



USGA COURSE CONSULTING SERVICE

Site Visit Report

The Villages

The Villages, Florida

Visit Date: April 2-4, 2024

Present:

Mitch Leininger, Director of Executive Golf Maintenance
Chris Neff, Consulting Agronomist USGA

Chris Neff | Consulting Agronomist | (843) 247-5488 | cneff@usga.org

USGA GreenSection

Executive Summary

Visiting The Villages for the first time was a pleasure and an eye-opening experience. As a representative of the USGA Green Section, the primary focus of the visit was to evaluate the present conditions of the Executive Golf Courses at The Villages. The Course Consulting Service (CCS) visit spanned three days and was spearheaded by Mitch Leininger, the Director of Executive Golf Maintenance. His pivotal role in keeping management companies focused, managing member expectations, and preparing for future renovations and projects is crucial to maintaining these golf courses. His efforts should be recognized as monumental in accomplishing these tasks. The Villages is a dynamic property with over 150,000 residents who enjoy over 700+ golf holes. The residents enjoy both championship and executive-style courses that fit the needs of many levels of golfers. During this initial visit, Mr. Leininger and I were very efficient with time. We visited 36 golf courses during my three-day visit, and I acquired a proper understanding of the challenges presently facing The Villages.

The winter El Niño weather conditions have not been very kind to golf courses throughout Florida, and some golf courses throughout the Executive Golf Portfolio were not immune to this issue. Wet conditions and cloudy cool temperatures were a recipe for disaster for finely mowed turfgrass, similar to putting greens. These conditions severely affected four main golf courses and created some poorly conditioned putting greens. The golf courses—Bocall, Pelican, Bonita Pass, and Redfish Run—range in age since their original construction, yet they share a common challenge: high organic matter content and the presence of an older variety of bermudagrass known as ‘Tifdwarf’, which is severely mutated. This combination makes it challenging to uphold high-quality putting conditions, especially given the prevailing weather patterns.

Throughout this report, I will highlight issues and topics that Mitch and I discussed during my visit. For almost all of the golf courses I visited, there was a commonality of issues ranging from green conditions to tree management, the need for specific agronomic programs, traffic control, and management company accountability. These issues, if not addressed promptly, could significantly impact the quality of the golf courses.

The following topics discussed during our tour of the golf course are discussed in greater detail throughout the remainder of this report.

- **Putting Greens:** Overall, the putting green condition was good across the property. However, a few sets of greens have suffered significantly due to the challenging weather patterns and the aging infrastructure at various courses. I was particularly pleased with using ‘TifGrand’ and ‘TifEagle’ bermudagrass varieties throughout the golf courses. Mitch and his staff have effectively identified the specific needs of each golf course on the property, which will significantly contribute to the future sustainability of the golf courses.
- **Tree Management:** Tree management is crucial for the aesthetics and playability of a golf course. Considering the extensive acreage at The Villages, the sheer number of native and planted trees is remarkable. Over time, these trees have grown significantly, underscoring the necessity for a formal tree management program to ensure their health and enhance the playability of the golf courses, thereby contributing to optimal turf conditions. Such a program will facilitate consistency and sustainability for years, benefiting the membership.
- **Need for Agronomic Programs for Management Companies:** One of the complexities of managing The Villages is relying on multiple contracted management companies to maintain the golf courses. Achieving consistency across the property poses a monumental task,

requiring a delicate balancing act by Mitch and his staff to ensure accountability. Implementing agronomic programs that contractors must adhere to is crucial for the facility's success.

- **Traffic Control:** With 3.5 million rounds of golf played across the golf courses of The Villages, the necessity for traffic control is apparent. Addressing foot and golf cart traffic requires multiple measures to prevent or mitigate damage. Various strategies, including selecting specific turf varieties, implementing additional inputs such as fertility, managing trees, and optimizing tee space utilization, offer options for controlling the traffic volume on a golf course.
- **Landscape Improvements:** I was highly impressed with the landscape enhancements made on the golf courses at The Villages. The materials used create a harmonious blend of different landscape elements, including flowering and non-flowering plants and repurposed landscape rock from the property. These improvements not only benefit course maintenance but also significantly enhance the aesthetics for the membership, enhancing their enjoyment of the golf courses.

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Putting Greens

Observations

1. We reviewed putting green profiles of both newly renovated and older-built infrastructure.



Figure 1: Profile of a new putting green on Belmont.



