**Q:** We have added several new tees to our golf course and are due to have the entire course re-rated for handicap purposes. In the past, we have placed our permanent markers at the very back of our championship tees for rating. Is this the best placement for these markers? (Pennsylvania)

**A:** The placement of tee markers at the very back of the championship tees is done for one reason — to inflate the total length of the golf course. The better option may be to place the markers at least three yards forward from the back of the tee to get a true measure of the length that the golf course will play from the championship tees. There should be at least two club lengths between the permanent marker and the back of the tee so that the rating is accurate when tee markers are placed.

**Q:** We have a problem with heaving on our golf course. In late winter the surfaces of fairways and greens are severely heaved. The surfaces eventually settle as the frost leaves the ground and we conduct normal rolling. Unfortunately, we lose a significant number of sprinkler heads during the process. Is there anything that can be done to reduce the damage? (New York)

**A:** Soil heaving is a phenomenon at many northern golf courses where surface soils freeze for long periods during the winter months. The heaving occurs as water from the unfrozen soils below is drawn toward the frozen soil layer above. The water freezes, creating a lens that forces the surface soils to heave. The result is not for the faint of heart! Fortunately, the surfaces usually settle out quite nicely as the frost leaves the ground and the ice melts. Severe heaving can buckle cart paths and damage sprinkler heads. Superintendents in northern New England have tried for years to insulate vulnerable sprinkler heads with straw bales and foam insulation, in hopes of minimizing the deep frost and the heaving that follows, and try not to panic when they see the moonscape that awaits them in spring.

**Q:** I received a directive to cut my budget by 15% for 2010. We already cut the budget by 15% last year by reducing fertilizer and chemical inputs, recycling topdressing sand, and switching to triplex mowers on tees and greens. Where else do I cut while providing the same quality product? (Nevada)

**A:** Significant budget reductions are an unfortunate reality at many golf courses in the region. The next step is to lower the golf maintenance standard during the off-peak season. Altering the maintenance standard allows freedom to cut the labor force while focusing the existing staff on priority areas such as tees, fairways, and greens. Reduce mowing frequencies on fairways and roughs, rake bunkers twice a week, and simply touch up in between. Promote playability rather than lush and green, and focus maintenance practices down the middle, where golfers are supposed to be. Less-intensive maintenance does not always equate to a reduction in playing quality. Interestingly, clubs that employed such a program last year did not report a reduction in golfer satisfaction.