

FLORIDA

TURF DIGEST

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Dr. Pavel Petelewicz's Evaluation of Herbicides for Postemergent Control of Goosegrass in Bermudagrass Turf

ALSO IN THIS ISSUE:

- 70th Annual FTGA Conference
- Conway Little League Cleanup
- Aerification Demystified
- Fragrant Plants for Florida Landscapes

“Why do you **Aerify Greens** when they are in **Great Condition?”**?

By Darren, J. Davis, CGCS

A common question in the golf industry is, “Why do you aerify greens when they are in great condition?”

The quick answer is that weather plays a large role in recovery. Therefore, performing aeration when the weather favors turf growth leads to quicker recovery. Aeration is also stressful on turf, so performing the task when the turf is in “great” condition is also vital.

We are fortunate in Southwest Florida that this coincides with the time of year the majority of the membership has left for the summer. At Olde Florida, we perform various types of aeration throughout the summer; however, we are most aggressive in the early to mid-summer. One reason is the days are the longest. The summer solstice (longest day of the year) was June 21.

We also want to perform aggressive aerification earlier in the summer to avoid cloudy, rainy days. The weather is obviously unpredictable, but in general, as summer in Southwest Florida progresses, we see an increase in cloudy weather. Clouds and rain reduce sunlight, and sunlight is essential to warm season turfgrass recovery. Historically we also have a greater likelihood of severe weather from tropical systems or hurricanes as the summer progresses. The negative impacts from severe storms could delay or cancel scheduled procedures, or at a minimum, slow the turf recovery.

Another question that is sometimes asked in the golf industry is simply, “WHY do you aerate?”

At its most basic, aeration helps keep soil “healthy,” and healthy soil plays a significant role in healthy turfgrass.

Agronomy textbooks teach that “healthy soil” consists of:

- 45% solids
- 25% air
- 25% water
- 5% organic material

In more detail, when done in conjunction with sand topdressing core aeration:

- Reduces compaction
- Dilutes organic matter
- Improves infiltration
- Increases oxygen exchange
- Reduces dry spots

It’s also important to vary the depths of aerification practices to prevent the development of compacted layers in the soil profile. At Olde Florida, we utilize two processes to achieve this: the Drill and Fill and the DryJect aerification methods. Both have advantages, and most years we will contract one of each.

With the **Drill and Fill** method, soil is brought to the surface and the holes are filled with kiln-dried sand. The diameter and length of the bits are customized to each property. At Olde Florida, we utilize a 1" bit, set to a depth



Practice Green—7 Days after Drill and Fill Aerification.



Topdressing—Practice Green.



Core Aeration—Practice Green.

of 10". The top 7–8" of our greens profile is the zone where we have organic buildup from 31 years of growth.

Traditional Core Aeration

The Dryject method has a quicker recovery time than the Drill and Fill, but the depth can be variable depending on soil conditions. Also, no organic material is removed with the DryJect. At the end of summer, after numerous cultivations, we can achieve a sand depth of approximately 7" with the DryJect *Maximus* process.

Our goal has been, and will always remain, to perform the more aggressive cultural practices during one of the five, week-long closures to reduce the impact to our summer players.

Alternate Aeration Methods

When conditions do not favor quick recovery, we also utilize several less aggressive aeration processes. These include: "Ninja tine," "needle tine" and water injection aeration. The Ninja tine is fairly new to the industry, but it is gaining popularity due to its ability to pull a consistent small core, consequently, removing organic matter with minimal disruption. The needle tine and water injection aeration methods do not "pull a core," so no organic material is removed. These practices have no impact on the surface, and most players never know the procedure has been performed.

The Benefits Far Outweigh the Inconvenience

Aerification is often seen as a negative by golfers who are only thinking about their round shortly after the process, but the year-round and long-term benefits of aeration far outweigh the short-term inconvenience. Not only does aeration enable a better year-round playing surface, but it also helps to insure a longer lifespan for the greens. The greens at Olde Florida are more than 30 years old, and we have no plans to rebuild them. The consistent aeration and other cultural practices have saved the club millions of dollars by not requiring renovation.



Drill and Fill Channel.



Drill and Fill—Practice Green.



The Hydroject—8 Green.



Darren J. Davis, CGCS, has been the Golf Course Superintendent at Olde Florida Golf Club in Naples, Florida since September 1992. He is a Past President of the FTGA, the Florida GCSA, the Everglades GCSA and currently serves on the board of the Musser International Turfgrass Foundation. Find him on X (Twitter), Facebook, Instagram and TikTok at @darrendavisgcs.



DryJect—Practice Green.