Cut water use by 15 to 25 percent



Aqua-PhyD's in-line water and soil treatment system uses resonant frequency technology to reduce soil compaction and harmful Na levels

Works with all water sources including brackish and reclaimed water

Increase root growth and nutrient uptake



Installation at a Southern California Golf Course



Call toll-free for more information or email info@aqua-phyd.com

Satisfaction Guaranteed!

www.aqua-phyd.com

(Continued from page 7)

NEW TURFGRASS DISEASE CULPRITS

Pythium root dysfunction causes the roots and crown of turfgrass to turn brown or black. The symptoms are most visible during the summer, but the disease actually spreads during spring and fall, when it is cool and wet.

Because symptoms are less prevalent on plants with a strong root system, there are several cultural practices superintendents can undertake to minimize damage caused by Pythium root dysfunction. Root enhancement techniques – specifically aerification, nutrition supplements, verticutting and reduced irrigation – are helpful in counteracting symptoms of the disease.

Irrigation management is also extremely important. Clay and compacted soils are more likely to harbor Pythium root dysfunction because of reduced drainage.

It is less difficult and less expensive to prevent Pythium root dysfunction than it is to try to cure it. Fungicides such as pyraclostrobin and triticonazole are two of the most effective at preventing the disease.

Dr. Lane Tredway, turfgrass pathologist at North Carolina State University, is one of the foremost experts on Pythium root dysfunction. To learn more about his research and information on NC State's Center for Turfgrass Environmental Research & Education, visit www.turffiles.ncsu.edu.

Brown Ring Patch

Formerly known as waitea patch, brown ring patch has been reported sporadically throughout the Midwest and is a mounting problem in Southern California. Occurring primarily on greens with high annual bluegrass (poa annua) populations, the disease is prevalent in warm and moist conditions.

Initial symptoms of brown ring patch are thin, yellow, concentric rings several inches in diameter that turn brown under hot or wet conditions. Once established, brown ring patch can quickly damage turfgrass. Temperature plays a significant role in regards to whether or not brown ring patch occurs. The disease does not spread in hot or cold conditions, but rather during times of mild (mid-60s to low-80s F) temperature.

Cultural control options of aerification and higher mowing heights are sometimes used to combat brown ring patch. Alternating among several fungicides – pyraclostrobin, propiconazole and triticonazole – has been an effective treatment.

Dr. Frank Wong, assistant plant pathologist at the University of California-Riverside, is considered one of the top brown ring patch researchers. For more information, visit UC Riverside's Department of Plant Pathology and Microbiology at www.plantpathology.ucr.edu.

(Continued on page 14)

Your Local Sales	John Holmquist	Matt Lucas	Vicki Beloian	
Associates:	707.974.8384	916.416.4589	408.438.1604	
Steve Blanchard	Tom Walgenbach	Paul Wizikowski	Dave Kaschner	
916.257.2228	831.212.5362	714.719.2589	619.843.5011	
	Associates:	Associates: 707.974.8384	Associates: 707.974.8384 916.416.4589	Associates: 707.974.8384 916.416.4589 408.438.1604
	Steve Blanchard	Steve Blanchard Tom Walgenbach	Steve Blanchard Tom Walgenbach Paul Wizikowski	Steve Blanchard Tom Walgenbach Paul Wizikowski Dave Kaschner

Why Horizon?

Horizon is the only professional distributor to offer:

- Complete line of professional fertilizers and soil amendment products
- Full selection of chemicals including post patent products
- Greens-grade seed from Seed Research of Oregon
- Greens-grade organic fertilizer from Sanctuary
- Quality line of soil surfactant products from Aquatrols
- Pond solution products from Becker Underwood and Bioverse
- Ready-to-deliver allied products, including pipe, fittings and wire
- Knowledgeable, experienced team of sales professionals with the skills to carry you from construction through renovation

From products to people, Horizon delivers a service unmatched in the industry – our dedication to doing whatever it takes, every day, to make your job easier.

That's the Horizon Way. That's the Horizon Difference.

Horizon irrigation | specialty | landscape | equipment

HorizonOnline.com | 888.898.8833 | AZ | CA | CO | GA | ID | NV | OR | TX | UT | WA

Superintendents Institute at the Course at Wente Vineyards

Industry experts gathered at the GCSANC Institute held in cooperation with University of California Cooperative Extension. The timely topic for the 2008 conference was: What is More Important Than Water? The 2-day event which included seminar, golf tournament and trade show was held at The Course at Wente Vineyards (Livermore, CA) and kindly sponsored by John Deere Golf and Reed Equipment Company. Presenters included Mike McCullough- NCGA and California Alliance for Golf, Chris Dundon-Contra Costa Water District, Event Cochairman Dr. Ali Harivandi- UC Cooperative Extension, David Langridge- East Bay Municipal Utility District, Dr. James Baird-UC Riverside, and Dr. Hossein Ashktorab-Santa Clara Valley Water District.



Minimize damage to fairways & rough Specializing in low impact vehicles

Providing Golf Superintendents certified arborist services for over 20 years, leaders when it comes to protecting and maintaining trees on golf courses.





