The USGA Green Section
Record

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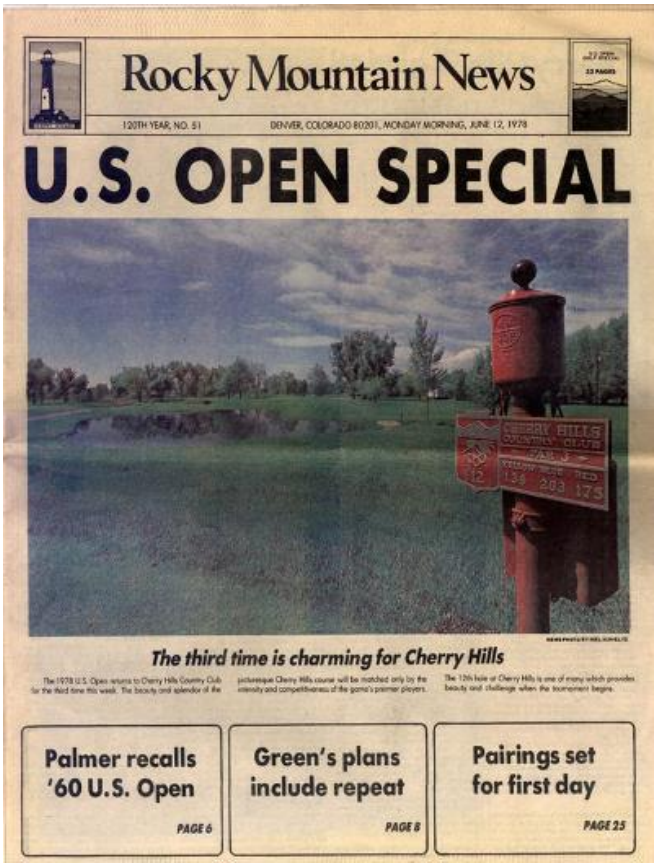
How Fast Were The Greens At The U.S. Open?

Things have changed a bit since 1978

by the Green Section Staff

We have all seen the video flashbacks of championships from years gone by. It is great fun to watch Arnold, Sam, Byron, and others in their prime. However, if you are in the business of golf course management, the things that catch your eye are how different the courses look compared to the ultra-manicured sites we see on television today. The bunkers really look like hazards, there are dry and even worn spots here and there, and typically there were a lot fewer trees. But the thing that stands out the most is how the balls rolled across the greens and then came to an abrupt stop.


Rocky Mountain News

120TH YEAR, NO. 51 DENVER, COLORADO 80201, MONDAY MORNING, JUNE 12, 1978

U.S. OPEN SPECIAL

The third time is charming for Cherry Hills

Palmer recalls '60 U.S. Open PAGE 6

Green's plans include repeat PAGE 8

Pairings set for first day PAGE 25

So why 1978? Well, that was the year the U.S. Open was held at the Cherry Hills Country Club in Colorado. It was the first Open at which the newly introduced Stimpmeter was used to aid in the preparation of the greens.

The following table is taken from an article by Mr. Thomas, the USGA's Technical Director at the time (click here to read Mr. Thomas' entire article).

Green Speeds Stimpmeter Readings - 1978 U.S. Open				
Practice Round	First Round	Second Round	Third Round	Fourth Round
8' 8 &#65533; "	8' 11 &#65533;"	9' 4 &#65533;"	9' 5 &#65533;"	9' 7 &#65533;"

Safe to say, the professional golfers that competed in the 1978 Open found the greens to their liking - particularly that years champion - Andy North. So the next time you feel your greens are too slow at your course remember that not too many year ago

they would have been just fine - even for a U.S. Open.

End Of The Line For Nutrients And Pesticides

USDA scientists investigate a novel approach to protect water quality surrounding golf courses.

by Kevin W. King, Sheela G. Agrawal, James F. Moore, Jim Balogh

Structure housing filters and test equipment with experimental green in the background. Drain lines from the green enter this structure and are connected to the filters located inside.

It is often necessary to install subsurface drain lines to reduce soil moisture levels for healthy plant growth. Properly installed drain lines retain sufficient amounts of water and air in the soil, as well as stimulate microbial activity. Drain lines help prevent rutting and soil compaction by golf carts or maintenance equipment, and they allow golf course access soon after heavy rains. However, subsurface drainage may carry nutrients and pesticides to surface waters. In this way, subsurface drainage bypasses managed and natural filter processes, including riparian zones and vegetated buffer strips.

Various filter materials are being tested for their efficacy to remove nutrients (N and P) and pesticides (chlorothalonil, mefenoxam, and propiconazole) from drain

lines before leachate is discharged into surrounding surface water.

The goals of this research were to investigate the use of industrial by-products and natural minerals as filter media to reduce the amount phosphorus and three pesticides (chlorothalonil, mefenoxam, and propiconazole) from golf course tile drainage outlets to surface waters. The most recent field study was conducted at the Ridgewood Country Club in Waco, Texas, using a filter housing designed by KriStar Enterprises, Inc. A different filter design will be assessed in the near future at the Royal American Golf Course located in Galena, Ohio.

Read on to learn more about this important project.

