

Bunkers are an obvious spot to save money at many golf courses. Realistic expectations must prevail when deciding how they are to be maintained.

he current economic recession has touched all parts of the golf industry. Golf course superintendents have not been immune from the reality and implications that forecasted revenues and rounds of golf are down at most golf facilities. There may be exceptions, but the rule is that most superintendents are studying ways to do more with less.

The agronomists of the USGA Green Section recently collaborated on this article, which is intended to provide golf courses with ideas on how to reduce their course maintenance budgets. Each item may or may not apply to your golf course; this list is not all-inclusive, nor is it intended to be a recommendation for your golf course. At a minimum, the ideas presented will encourage creative thinking among superintendents and their staffs as they manage their golf courses

through difficult economic times. When reviewing these ideas, it is up to each individual golf course to determine whether the idea will change the desired standards of the course and whether this is acceptable. Please note — ideas that involve reducing the frequency that something is done only reduce expenses if total payroll hours are reduced as a result.

COST SAVINGS VS. COST CUTTING

Before moving forward, it is important to distinguish between the terms *cost savings* and *cost cutting*. For the purposes of this article, *cost savings* is defined as spending less for a product or service without changing the quality of the course. In golf maintenance, this means the standard remains the same, but a less expensive way has been found to achieve the standard. Cost cutting is

defined as spending less for a product or service with a reduction in the standard. In golf maintenance, this means that the standard is lowered and less is spent to achieve the new standard. Always communicate proactively with course officials if the standard is being lowered to cut costs.

USGA TURF ADVISORY SERVICE

The USGA Green Section has been offering Turf Advisory Service consulting visits to golf courses since the early 1950s. Green Section agronomists visit more golf courses each year than any other turfgrass consulting organization. Please contact your regional agronomist for more information about tailoring these ideas to your course and communicating them to those who play the course.



Alternating rolling with mowing has become a popular strategy on putting greens.

PUTTING GREENS

- Change holes less frequently.
- Employee changes the hole and mows the green. If a triplex is used, mount hole changer on the mower.
- Using more plant growth regulators may reduce mowing frequency or allow rolling instead of mowing more often.
- Increase mowing heights to reduce stress, limit fungicide use, and leave a margin for unusual environmental extremes.
- Alternate mowing and rolling.
- Eliminate or reduce double mowing.
- Increase use of triplex mower, but use walk-behind for cleanup pass.
- Use a less-expensive fertility program. For example, use urea plus iron for spoon feeding instead of specialty programs.

BUNKERS

- Reduce raking frequency and increase the use of touch-up or spot raking.
- Increase use of motorized rakes and reduce hand raking at clubs that usually rely on hand raking.
- Eliminate excessive or unnecessary bunkers. Install mounding or depres-

- sions instead. Initially requires investment in time and resources.
- Treat perimeters and banks with growth regulators to reduce edging/ mowing frequency.
- Extend the life of fiberglass-handled bunker rakes with the installation of plastic sleeves from vinylguardgolf.com.

FAIRWAYS

- Reduce fairway mowings per week.
- Increase use of growth regulators to reduce clippings and support reduced mowing frequency.
- Rely more often on fertigation. Nitrogen applied frequently in small amounts is more efficient than granular applications. A pound of nitrogen can be stretched further with fertigation.
- Eliminate all nutrients except nitrogen for one season or so.
- Reduce total nitrogen applied.
- Use more iron and less nitrogen.
- Increase use of large pullbehind gang mowers.

- Implement the most efficient mowing patterns to save on fuel and time.
- Don't collect clippings.
- Use generic herbicides.
- Decrease herbicide applications.
- Take advantage of early order programs for fairway and rough products.

ROUGH

- Mow roughs less frequently.
- Decrease total fertility in rough, or fertilize only high-traffic zones.
- Apply herbicides less frequently.
- Skip preemergence application if weed seed bank is minimal and weeds have been controlled successfully for years.
- Eliminate the intermediate cut.
- Lower the primary rough cut and mow less frequently.
- Maintain a wide band of low-cut primary rough around each fairway. Maintain a higher cut (4-6") and mow less frequently farther away.
- Create no-mow areas if they are out of play.
- Reduce herbicide applications and labor in natural areas.



The expense of maintaining water coolers on the golf course should be compared to alternative means of providing water to golfers. Substantial annual savings exist.

- Mow with gang mowers instead of self-contained rotaries.
- Remove mulch and install a more shade-tolerant grass.

