

November 28, 2012

Windmill Ridge Golf Course
Monett, Missouri

DATE OF VISIT: November 15th and 16th, 2012

PERSONS PRESENT:

Mike Knight, Golf Course Manager
Justin Beck, Golf Course Superintendent
Darrell Easley, Assistant Golf Course Superintendent
Michael D. Vogt, CGCS, CGIA

Overview of Greens Conditions

Upon my arrival at Windmill Ridge Golf Course I surveyed the greens and discover a good color and dense turf surface with few exceptions. Number two green has several areas, as illustrated in Photo 1, of healing and turf replacement with the hexagonal turf plugger. With additional sand topdressing these areas will knit together very well.



Photo 1 Sod plugs on number 2 green

Greens Conditions (continued)

Height of Cut, Speed and Pace of Greens

The current height of cut is .135 inches or just .025 (twenty five thousands of an inch) above $\frac{1}{8}$ inch. Mowing is being performed three to four times per week dependent upon weather conditions and clipping yield.

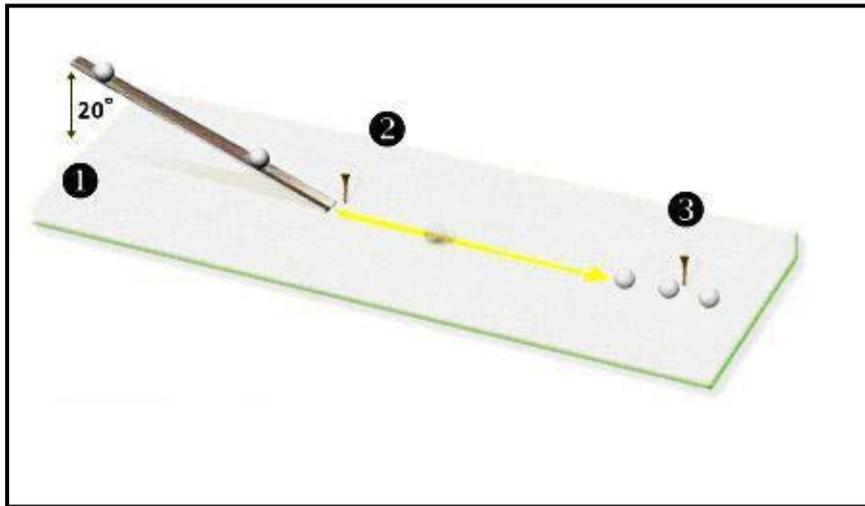


Figure 1 Standard Stimpmeter

On Friday afternoon, November 16th, after a discussion on greens speeds; assistant golf course superintendent Easley and I measure green speed on three representative greens (practice green, 12 and 17). We used a modified Stimpmeter, slightly different than in Figure 1; all green speed measuring devices are similar in function. The ball is rolled down the slope by gravity to an angle of 20° (Figure 1, #1), rolling onto the green at a repeatable velocity of 6.00 feet per second. The distance travelled by the ball in feet is the 'speed' of the putting green. Six distances are measured; three in each of two opposite directions, these readings should be averaged on a flat section of the putting green. The three balls in each direction must be within 8 inches of each other (Figure 1, #3) for validation of the test. For consistency purposes subsequent Stimpmeter reading should be taken at the same green location each time a measurement is recorded.

When we averaged three greens with a total of 18 ball rolls; the final overall green speed on Friday afternoon was calculated at 10 feet 2 inches.

The Stimpmeter can be an important tool and if used regularly at Windmill Ridge, the possibilities for improved playing conditions are substantial. Green speeds for individual golf courses are a decision best left to highly skilled golf course superintendents and depend on many factors (e.g. Slope, Contours, Green Size, Grasses, Weather, Budgets, etc.). It should also be noted that Stimpmeter Readings on American golf courses generally range from 7 feet to 12 feet. Experience shows that trying to keep the speed above 10 feet on a consistent basis during summer stress periods usually causes difficult-to-manage turf problems and is not recommended.

Height of Cut, Speed and pace of Greens (continued)

United States Golf Association Green Speed Chart			
<i>Regular Daily Play</i>		<i>Championship Play</i>	
Fast	8 feet 6 Inches	Fast	10 feet 6 Inches
Medium Fast	7 Feet 6 Inches	Medium Fast	9 Feet 6 Inches
Medium	6 Feet 6 Inches	Medium	8 Feet 6 Inches
Medium Slow	5 Feet 6 Inches	Medium Slow	7 Feet 6 Inches
Slow	4 Feet 6 Inches	Slow	6 Feet 6 Inches

Table 1 USGA Stimpmeter green speed chart

The speed readings we took at Windmill Ridge on November 16th are classified by the USGA as exceeding fast for regular play and between Medium Fast and Fast for championship play. As a comparison, Augusta National normally is prepared to roll 12 to 12.5 feet during the Master’s Tournament.

The Stimpmeter’s real intended use was to measure consistency, this is the tools real value in that it can compare pace and speed from green-to-green. Once a player can establish a green speed and pace on the practice green the player can replicate that stroke on the course from green-to-green. Whether medium or fast, surveys show golfers are more concerned with consistent speed and pace rather than overall speed. Additionally, data shows that the average play cannot distinguish a six inch difference from green-to-green.

Aerification

The results from aerification are evident in Photo 2.



Photo 2 Aerification hole yields excellent root growth

Aerification is perhaps the single best cultural practice for golf greens at Windmill Ridge. The red arrow in Photo 2 indicates increased rooting depth where an aerification tine penetrated well into the root-zone. A five inch root structure is considered good for this time of year after a particularly hot summer.

Fairway Weed Control

Due to the application of herbicides and several frosts knotweed and a large population of clover has been controlled. An additional application of Glyphosate (Round Up[®]) and Proflam (Proflam[®]) should be applied late February – early March to control any grassy and surviving broadleaf weeds.

Meeting with Justin Beck

From 11:00 am until 3:00 pm on November 15th I spent time with Justin Beck, on course. We discussed many programs and unique situations pertaining to the management and maintenance of the Windmill Ridge Golf Course.

Collection of Green Root-Zone Samples

Assistant Easley collected root-zone samples for laboratory tests; the results will be forthcoming during December. I will file a report comparing previous green root-zone samples after analysis of results.

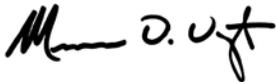
Conclusion

I was very pleased to observe excellent conditions on greens. A good population of bentgrass and an improved root density were also noticed. Depth of rooting remains less than ideal, however most new root growth will occur in the spring. A plan to increase venting and perhaps a heavy aerification will be scheduled depending on rooting conditions, weather and tournament functions in March and April of 2013.

My next visit will concentrate on small winter projects, final winterization of turf areas, drafting nutrition and spray programs for 2013 and an evaluation of maintenance practices for the coming 2013 season.

Any questions or comments, please feel free to contact me at your convenience, email mvogt@mcmahongroup.com or cell number (636) 448-0699.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Michael D. Vogt". The signature is stylized with a large initial "M" and a long, sweeping underline.

Michael D. Vogt, CGCS, CGIA