Watch a short video explaining this project (3 minutes)

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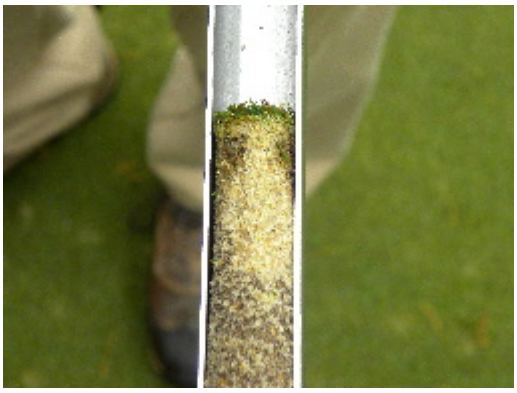
Regional Updates

Mid-Atlantic Region
Preparing Congressional CC for the U.S. Open: Above and Below the Ground
by Stanley J. Zontek, director

Most observers of the game of golf see only what is happening above the ground, on the carpet of grass upon which the game is played. After all, it's that surface of turfgrass that affects all we see --- how the ball nestles into the longer grass of the rough, sits down into the intermediate cut of rough, bounces on the fairways, and rolls on the green toward the hole. Interestingly, there is a lot more that goes on behind the scenes and under the canopy of turf that affects all that happens above the ground.



A close-up of a Dryject column of sand. This is a firming technique and not a substitute for core aeration.

This regional update will take a quick look at one of the course preparation practices being used at Congressional CC, along with numerous other golf courses that are placing importance upon playability as it pertains to firmness.

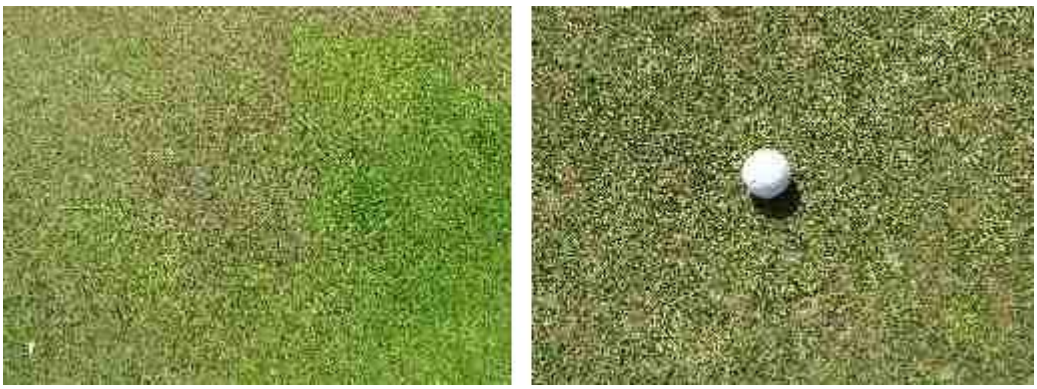
Read the rest of this update

Northeast Region
If I'm sneezing, it must be spring
by David A. Oatis, director, Northeast Region

Pollen levels have been off the charts in the Northeast Region recently, and even people who "don't have allergies" have been feeling the effects. With luck, this isn't a sign of the pain our turf is going to experience in the coming months!

It is always interesting to watch the growth and development of putting green turf in the spring. Initially, bentgrass outgrows *annual bluegrass* (AB) and turf managers everywhere are hopeful that bentgrass populations have increased. Typically, a few

weeks later, hopes are dashed as the growth rate of annual bluegrass suddenly outpaces the bentgrass, giving rise to the concern that the "annual bluegrass is taking over!" This is where many courses are now.



(L) Off color bentgrass at this time of year is usually due to cool temperatures and mechanical injury. Adjacent annual bluegrass may be unaffected. (R) Newly established AB usually seeds prolifically and will likely be more susceptible to stress and disease later in the season.

When temperatures rise a bit more and stay consistently warmer, this appearance will dissipate and the next phase will kick in: the "*June swoon*" of annual bluegrass. Once AB's energy is expended in producing a seed head, the plants turn yellow and their growth rate slows dramatically. For turf managers with lots of AB, this also can cause concern. So what is the point of all this? Most golfers look at putting greens and think of them in a "singular" sense. However, each green is comprised of millions of individual plants, most falling into 2-3 species: annual bluegrass, creeping bentgrass, and perhaps velvet bentgrass. Note also that there are thousands of different biotypes of each species present, and the growth rates of these grasses vary. So if you are wondering why the greens are not smooth as glass, these are the reasons.

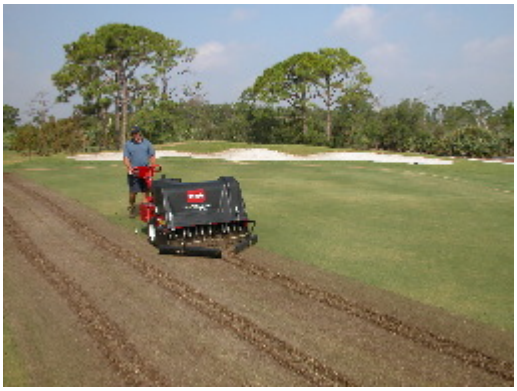
Read the rest of this update.

Florida Region

by John H. Foy, director

All around South Florida there are the usual indicators that the winter golf season is at an end. At private clubs throughout the area, member and guest rounds have dropped off, and reciprocal and annual summer membership programs are now in effect.

So begins the summer course maintenance season. Although disliked by golfers as well as the course maintenance staff, core aeration of putting greens, tees, fairways, and roughs is an absolutely necessary maintenance task for recovering
from winter season damage, reducing and controlling rootzone organic matter accumulation, and maintaining a dense, healthy turf cover most of the time.



While disliked by everyone, now is the time to initiate summertime cultural management programs on Florida golf courses.

It has been six to eight months since the last core aeration on putting greens and other important play areas. With routine mowing and other maintenance practices, in combination with seasonal play, moisture infiltration and rootzone gas exchange have declined. This is true even when periodic

venting with small diameter solid tines or water injection is performed because the benefits of venting quickly dissipate.

Read the rest of this update.

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