**Turf Twisters**

**Q:** Will we gain anything from returning the clippings to the turf rather than collecting them from our fairways every time we mow? (New Jersey)

**A:** Yes, a nutrient effect can be gained. Grass clippings contain a significant amount of nutrients. As the clippings decay, nutrients are returned to the soil for uptake again. Research indicates that approximately 50% of applied nitrogen is removed when clippings are harvested.

Other studies show that 100 to 150 lbs. of nitrogen is removed per acre per year via clipping collection.

**Q:** I've been asked to cut back the operating budget and specifically to reduce bunker maintenance. I like the idea of reducing the maintenance cost of hazards, but I don't want to apply a change that will draw complaints. Any suggestions? (Kentucky)

**A:** Start by reducing the raking frequency. One or two complete rakings each week can be supplemented by hand raking disturbed areas on mornings when complete machine raking is withheld. Then, be sure that bunker drainage is functioning properly and that design features do not allow constant erosion. Investing in drainage and subtle design changes to ensure positive water movement will pay dividends in the form of reduced maintenance costs. Microenvironment limitations also should be considered. As an example, if tree roots are moving into a bunker, or if overhanging growth is adding debris, adjustments are in order. Don't allow the temporary tree to compromise the permanent bunker. Finally, take advantage of the mandated budget reduction to remind players that bunkers are to be avoided and the amount of resources they consume should be limited.

**Q:** With the loss of Nemacur (fenamiphos), what hope do we have for managing plant parasitic nematodes? (Florida)

**A:** Soil-borne plant parasitic nematodes are among the worst pests Florida golf courses face, especially with the loss of Nemacur. Curfew (1,3-D) is currently the only effective commercial alternative, according to numerous studies conducted by Dr. Billy Crow, University of Florida Landscape Nematologist, but it can only be applied once yearly and does not have a year-long residual. In regard to nematode damage, managing the symptoms is just as important as controlling the pest. Since nematodes feed on turfgrass roots, it is important to apply supplemental water and nutrients to infected areas on a light/frequent basis during times of intense pressure. Nematode populations fluctuate greatly throughout the year, and it is important to target peak times to mitigate stress. Other alternatives are currently being evaluated, and we may finally have several effective products within the next couple of years.