- On the Road -
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Fairway Drainage Project at Diablo CC

Trenching spoils on No. 7 fairway being removed (note finished trench on the right).

Permeable basin with siphon in center (note gray turf drains feeding into basin).

A six-foot siphon/sump basin (an electric 1-horsepower pump is used to remove excess water).

No. 4 fairway prior to trench compaction and clean-up.

Trenches have been filled and compacted on No. 4 fairway.

The finished product of No. 4 fairway.

Todd Lyijynen Q&A

The superintendent at Diablo CC in Alamo discusses the reasoning behind a recent fairway drainage project.

Q. Why did you start a fairway drainage project?

A. Parts of the golf course were completely unplayable during the winter months. We wanted to give the membership a golf course that could be at least playable and one in which we could still perform maintenance on a regular basis.

Q. Why did you go with a siphon type of system for the fairways?

A. One of our members saw the system at another course in the area. I visited the course and was impressed at the results. The technology and the construction methods were a perfect fit for us. Our wettest areas are also the lowest areas of the golf course. With this system, we can move the water uphill and off the property. Lateral turf drain lines (similar to waffle drains) were installed and backfilled with sand.

Q. Why didn't you backfill with pea gravel?

A. Sand was used as a backfill to prevent any fine particles from migrating downward and sealing off the fabric around the drain.

Q. What impressed you the most during the construction phase of the project?

A. The fact that very little damage occurred to the golf course. The company, Turf Drainage Company, did a great job of keeping damage to a minimum. The trench compactor really made a difference as far as trench settling goes. I also liked the idea of permeable catch basins. The basins will receive water from all depths of the soil profile, instead of from the surface only.

For the complete Q&A, visit the NCGA web site at www.ncga.org/turf/lyijynen.htm

Tid Bits

Superintendent Corey Eastwood, CGCS at Stockton GCC, is utilizing modern technology to keep his members informed about golf course maintenance practices. Corey noticed the idea of emailing members about golf course conditions when he attended the Innovative Superintendent session at the National GCSAA Conference in Orlando. Eastwood starts each email off with the weekly weather forecast then informs members about upcoming course projects, any impending cart restrictions, etc. He also offers gardening tips at the end of each email bulletin. The Monday morning updates are a very quick and efficient way to inform members and keep them up-to-date about golf course maintenance issues.

The Spring to Summer Transition and *Rhizoctonia* Diseases

By David L. Wienecke, USGA Agronomist SW Region

The changing weather patterns mean spring is here! Take advantage of the cooler temperatures and spring showers to apply soil penetrants. Soil penetrants are applied to increase irrigation efficiency and reduce localized dry spot problems and this effect will last much longer when applied in spring rather than when applied after soils have already dried in summer periods. Many golf courses have found they end up applying less penetrant because the effect lasts weeks longer when the penetrant is applied in early spring. It is also easier to maintain soil moisture levels longer into the summer when the rootzone stays wetter longer with the aid of early application of penetrants.

In addition to changing water needs of turf in spring, disease issues also change. The transitional weather periods of spring and fall make ideal conditions for Rhizoctonia and Dreschlera diseases. Rhizoctonia diseases include brown patch disease and yellow patch disease.

Brown patch disease, caused by Rhizoctonia solani begins as a light brown circular patch most often on cool season grasses when surface moisture or humidity are high and night temperatures are above 68°F (20°C). For this reason brown patch disease is termed a warm weather disease. Large areas can show disease symptoms rapidly during hot, rainy or humid weather. Typical symptoms generally will exhibit rings or patches of blighted grass and may or may not exhibit leaf spots throughout the turf stand or within a patch. The grass in the diseased area will look purplish green at first, followed by turning a light brown. Classic symptoms of brown patch disease are dark purple or grayish brown on the border of the patch, that is termed a smoke ring. Symptoms of the pathogen are more easily seen during early morning periods when dew is on the grass or during very humid weather.

Yellow patch disease (also called cool weather brown patch), caused by Rhizoctonia cerealis, occurs during extended raining and cool to cold periods (i.e. 28-36°F/-2-3°C). Disease symptoms include light brown, reddish brown, or yellow rings and patches on closely mowed grasses. The disease is seen most frequently on cool-season grasses but is also seen on warm season grasses. Patches occur most frequently on warm season grasses in the spring when grasses are breaking dormancy. Smoke rings are not usually evident, and active infections may be noticeable by off-colored shoots at the margins of the patches. Affected shoots can easily be pulled from grass sheaths or points of attachment where infections occur.

Note that Rhizoctonia disease causing structures can occur over a wide range of temperatures (46-103°F/8-40°C) as long as free moisture is available. Rhizoctonia fungi are capable of growing in the soil for long periods of time as decomposing organisms and infecting turf when moisture and temperature and/or stress conditions favor infection and disease development. This disease has been found to show symptoms, especially on creeping bentgrass/Poa annua turf, but not cause turf damage or complete the disease process. Fungicides labeled for this disease are effective at stopping disease development. Have a great spring!

CDGA Web Site

The Chicago District Golf Association, in conjunction with the University of Illinois, has started a website that will assist golf course superintendents and other turf professionals in making sound pest management decisions. The web site, www.interactiveturf.com, will provide weekly pest monitoring information as well as pest management recommendations. The site will also list any new information or research updates as it pertains to pest management practices. The utilization of weather stations and computer software will allow the researchers to develop predictive models to forecast future pest outbreaks. Links to pesticide labels and MSD sheets are available on the site.