Contact Us at 888.969.8733 or www.arborwell.com

Hayward · Sacramento · San Jose · San Mateo



GCSANC members serve as panelists at the 2008 Institute. David Sexton, CGCS, Joe Vallaire, Gary Ingram, CGCS, and Brad Griffing.



Host Superintendent Glenn Matthews of Wente Vineyards provides insight to colleagues at The Institute

(Continued from page 11)

NEW TURFGRASS DISEASE CULPRITS

Rapid Blight

Rapid blight occurs in the fall and winter, affecting several annual winter grasses used to overseed Bermudagrass. Affected species include ryegrass, annual bluegrass and poa trivialis. It is primarily seen in the Southwest, including Nevada, Arizona and Southern California, as well as on coastal areas in the Southeast and Northeast. Perennial grasses are not affected by rapid blight.

The disease is associated with a marine organism and cases of rapid blight rise significantly in areas where superintendents use reclaimed water or water with high salinity for irrigation. The disease can occur on any area that has been overseeded, but is usually treated only on putting greens.

Dr. Mary Olsen, plant pathology specialist for the University of Arizona-Tucson, has confirmed that rapid blight is caused by an obscure microorganism that prior to its discovery in turf was known to infect in marine plants such as seagrass, diatoms and algae.

Rapid blight shows itself as water-soaked, slightly sunken and darker looking turf. It turns yellow and dies in patches.

The primary cultural control option is to use better quality irrigation water, avoiding reclaimed water, if possible. Pyraclostrobin provides the most effective preventative control, with mancozeb as a less effective alternative.

Olsen is a leading rapid blight researcher. The University of Arizona's Division of Plant Pathology and Microbiology is available on the Web at http://ag.arizona.edu/PLP.

Prevention, Education Key

To avoid being caught off guard by new diseases, it is important to stay educated on new diseases, be consistent with preventative tactics and devote time to detection efforts.

Part of being proactive is keeping up with the latest research and information about turfgrass disease. Superintendents who collect and absorb background information are better prepared when they encounter a problem – they know what they are dealing with and who can help them.



Some superintendents are quick to write off an undiagnosed problem as being untreatable by a particular fungicide they have already applied, so they simply retreat with a different product. Instead, they should take a turf sample and send it in to a diagnostics lab.

Fungicide manufacturer representatives, university extension personnel and other course superintendents are also good sources of information. It is wise to seek the help of others if they encounter an abnormality they do not recognize.

It may seem like common sense, but it is important for superintendents to walk their courses every day to keep an eye out for abnormalities. New diseases such as pythium root dysfunction, brown ring patch and rapid blight can cause problems quickly if undetected.

Sidebar: Getting to the Root of the Southeast's Pythium Disease The good news for Charles Sheffield, superintendent at Croasdaile C.C. in Durham, N.C., is that only one disease significantly disturbs his turf. The bad news is that it is Pythium root dysfunction caused by Pythium volutum. Superintendents and pathologists living in the Southeast are learning that Pythium root dysfunction on creeping bentgrass greens is a plague.



(Continued from page 6)

GCSAA's NEW LEADERSHIP ACADEMY

develop presentations and get important messages out to the public at large.

The meeting's agenda was an even blend of subtle selfpromotion and a chance for representatives to give their opinions on the organization's efforts. Concerns were raised about the GCSAA's heavy emphasis on the GIS show and the rising cost of membership dues. Feedback on the website's usefulness and PDI were also given. It became clear that a large, national organization such as the GCSAA will always be challenged with serving a membership with diverse budgets and resources.

To help with these disconnects, we were encouraged to get involved in our local chapters. Whether we chose to serve on the board or just attend meetings, our local chapters are the most effective tool we have collaborate on issues specific to our area. We should feel fortunate to have such a strong chapter here in Northern California. With an experienced Association Manager and Media Consultant like Barbara Mikel and Emmy Moore Minister, we have considerably more resources available to us than most chapters. I left Lawrence impressed by the resources and talent representing us on the national and local levels. Just as impressive, is our potential to do more if we all get involved and use the resources available to us.

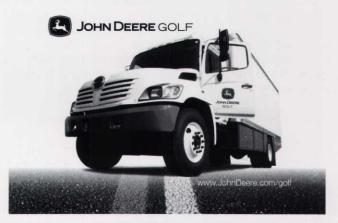


When it comes to support, we have the rubber to meet the road.

We don't just pay lip service to the idea of great service. We have equipment distributors who have been in the game for decades. A parts network you could set a clock by.

And now, dozens of Stores-On-Wheels® and Golf Sales Reps. Who supply agronomic goods and know-how straight to your course. With the full resources of John Deere Landscapes to back them up.

It's one thing to promise support. We actually deliver. Call 1-800-321-5325 today.



NEW AND RECLASSIFIED MEMBERS FOR AUGUST AND SEPTEMBER

David Bermudez Del Rio Country Club Class A

Joseph Grisafe DuPont Professional Products Affiliate

Mike Ligon Sand Channel Greens Affiliate

Walter Souza Sharp Park Golf Course Superintendent Member Michael Steve Grigg Brothers Affiliate

Ronald Carney Retired Class A

David Ladd Retired

Mike McCoy Grass Roots Agronomics, Inc. Affiliate