



# HOLE NOTES

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## GOLF COURSE IRRIGATION AND DRAINAGE

# Water On, Water Off!

By CLIFF JOHNSON

The formula sounds so easy: Provide grass with optimal moisture and it will thrive.

For golf courses, getting the water on the grass is the simple part, thanks to sophisticated irrigation systems that supplement unpredictable rainfall.

Getting the water off the grass - and out of a waterlogged soil profile - is a more formidable challenge.

One of the most common golf course turf problems is excess water trapped at the surface. When water is unable to permeate topsoil, the result is surface ponding and an unstable surface that inhibits turf growth and invites turf diseases and soil compaction. Poor drainage can cost a golf course in both obvious and hidden ways:

Reduced play days and cart rental income; damage and scarring to fairway turf; turf renovation and restoration; reduced resistance of turf to drought; turf die-back in winter, and less enjoyable playing experience for golfers.

Until recently, the only cure for poor drainage has been major reconstruction of fairways and greens using conventional drainage methods that involve trenching, re-establishment of



**FAST AND QUICK.** The Shelton Super Trencher cuts a trench up to 5" wide and conveys it away to the removal cart.

turf and lengthy disruptions to play.

In the mid-1990s, Hartman Companies of Victoria, Minn., introduced to the United States a proven drainage technology from the United Kingdom called Slit Drainage. The new surface drainage system consists of an intensive grid of parallel slit-trench drains that removes excess surface water before it has a chance to

pond and damage the soil surface. Slit drainage, according to Jeff Hartman, founder and president of Hartman Companies, is capable of draining an area three times faster than conventional drainage (i.e., farm-field style drainage) without an increase in cost.

*(Continued on Page 5)*

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