Cover 'em up

Preventing fairway aerifier tines from hitting sprinkler heads during aeration has been a challenge since fairway aerifiers were invented. Using wire flags or turf-marking paint are two ways to make sprinkler heads more visible to equipment operators. Another way is to cover sprinkler heads with 12-inch-by-12-inch, 16-gauge steel plates. This method is being used at Lakewood Country Club in Rockville, Md., where former equipment mechanic Larry Baxter Jr. fabricated the pieces.

To prevent damage to the sprinkler heads while at the same time preventing damage to the aerifier or tines, a steel plate is placed on top of each sprinkler head, quick-coupler valve and any other piece of irrigation or drainage equipment before the aerifying process begins. A staff member will know if he hits a plate by the loud sound it makes.

Baxter purchased two 4-foot-by-8-foot, 16-gauge steel sheets that cost about $75. He used a circular saw with a special steel-cutting blade and made 32 plates from each sheet. Then he grinded the sharp edges smooth and painted each plate “safety” yellow with a rustproof paint that costs about $35. It took about four or five hours to make the plates and was done during the off-season.

The staff fabricated 64 plates, which is enough to stay ahead of the fairway aerifier. Since crew members started using the plates, they haven’t damaged a single sprinkler head. Before using the plates, about 10 were damaged.

Assistant superintendent Mark McGreevy first learned about the idea while serving an internship at Loch Lomond Golf Club in Scotland, where the crew uses steel plates to prevent damaging sprinkler heads when topdressing fairways.

Got juice?

Hurricane Wilma caused widespread power outages Oct. 24, 2005, in southeast Florida. The Boca Rio Golf Club in Boca Raton, Fla., where Robert M. Randquist, CGCS, is director of golf course and grounds, received about 3.5 inches of rainfall and didn’t have electricity for about five days. But Randquist was quick to respond. He purchased a used, portable electric generator to operate the irrigation pump station two days after the storm.

The generator is mounted on a trailer that can be transported easily by a 35-horsepower tractor or 3-ton pickup truck. It has a Cummins, 6-cylinder, 300-horsepower diesel engine that produces about 225 horsepower at full load. It consumes between 14 and 18 gallons of diesel fuel per hour, depending on the electrical load, from a 150-gallon fuel tank. The electrical panel has one 480-volt plug through a 200-amp circuit; multiple 480-volt plugs, each on 50-amp circuits; one 240-volt plug through a 100-amp circuit; and four duplex 120-volt plugs, each with 30-amp circuits. It’s capable of generating as much as 600 volts at 60 hertz.

An electrical contractor installed a transfer switch inside the irrigation pump house to allow the maintenance staff to switch from their regular electrical power source to the generator power safely. A junction box installed on the outside wall of the pump house allows for an easy connection for the extension cord from the generator. Once the generator is parked next to the pump house, it takes about 10 minutes to be completely operational. The generator also can be used to power the refrigerators, freezers and lights in the clubhouse, but not the air conditioners.

The cost for the completely refurbished generator was $25,000. A new one can cost between $45,000 and $85,000, depending on the size and optional equipment.

Randquist also has two 5,500-watt portable generators that provide temporary power for the fuel island, soda machine, time clock, lights, office, telephones, etc., during a power outage at the maintenance building complex.