

# Wisdom from the West Coast

## Golf course maintenance trends in the Southwest.

BY PAT GROSS, DAVID WIENECKE, AND BUD WHITE

The year 2003 was a year of challenges and innovation for golf courses in the Southwest. The main topics of discussion during Turf Advisory Service visits centered on the impact of the economy on golf revenues and maintenance activities, as well as the long-term outlook for water availability. Other interesting developments and trends in the Southwest included high-speed golf carts that started appearing on golf courses, putting green aeration methods, and new technology for overseeding. This article will provide some insight into these topics and other significant issues in the Southwest.

### ECONOMIC ISSUES

In general, the downturn in the economy forced most golf operations to take a critical look at their budgets and make some very difficult decisions regarding capital improvement projects, purchasing, labor, and operations. Many courses reported that play was down by 15% to 20% for most of 2003. This significantly impacted revenues, especially at resort and high-end daily-fee courses. Golf courses in California were also hit with increasing costs for workers' compensation insurance, as much as 300% at some facilities, despite the fact that there were no claims! The cost of keeping the doors open increased as play and revenues decreased, which created a sig-

nificant challenge for general managers and superintendents. How do you fulfill the high expectations for quality when the revenues and budget dollars are not available? Obviously, it took some creativity and good management skills to get through this difficult time. Here are a few of the successful ideas that courses employed during tough economic times:

- Labor and water are consistently the two biggest budget items for South-



Because of the drought and ongoing economic concerns, many golf courses in the Southwest are auditing the performance of their irrigation systems. This important practice helps conserve water, reduce irrigation costs, and improve turf quality.

western golf courses. Many courses were forced to lay off employees and make necessary adjustments to the maintenance schedule. Some superintendents made a conscious decision to reduce irrigation by 10% to save irrigation costs, with the emphasis placed on reducing irrigation in out-of-play areas.

- Maintenance procedures were focused on primary playing areas (i.e., greens, fairways, tees), with less emphasis on roughs, bunkers, and out-of-play areas.

- Many courses performed audits of their irrigation systems to insure that water was not wasted and that systems were running efficiently. This involved activities such as catch-can tests to evaluate distribution, checking wear and tear on nozzles, and identifying the cause of chronic wet spots and dry areas.

- Superintendents worked on cross training employees to expand productivity.

- Emphasis was placed on keeping equipment in top condition. Mechanics and employees received extra training on preventive maintenance techniques so that breakdowns and costly repairs could be kept to a minimum.

- Some courses improved labor efficiency by changing mowing patterns on tees and fairways.

One course was able to reduce mowing time by 25% and saved 40% on bearing replacement by changing mowing patterns on tees.

- Emphasis was placed on high visual impact areas such as the course entry and first tee. In many cases, improvements could be made for a very low cost, yet golfers readily noticed and appreciated the changes.

### WATER ISSUES

The Southwest has experienced increasing drought conditions over the

past four years. Water restrictions were imposed in Arizona and Nevada, and some golf courses had to make difficult decisions to eliminate turf or take sections of the course out of play to conserve water resources. Conflicts over the allotment of Colorado River water required the intervention of the United States Secretary of the Interior, which ultimately forced a deal between farmers in the Imperial Valley of California to relinquish water to the San Diego Water District. The area hardest hit at the moment is Las Vegas, where a state of drought emergency is imposed that has required golf courses to reduce water use by nearly 20% due to record low levels in nearby Lake Mead. It is interesting to note that the cost of irrigating an 18-hole golf course in Las Vegas is already close to \$1 million, and costs are likely to remain the same despite declining water availability. In response, some golf courses in Las Vegas have suspended winter overseeding and others are eliminating irrigation in out-of-play areas. So far, courses in California have been spared water rationing, but a few more years of drought will place increasing pressure on water-thirsty Southern California.