TEES

- Eliminate topdressing for a season or two (if applicable).
- Eliminate use of walk-behind mowers.
- Don't overseed.
- Abandon square tee configuration and round off edges with a triplex.
- Move tee markers less frequently.
- Reduce fertility (if applicable).
- Mow less frequently.
- Eliminate overseeding bermudagrass tees in winter.

COURSE

- Eliminate on-course water coolers.
 Inform golfers of the need to buy water or fill their own water bottles prior to play.
- Eliminate landscape plantings and flowers on the golf course.
- Shrink landscape plantings around the clubhouse.

BUDGETING AND PLANNING

- Conduct time and motion studies to determine what it costs to do everything on the golf course. Be sure to include materials. This information is invaluable for planning.
- Consider gap maintenance to avoid golfers and increase productivity.
- Begin the workweek on Saturday.
 Better able to manage hours and avoid overtime.

TREES

- Remove trees that are a hindrance to turfgrass health.
- Do not just trim trees if what they need to be is removed.
- When removing trees, hire a land clearing company. They are often one-third the price.
- Root prune trees to decrease water use in rough.



Rounding off square tees with a triplex mower can reduce mowing time by 50%.

MAINTENANCE OF WATER HAZARDS

• Maintain to the margin of a hazard. Eliminate string trimming inside the hazard or reduce it to once per season.

MAINTENANCE DOWN THE MIDDLE

• Keep the focus on the middle of the course. Commit to having fantastic tees, fairways, and greens, even if it means lowering standards in the roughs, woods, and bunkers.

LABOR

- Hire fewer summer employees.
- Eliminate or reduce special projects.
- Borrow or share equipment in appropriate situations.
- Study the zone maintenance concept. Employees are all cross-trained. Each zone leader can mow greens, change holes, rake bunkers, change tee markers, empty trash, and replace water jugs. This is more efficient and consumes less fuel.

- Implement the buddy system, where two workers ride in one cart to reduce fuel consumption.
- Eliminate overtime.

GOLFER CONTROL ISSUES

 Control golf carts more strictly to reduce wear and the need for nitrogen and water. time it takes to get the crew out on the course. When the facility is poorly designed, bring one or two staff in 30 minutes early to stage all the equipment needed for morning jobs outside the building. This avoids the crew from wasting five to ten minutes every day waiting to get equipment out of the building.



Anything that can be done to reduce irrigation will lessen the electric bill.

- Reduce shotgun starts unless an outing is generating revenue for the club.
- Delay opening the course in the spring by a week.

EQUIPMENT

- Keep blades sharp.
- Know the clip rate and optimum speed of every mower to produce the best cut.
- Ensure accurate spray or granular calibration to prevent unintentional over- or under-application.
- Determine the fleet management option (lease vs. purchase) that provides best cash flow.
- Keep equipment stored in the maintenance facility to minimize the

IRRIGATION

- Reduce the total amount of water applied. There is a partial kilowatthour behind every drop of water applied.
- Reduce irrigated areas.
- Fine tune the system via leveling heads, replacing worn nozzles, etc.
- Understand how the electric utility charges for power and then operate the pumps in the most efficient way.

MISCELLANEOUS

 Contact the local electricity provider and schedule a commercial audit for the maintenance facility and clubhouse.

- Evaluate the golf cart charging protocol and be sure it is the most costeffective way to charge the golf carts.
- Be sure to apply to the IRS to claim the Off Road Fuel Tax Credit for unleaded gasoline used in golf course equipment.
- Install motion-activated light switches in restrooms and the break room.
- Keep the maintenance facility two degrees warmer in summer and two degrees cooler in winter.
- Evaluate the number of phone lines entering the clubhouse and maintenance facility. Reduce if possible.
- Modify uniform service. Consider purchasing two pairs of pants and shorts each year for employees. Install a washing machine and dryer in the maintenance facility.
- Do not provide Styrofoam cups in the break room. Buy each employee a thermal mug — one time only.
- Study the most effective way to store equipment to minimize time spent in the morning getting equipment ready to go.
- Use perennial plant materials at the clubhouse.

CONCLUSION

Recessions are difficult, but not permanent. They give rise to new ways of operating and take all of us out of our comfort zone. Being forced to consider ways of keeping the bar at the same level instead of raising the bar requires a different mindset. As we move from tough times to more prosperous ones, golf course superintendents and course officials will be better off for the experience. Now and in the future, the USGA Green Section remains committed to staying up to date and providing cutting-edge information to all who seek it.

This article was compiled by CHRIS HARTWIGER and PATRICK O'BRIEN, with contributions from the other regional Green Section agronomists.