



COURSE CONSULTING SERVICE

# Onsite Visit Report

## **Jekyll Island Golf Club**

Jekyll Island, Georgia

Visit Date: Augusta 22, 2022

Present:

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## **United States Golf Association**

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The USGA Green Section develops and disseminates sustainable management practices that produce better playing conditions for better golf.

# Executive Summary

Thank you for the opportunity to visit the Jekyll Island Golf Club in Jekyll Island, Georgia. The facility consists of 63 holes of golf, covering close to 400 acres. At the time of my visit, the golf courses were in varying levels of conditioning due to the unavailability of staff. Currently, the golf courses are being maintained with roughly 15 staff members, including Mr. Saunders, a superintendent, and an assistant superintendent for all 63 holes. The purpose of my visit was to evaluate current golf course conditions and agronomic programs. Many things were discussed during my time on property and this report will focus on the following items.

- **Putting Greens/Collars:** The putting greens were in various conditions at the time of my visit. Jekyll Island Golf Club consists of three 18-hole golf courses and one 9-hole golf course. Pine Lakes putting greens are 'TifEagle' ultradwarf bermudagrass while the rest of the putting greens consist of 'Tifdwarf' and off-type, less desirable bermudagrasses. Greens on all three golf courses were constructed at different times over the last 50 to 60 years with Pine Lakes being the most recent construction, 22 years ago. This report will detail the current state of the putting greens and opportunities for improvement of both the putting greens and collars.
- **Bunkers:** At the time of my visit, the bunkers were in average to poor condition due to a lack of attention to detail from the impact of short staffing levels. The number of staff currently employed at Jekyll Island Golf Club is inadequate to maintain the bunkers and many other details around the property. While bunkers are a hazard, they do need to be maintained on a regular basis, including edging, mowing, trimming, and raking, as well as the removal of any weeds. Furthermore, the sand depths need to be checked and maintained for safe, playable bunkers. I am of the opinion that there is more than enough square footage of bunkers on the property and a reduction of 25 to 35% of the bunker square footage would improve the flow of the golf courses, improve the pace of play and eliminate future and current labor inputs.
- **Roughs and Waste Areas:** There is ample maintained turfgrass at Jekyll Island Golf Club. Maintained rough requires a lot of inputs including fertilizer, irrigation, mowing, cultural practices, pesticides, and above all, time. Reducing the area of maintained rough and replacing it with sandy waste areas that would be natural in your setting would greatly reduce the time and money spent on these maintained turfgrass areas. This type of project needs to be carefully done to ensure that the aesthetics and feel of the golf course as well as the design and strategy are maintained.
- **Tree Management:** Trees compete with turfgrasses for sunlight, nutrients, and water. Trees to the south and east of turfgrass areas, especially putting greens, are very problematic. Trees need to be pruned or removed if they are competing with putting greens for shade, nutrients, and water. This report will highlight opportunities for improvement as well as issues that are currently being caused by tree competition.
- **Infrastructure:** Overall, much of the property is between 22 and 60 years old as it relates to infrastructure. Infrastructure includes drainage systems, irrigation systems, putting greens, and bunkers. Luckily, Jekyll Island Golf Club has developed a master plan to renovate both infrastructure and the golf courses. Based on annual rounds between 64,000 and 68,000 rounds per year, 63 golf holes are not needed to meet this demand. There are ample opportunities to improve infrastructure and reduce labor while improving the overall golf experience at Jekyll Island Golf Club. This report will detail specific ways that infrastructure

can be upgraded while improving the golf experience and converting some of the golf course back to the native landscape.

- **Labor/Budget:** Currently, Jekyll Island Golf Club is operating at a budget and labor shortfall for 63 holes and a practice facility. As previously mentioned, the staff size is much too small to be able to adequately maintain 400 acres and 63 holes of golf. The staff is barely getting by with keeping the property mowed but many details, applications, and fine-tuning of the property are being missed. The club should explore ways to increase staff size and use contract labor to accommodate staffing level shortfalls.

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# Putting Greens/Collars

## Observations

During the visit, I was able to take a look at putting greens and collars across all four golf courses on the property. After examining turfgrass quality, turfgrass density, and soil structure as well as infrastructure including irrigation, it became clear that most of the putting greens at Jekyll Island Golf Club are in need of renovation. The putting greens have shrunk in size over time due to collar encroachment as evident by the distance between sprinkler heads and the lack of unique shape on the putting greens across the property.