### HIGH-SPEED GOLF CARTS

We received many inquiries this year regarding the new high-speed electric golf carts, such as the GEM and Think

High-speed electric golf carts that are capable of traveling 30 mph are starting to appear at golf courses. So far, there have not been any negative impacts to turf quality, but superintendents and managers are increasingly concerned about the potential for accidents when traveling at higher speeds.



### Trends in Maintenance During Difficult Economic Conditions

- Use of more part-time labor and a reduction in overall staff sizes.
- Employees were cross trained to expand productivity.
- Maintenance was focused in primary playing areas with less emphasis on rough, bunkers, and out-of-play areas.
- Audits were performed on irrigation systems to save money and conserve water.
- More emphasis was placed on preventive maintenance of equipment to avoid costly repairs.
  - Mowing patterns were changed to reduce mowing time and wear on equipment.

vehicles, that began showing up on golf courses. In general, these vehicles can operate at up to 30 mph in high gear for street operation, with a lower gear for use on the golf course. Obviously, the temptation is to keep the vehicles in high gear on the golf course. Superintendents, golf professionals, and course officials were concerned about possible damage to the turf and golfer safety. While there does not appear to be any research on the issue, we have urged courses to consider the following points:

- The new high-speed golf carts are generally 200 to 300 lbs. heavier than standard golf carts, but the tires and wheel base remain relatively wide to

displace the weight. Perhaps weight is not a major concern if you consider that many golf course maintenance vehicles are heavier and do not cause substantial damage, but large numbers of heavy carts could have a negative impact over time.

- Starting, stopping, and turning in high gear are likely to cause more turf injury due to abrasion and compaction. So far, the courses allowing the high-speed golf carts have not reported a significant increase in turf damage.
- The main concern is the potential for accidents and injury when traveling at higher speeds. Golfers often drive carts down canyons, up hills, and across uneven ground, which can cause the cart to tip over. Include the fact that alcohol is served at many golf courses, and you have the potential for serious accidents.

As a precaution, we have urged courses to contact their insurance companies to obtain more details about potential risks and liabilities before developing a policy in favor or against the use of high-speed golf carts.

### PUTTING GREEN AERATION METHODS

Golfers hate the disruption caused by putting green aeration just as much as superintendents hate this labor-intensive

project and hearing the complaints of golfers. More and more courses seem to be modifying their aeration programs by using smaller aeration tines on a compressed spacing. The most popular method is the use of  $\frac{3}{8}$ " hollow tines on 1" x 1" centers. This configuration accelerates thatch removal with quicker turf recovery compared to standard core aeration using the larger  $\frac{3}{8}$ " hollow tines on 2" x 2" centers.

## OVERSEEDING METHODS

Winter overseeding is a common practice in Palm Springs, Las Vegas, Phoenix, Tucson, and parts of Southern California. During the past two years, a few courses have been using the Turf Solutions Dry Spray Applicator for overseeding. This technology has been used in the Southeast for ten years and is now becoming popular in the West. The tractor-drawn seeder has a very precise metering

device and uses forced air to accurately apply seed. This technology has many advantages, including:

- Less renovation of the bermudagrass base is needed prior to overseeding.
- The ability to use lower seeding rates to achieve good overseeding density.
- Very uniform seed distribution for better coverage and even germination.
- Seed application is faster (1-3 days for an 18-hole course) and can be done without closing the course.