Figure 2: Profile of an older putting green with over 6" of organic matter layer on Pimlico.

2. Implementing 'TifGrand' and 'TifEagle' bermudagrass varieties for putting greens across the Executive Golf Courses has been successful.
 - This is being undertaken during the renovation or repair of golf courses to address turf loss, specifically on putting greens.
3. The subpar conditions of putting greens across multiple golf courses have been significantly influenced by several factors, including adverse El Niño weather patterns, the aging of the putting greens, and the utilization of the older bermudagrass variety known as 'Tifdwarf'.



Figure 3: Profile from Bonita Pass showing a 3" thick organic matter layer.



Figure 4: Putting green from Bonita Pass.

4. The greens on the older golf course have reached the end of their life cycle and require renovation.
5. Absence of a nursery putting green for repairing turf damage on the putting greens.

Recommendations

1. Implement a deep-tine aeration program for the older golf courses slated for future renovation.
 - This program will help maintain the greens' drainage through the organic matter layer until they are scheduled for renovation.
2. Continue implementing more 'TifGrand' and 'TifEagle' bermudagrass varieties throughout the Executive Golf Courses.
 - Mitch applies sound decision-making when deciding which course gets a specific turfgrass planted on the playing surfaces.
 - His plan going forward was reviewed with me during my visit and should continue to remain on schedule.
 - These grasses are long-term decisions for the sustainability of the golf courses.
3. Continue to "restore and refresh" the golf courses on a manageable schedule.

- Continue communicating the golf courses and their timeline for future closures and renovations with the membership.
4. **Build strategically located nursery turf nurseries that can provide turf when damage to putting greens occurs.**

Tree Management

Observations

1. **Tree roots compete with turf for valuable soil moisture and nutrients. Unfortunately, trees always win this battle and can cause significant turf decline.**



Figure 5: Damage to turf in the rough from encroaching roots.



Figure 6: Tree along the rough line causing the root and shade damage.

2. There are numerous large trees throughout the properties of the Executive Golf Portfolio.

- Many of these trees are close to the fairway edges and tees. Their canopies block sunlight from reaching the bermudagrass.
- As a general rule, bermudagrass does best when it receives eight hours of sunlight. This is very important for areas that routinely come into play and must recover from traffic. The inability to receive sunlight compromises recovery potential, increases the susceptibility to disease infection, and delays spring green-up.

3. Many trees, specifically oaks, must be properly pruned and maintained throughout their existence.



Figure 7: Poorly maintained tree causing severe shade issues.



Figure 8: Poor conditions on the putting green from the tree.

Recommendations

1. **Root prune along the fairway and rough edges to cut back tree roots, encroaching and competing with the turf for vital nutrients and water. [Getting To The Root Of The Issue \(usga.org\)](https://www.usga.org).**
 - The Imants RootPruner is the most effective tool for completing this service.
 - This can either be contracted out or purchased throughout all the properties.

2. **Remove trees limiting turfgrass growth in crucial playing areas.**
3. **Prune and maintain the beautiful oak trees throughout all the properties; this should be done annually.**
 - Annual funds should be allocated for regular maintenance of these and other trees throughout all the properties on the executive golf portfolio.

Need for Agronomic Programs for Management Companies

Observations

1. **The inconsistency of golf course conditions from property to property suggests disparities in agronomic programs carried out across companies and courses, even under the same management company contract.**
2. **There needs to be more clarity in holding contracted companies accountable for subpar golf course conditions throughout the duration of their contract.**

Recommendations

1. **Identify specific agronomic plans in new contracts for management companies in the future.**
 - These contracts should outline specifications for fertility, pre-emergent weed programs, and cultural practices.
 - I have reviewed the programs that Mitch and his staff formalized, and they are well-structured and feasible for contractors to accomplish.
2. **Implement a "Scorecard" system that is easily achievable, reviewable, and actionable.**
 - The scorecard has been discussed, and we are currently reviewing options and criteria for scoring.

Traffic Management

Observations

1. **Due to the excessive rounds of golf played at The Villages, the foot traffic on and off most tee and green complexes creates significant turf damage during the fall, winter, and spring seasons.**



Figure 9: Walk up to tee complex that has no turf coverage.

