



*Island
Aerification*

Sanibel Island

Our greens were in great shape and now our golf course superintendent ruined them by punching holes all over them. Is this aeration all that important?

Aeration is an extremely important maintenance practice. Although it results in a temporary disruption of the green, aeration.....

- improves water penetration into the soil
- reduces soil compaction
- stimulates turfgrass root growth for a healthier plant
- helps control thatch build-up
- improves overall growing conditions.

Aeration frequency required depends on many factors.



Fairways





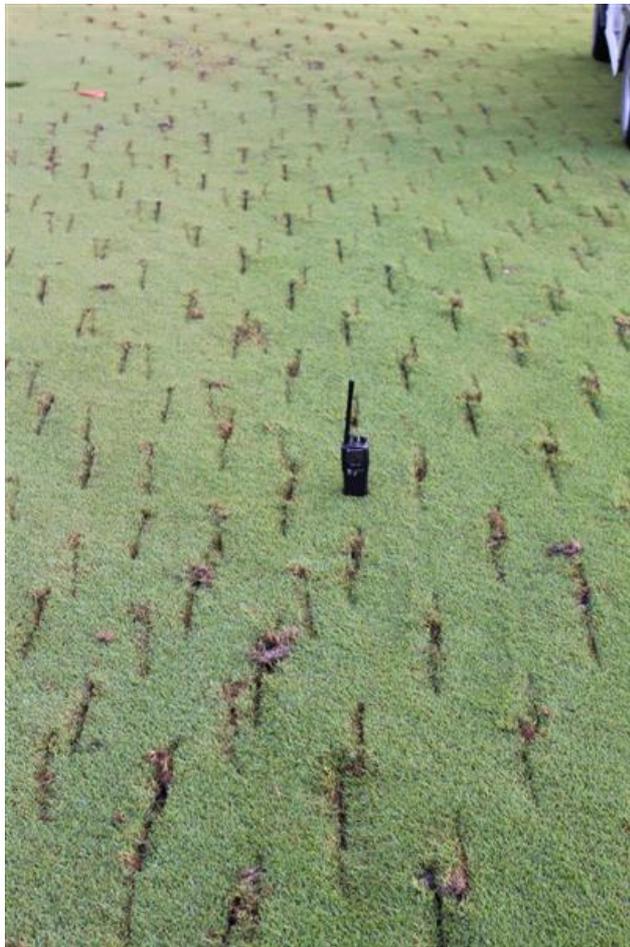
The ultimate in fairway aerification ! What we would like to do!



A coastal island can offer some interesting soil conditions.



Multiple approaches for successful fairway aerification.



Slicing



Hollow Deep Tine aerification





Hollow or Solid Conventional Fairway Aerification





Aerification as a
tool to improve
soil conditions

Incorporating
Amendments
or Fertilizer
Products



Aerify,
Apply,
Incorporate



Topdress fairway areas first, even if just selected areas and then aerify and drag.





Greens



Several approaches that all work!



What are we really trying to do?

How are we effective and economically efficient?



ISTRC

International Sports Turf Research Center Aerification Displacement Chart

Tine Size	1.25" x 1.25" Centers	1.5" x 1.5" Centers	2.0" x 2.0" Centers	2.5" x 2.5" Centers	5" x 5" Centers
1/4" Hollow Tines	3.14%	2.18%	1.23%	0.79%	
3/8" Hollow Tines	7.07%	4.91%	2.76%	1.77%	
1/2" Hollow Tines	12.57%	8.73%	4.91%	3.14%	
5/8" Hollow Tines		13.64%	7.67%	4.91%	
5/8" Hollow Vertidrain					1.23%
3/4" Hollow Tines				7.07%	1.77%
3/4" Hollow Vertidrain					1.77%
1" Hollow Tines					3.14%
1" Hollow Vertidrain					3.14%
7/8" Drill & Fill (7" Ctrs)					1.23%
Graden Verticutter (15 Blades @ 1" Spacings)	<u>1mm Blade</u> 3.93%	<u>2mm Blade</u> 7.87%	<u>3mm Blade</u> 11.81%		

Note: 1/4" Quadtines remove as much material as Regular 1/2" Hollow Tines

3/8" minimum for ease of topdressing fill if replacement of material is required

For double aerification make two passes at approx. 37° (slightly less than 45°) to minimize overlap



Solid



Core



Core

Solid















Before

After



Topdressing Practices

Address problem areas on greens during aerification.



Apply amendments to the greens after cleaning up the cores or with solid aerification. Make the most of the products!





Following last aerification and start to the winter season



*The Sanctuary Golf Club
Green and Grounds Department*