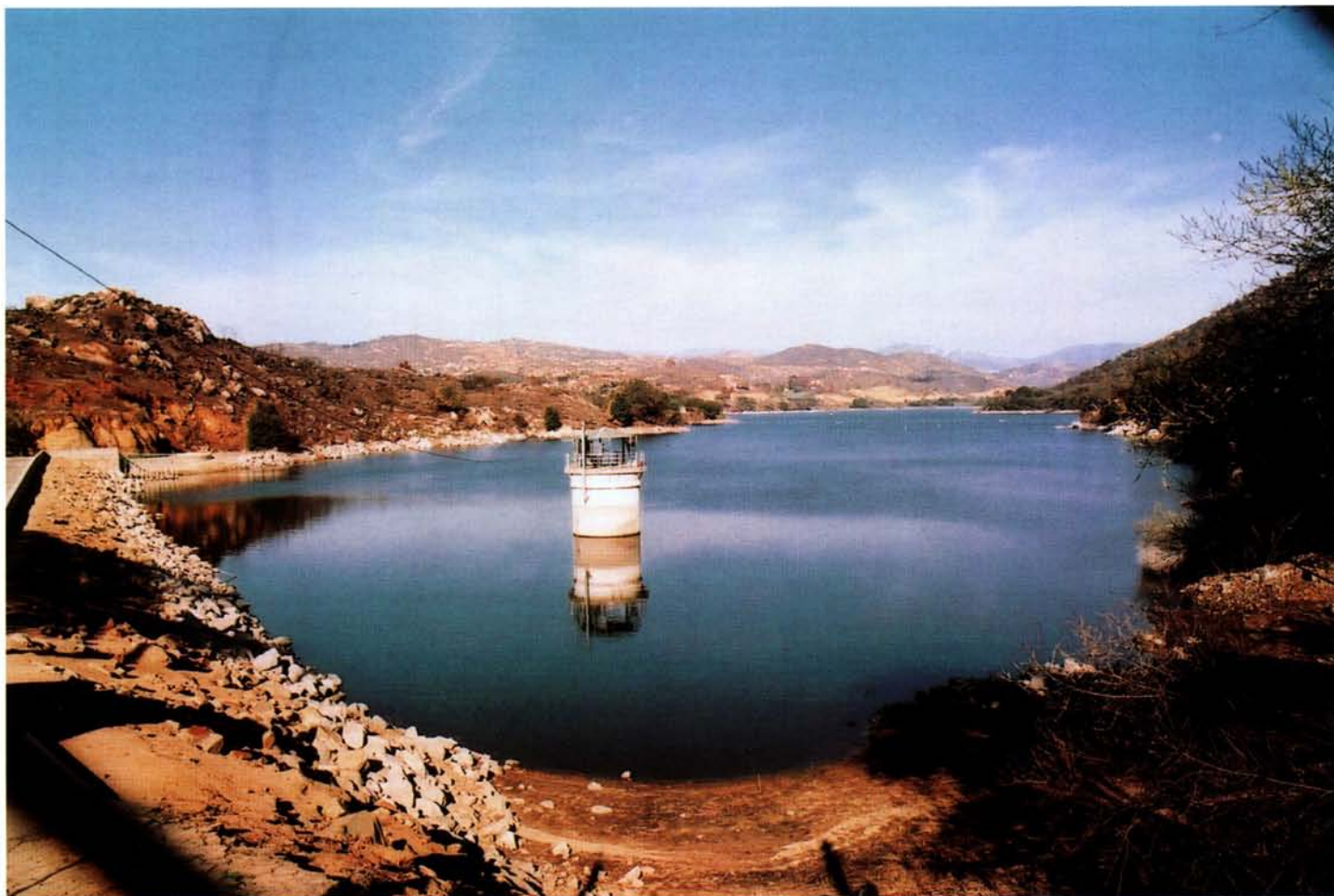
The Turf Solutions Dry Spray Applicator also has been used to accurately apply other varieties of grass seed such as bermudagrass at the very low rate of 25 lbs. per acre. For overseeding with perennial ryegrass, good results have been achieved at rates ranging from 150 lbs. to 400 lbs. per acre, which is substantially less than the standard overseeding rates of 650 lbs. to more than 800 lbs. per acre. At the moment, this

seeding method is only available as a contractor service.

## CONCLUSION

Wisdom often comes from surviving difficult challenges and learning valuable lessons in the process. If that is the case, many superintendents in the Southwest gained wisdom this year as they dealt with challenging economic times while striving to fulfill the high expectations of golfers. As always, the talent and ingenuity of golf course superintendents made it possible to meet these challenges and prepare for the year ahead.

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The Southwest has experienced increasing drought conditions during the past four years, and water supplies are getting desperately low.