Our course seems to be the home for more and more cicada killer wasps. Besides the nuisance they create with the holes they burrow in the ground and the piles of soil around the holes, many of our golfers are fearful of these large wasps. I have told them they are harmless to humans. They do not seem to believe me. Maybe they will believe the USGA Green Section. (Maryland)

According to Dr. William J. Sciarappa, Monmouth County (New Jersey) Extension Agent, while the male giant cicada killer wasp often flies close to people in defense of his nest, only the female can cause a mild sting. Her stinger is used primarily to paralyze prey, not to attack humans. A fact sheet on this pest can be downloaded from the website of Rutgers University at www.rcre.rutgers.edu/pubs/publication.asp?pid=FS040. With support from the USGA and Rutgers, maybe your skeptical golfers will believe you now.

Our Green Committee is debating whether or not there should be a step cut of rough between the fairway and primary rough. Some feel that an intermediate step cut of rough is necessary for proper conditioning of the course. Can you assist our discussion? (Indiana)

An intermediate step cut of rough is not required to play the game or apply the Rules. Although it can be a good means of transitioning between the fairway and primary rough, there are maintenance costs that should be considered. It's not uncommon for an intermediate step cut of rough to be one of the weakest areas on a course. The cutting height is lower than the primary rough, and yet the fertilization and irrigation programs are often the same as either the fairway or primary rough, which neglects the specific needs of the step cut.

Bottom line, while there are enhancements to playability offered by an intermediate step cut of rough, be sure that adequate funding is provided to maximize turf dependability if it is utilized.

We are debating what material to use for backfilling our fairway drainage trenches. Is it best to put gravel all the way to the top, or just use gravel around the pipe and then sand to the surface? Is it acceptable to place sod over the top of the trenches? (Nevada)

Both materials you mentioned are appropriate and effective, depending on the circumstances. Placing gravel to the surface of the trench is usually done to intercept moderate to heavy amounts of water. Gravel drains are very effective when first installed, and then drainage gradually slows as the trenches become contaminated with debris and clippings. Backfilling a drainage trench with sand is normally done to intercept moderate to low amounts of surface water. Like the gravel-filled trenches, they decline in effectiveness with age.

The main advantage of sand is that the area can be seeded so it is not as unsightly and causes less interference to golfers. With regard to placing sod over the top of the trenches, this defeats the purpose of the surface drains and is not recommended. If the trenches are unacceptable to golfers, you can consider alternative drainage methods such as installing subsurface drains with catch basins to capture the surface water.