2. **During the slow turf-growing season, winter cart traffic areas create turf loss around tees, fairway entry points, funnel points alongside fairway bunkers, exit to paths, and putting greens.**
 - This is mainly an issue during periods of cool weather such as fall, winter, and spring, making it a non-issue at many courses during the summer growing season.
3. **The installation of ‘TifTuf’ and ‘TifGrand’ bermudagrass varieties in renovation is being completed to “refresh” golf courses.**
4. **Damaged turf areas are present on tee surfaces due to improper rotation techniques.**

Recommendations

1. **Address underlying stresses in high-traffic areas to improve turf health so that it is better suited to handle traffic stress.**
 - Annual tree canopy and root pruning should be performed in these areas.

2. Continue utilizing new bermudagrass genetics in high-traffic areas.

- 'TifTuf' and 'TifGrand' are newer hybrid bermudagrass varieties that can support higher traffic and drought stress before showing visual signs of decline.

3. Research and install the [Traqmatz](#)[®] system in these high-traffic areas. This product is made of 50% rubber, applied to the turf as a mat, and protects the crown of the turfgrass plant from cart and foot traffic.

- This product can be applied anytime during the year and is a non-slip surface, as the grass is starting to grow through it, for the safety of the membership.



Figure 10: Traqmatz material was installed during the winter which protected the turf from excess traffic.

4. **Additional inputs are required to mitigate compaction and apply supplemental fertility in areas prone to foot and cart traffic, especially in entry and exit zones.**
 - Core aeration during the summer and growing season will help alleviate compaction and improve turf health. Solid-tine aeration is another option, but only during the golfing season, and it is not a replacement for core aeration.
 - Supplemental fertility applications during favorable turf growth periods will help speed recovery. Soluble nitrogen sources such as urea and ammonium sulfate can accomplish this.
5. **Experiment with new traffic control techniques that can help alleviate stress due to traffic.**



Figures 11 and 12: Examples of traffic control without using ropes and stakes.

6. **Utilize the entire tee surface to provide good turf conditions daily.**
 - A daily rotation will guide this plan and be successful. [Get Creative With Winter Tee Marker Placement \(usga.org\)](https://www.usga.org/tee-marker-placement).

Landscape Improvements

Observations

1. Reviewing newly renovated golf courses or closed courses for a shorter period, I observed new landscape plantings that accent the properties well and are viewed as maintainable landscapes.



Figure 12: New landscape plantings accent the properties well.



Figure 13: Continue establishing butterfly gardens through all the golf courses.

2. I viewed many versions of butterfly gardens on each property.

Recommendations

1. Continue this significant improvement throughout all the golf courses.
2. Experiment with different types of landscape materials.
3. Research the possibility of “Beekeeping” on the property. [Five Tips For Beekeeping Success \(usga.org\)](https://www.usga.org/beekeeping).

Summary

I had the pleasure of conducting a USGA Course Consulting Service visit for The Villages, and I am looking forward to attending the upcoming Board Meeting on June 3rd to provide a follow-up after this report. It's exciting to anticipate the repair and restoration of the golf courses that were not in optimal condition, with the goal of seeing them restored to excellent condition.

Looking ahead to the future of The Villages, the USGA Green Section is keen on being a strategic partner in the success of the golf courses. We believe that by working together, we can enhance the agronomic plans for the golf courses and meet the membership's expectations more effectively. To support this collaboration, the USGA can provide various forms of assistance, including serving as an unbiased partner during Board or Town Hall meetings, implementing a scorecard system to evaluate management contractors, assisting in developing agronomic programs, and conducting USGA Workshops to educate management companies' staff on new technology and techniques.

With 11 consulting agronomists located across the country, the USGA Green Section is well-equipped to provide top-notch golf course consulting services. Our team's knowledge and experience, combined with our track record of working with multi-course facilities and government-owned facilities dealing with management companies, position us as leaders in the field.

If you have any questions regarding this report or any other issues, please don't hesitate to contact me for assistance. I'm here to support The Villages in achieving its goals and ensuring the continued success of its golf courses.

Respectfully submitted,



Chris Neff, Consulting Agronomist
USGA Green Section

Distribution:

Mitch Leininger, Director of Executive Golf Maintenance

USGA Green Section

Turfgrass and Environmental Research

The [USGA Green Section](#) appreciates your support of the Course Consulting Service. First started in 1953, the Course Consulting Service provides unbiased assessments of golf facilities to optimize resources and reduce the consumption of critical resources. The proceeds from the Course Consulting Service directly support the USGA's annual \$2 million investment in [turfgrass and environmental research](#), which provides an estimated [\\$2 billion annual benefit to the U.S. golf industry](#). Follow the QR Code for more information.



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