

# The Top 10 Changes in Golf Course Management in the past 25 Years

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*Michigan State University*

# The question?

Please rank the top 10 changes that have improved the game of golf at your facility(s)\* within the past 25 years.

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Participants had 30 categories to choose from and were asked to make comments if they so wished. 300 individuals made comments about their choices or choices they felt were missing on the survey.



# Survey Results

# **The Top 10 Changes in Golf Course Management in the past 25 Years**

10. Plant Breeding/New Cultivars
9. Instant Communication
8. Wetting Agent Advancements
7. Green Mower Improvements
6. Green Speed Management

# The Top 10 Changes in Golf Course Management in the past 25 Years

5. Sandtopdressing Equipment & Knowledge of Rates & Timing.
4. Aerification Improvements
- 3. Lightweight Green Rolling**
2. Improvements in Knowledge & Use of PGR's
1. Irrigation Technology

# Rolling

- “From May until October each green should be rolled **daily with a light roller**”  
**W.J. Travis, 1901. Practical Golf**



*Mowing*



“there are greens on which the **rabbits** are the chief, and almost the only, greenkeepers. The **rabbits crop the grass short and produce an admirable quality of springy turf**. I do not suppose any other greens are kept up to an equal degree of excellence with so little expense in wages of greenkeepers as these, and all because the **rabbits do so much of the work, without payment**”

[Hutchinson, 1906].

# Green Rolling 1928-1990



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Dr. Nikolai,

**You seem to have done quite a bit of research regarding rollers and dollar spot. Have you or are you aware of anyone who is looking into rolling and moss control? As a golf course superintendent I have seen over the past few years with aggressive rolling practices (daily) that my silvery thread moss populations on my *Poa annua* putting greens has been on the decline.** I have prepared a blog about my theories here:

**<http://penderharbourgolf.blogspot.com/2011/12/another-look-at-moss-on-putting-greens.html>** if you are interested.

I think that it would be beneficial for some research institution to conduct studies to see if rolling does in fact reduce moss populations on putting greens and if so how often and at what times of the year are most effective.

The reason I have sent this to you is that you are the Dr. Greenspeed!

Thanks for your time,

--

Jason Haines, Superintendent,  
Pender Harbour Golf Club

Hey Thom,

Thanks for showing interest. You can quote me all you want.

I think that the moss is being suppressed from the roller due to wear and not so much increased turf density. The course in the first picture has much more dense turf than me and about 200x more moss!

I recently sprayed my greens for moss in the spring so there is really nothing to observe on my greens sadly. Even before I sprayed my greens I was noticing a decline in the moss and this other course with younger putting greens had significantly more moss.

**I have *Poa annua* greens as does the course in the first picture of my blog. I roll daily from April-October and cut every other day. The last 2 years I have used an old Woodbay Greensiron 3000. I just purchased a brand new Truturf roller for next season.**

The course in the first picture doesn't roll regularly and when he does he uses a pull behind heavyweight roller. I don't think that his rolling has any effect on the moss. I also think that my rolling techniques might have some effect but potentially not the greatest effect that it could.

I think it would be neat to compare lightweight vs heavyweight and on different frequencies. I will talk to the superintendent there to see how often he cuts his clean up cuts on his greens. He uses a toro 3100 triplex to cut them. I don't have the numbers on what kind of ground pressure this unit will produce on the tires while the cutting units are on the ground. I know that my roller has about 3.5-4psi and my old roller had about 4-5 psi.

I went back to the mossy course yesterday to check out some of my traffic patter theories and in almost every case they were correct. It is really neat to see such a large moss population and such a clear and defined infestation. I plan on going back to the course to take pics of all the greens comparing the mossy areas to traffic patterns but that will probably have to wait until next week. It really helps that the moss has been sprayed with Kocide and is a nice dark black colour.

Anyways I'll send you a link to my pictures when I get them up on the net some time next week.

Thanks again,

Jason Haines,  
Superintendent,  
Pender Harbour Golf Club  
604-989-0023







I have rolled daily for two years and have only seen positive results. Healthier better quality putting surfaces. Less labor and wear and tear on my greens mower and less moss and dollar spot.

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A person wearing a dark jacket, a cap, and large red earplugs is operating a red and yellow roller on a golf green. The roller has two large black tires and a yellow frame. The person is looking down at the machine. In the background, there is a vast green golf course under a cloudy sky. A red flag is visible on the horizon.

**6. HOC can be raised and green speeds retained resulting in an increase in wear tolerance and a decrease in brown patch and anthracnose.**

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**1. Increased customer satisfaction**



# Season Average Green Speed Gain Day Rolled



	2002	2003
Check .125"	-----	-----
Double cut ( <b>daily</b> )	+11"	+10"
True Surface	+13"	+14"
Smithco	+15"	+16"
Salsco	+16"	+15"
Speed Roller	+20"	+20"
True Turf	+16"	+17"

# Season Average drop in Green Speed Day after Rolling



Check .125"

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Double cut (**daily**)

**-2**

**+1**

True Surface

**-11**

**-6**

Smithco

**-10**

**-6**

Salsco

**-10**

**-6**

Speed Roller

**-13**

**-11**

True Turf

**-13**

**-8**

Happy 25th  
Anniversary



# Frequency & Weight

- “Frequent rolling with **light rollers, 3’ or so in width, and weighing a hundredweight to a hundredweight and a half** is undoubtedly beneficial, but the excessive use of the heavy roller used to be one of the **commonest faults in green keeping.**”

H.G. Hutchinson, 1906. *Golf Greens & Greens-Keeping*

**Will History Repeat?**

