime. The following comments are for your consideration when your club begins transitioning to a more firm, fast, and playable golf course:

- A soil system that offers the ability to employ a deep and infrequent irrigation regime lends itself well to providing firm and fast conditions. However, as shown in the example at Lahontan Golf Club, where infiltration rates were such that irrigation must be applied daily during the heat of the summer, the goal of irrigating every third, fourth, or even fifth day, may become part of a long-range soil modification plan at your facility.
- Hand watering was a common thread at all the golf courses interviewed in researching this topic. Focus hand watering efforts on greens, followed by approaches, and, finally, the middle of fairways. None of the courses interviewed mentioned giving much attention to hand watering roughs.
- Spring is the most logical season to begin employing a firm and fast irrigation regime.
- Wait until it is absolutely necessary to water, and then wait another day!
- It may take two or three years for the superintendent, for the turf, and for the golfers to be comfortable with the firmer and drier conditions.

- Communicating with members and guests is paramount prior to making any changes. When your golfers know what to expect, they will be more likely to adapt and accept different and, most important, better playing conditions. Firm and fast agronomic practices offer benefits that are many and far reaching.

There is no doubt that such practices will ultimately improve turf health, enhance drought resistance, and reduce the impact on the environment. Courses will likely realize savings in fuel, energy, and labor associated with mowing demand. Most important, these changes are good for the game of golf! Golf courses abandoning operations favoring lush, green, over-indulgent cosmetics realize the future of golf is not lush and green, it is firm, fast, and green.

BRIAN WHITLARK and DERF SOLLER promote firm and fast playing conditions in the Southwest and Northwest Regions of the USGA Green Section.