Currently on 36 holes at Jekyll Island Golf Club, the putting greens include 'Tifdwarf' bermudagrass, while the 18 holes at Pine Lakes were updated 22 years ago with modern 'TifEagle' bermudagrass and the 9 holes at Great Dunes were renovated through the no-till method in 2018 to 'TifEagle'. It is evident by looking at the putting greens at Pine Lakes that this turfgrass is providing superior playing conditions and putting green performance. Unfortunately, there is some contamination from the previous putting greens at Great Dunes, leftover from the no-till aeration. I would greatly encourage removing all organic matter and replacing with new greens mix during a renovation or completely starting over to reduce the risk of contamination in putting greens.

Upon evaluation of the soils on all three golf courses, each golf course has extensive organic matter accumulation due to the lack of aeration and management over the last 25 to 60 years. Despite these challenges, the putting greens were in average to above average condition where there was no shade competition.



*Figure 1: Vertical soil profile 'TifEagle' putting green from Pine Lakes. Organic matter has accumulated over the sand growing medium from the original construction 22 years ago.*



*Figure 2: Excessive organic matter accumulation in old 'TifDwarf' bermudagrass putting green at Jekyll Island Golf Club.*



*Figure 3: Good rooting and turfgrass health in non-shaded areas.*

## Recommendations

1. Evaluate opportunities to remove or prune trees on the southern and eastern sides of putting greens. Trees compete with putting greens for sunlight, water, and nutrients and negatively impact putting green health and performance.
2. Increase core aeration, vertical mowing, and sand topdressing. At least 20% of the profile should be disrupted with core aeration and sand topdressing to backfill the aeration holes every year. Vertical mowing, and sand topdressing need to be done at least every other week during the growing season.



3. Evaluate opportunities to completely renovate all putting surfaces and reduce the amount of putting greens at Jekyll Island Golf Club. I would recommend following [USGA Putting Green Construction Resources](#) and using 10 foot spacing for drainage and variable depth greens mix.
4. 36 to 45 holes will likely be more than adequate to accommodate the demand for golf at Jekyll Island Golf Club. Putting greens may need to be moved if shade remediation is not possible, but all putting greens should be renovated in the next three to eight years depending on the age of the putting surfaces, to include new [USGA specified putting greens](#) with 'TifEagle' ultradwarf bermudagrass. Despite the age and lack of management on Pine Lakes' putting greens, it was still very impressive to see the overall condition, turfgrass quality, and lack of off-types on those putting greens.

## Bunkers

### Observations

The bunkers were in various stages of maintenance at the time of my visit. Many of the bunkers contained weeds and were not trimmed or edged due to a lack of staff. It cannot be overstated how inadequate the staffing levels currently are for 63 holes of golf and 400 acres of maintained turfgrass. Overall, bunkers provide important design and strategy elements to a golf course as well as provide a clear aesthetic and theme throughout the property. Currently, the bunkers at Jekyll Island Golf Club are nondescript and are often very large. Continue to work with your architect through the master plan to establish an identity for both the aesthetic and strategy of the bunkers on the property. Each golf course should have a unique feel and design for its bunkers, but like any renovation project, staffing levels, maintenance, and the availability of both time and labor should be considered in both design and size of the bunkers.



*Figure 4: Bunker at Jekyll Island Golf Club.*

## Recommendations

1. Contract bunker edging and maintenance if possible until staff levels can increase. If there is not a contract option, increase staff levels to spend more time edging and mowing around bunkers as well as removing weeds from said bunkers. If possible, spend more time raking and maintaining bunkers to prevent weed encroachment.
2. Plan to renovate all bunkers as part of the master plan including bunkers on Pine Lakes and the new combination course of Great Dunes and the front 9 of Oleander. Each golf course should easily be able to reduce bunker square footage by 25 to 35% and have its own unique bunker aesthetic. I recommend exploring the artificial sod stack bunker aesthetic used at Kiawah Island Club's Cassique Course or Secession Golf Club as a potential opportunity to have a unique bunker shape, size, and aesthetic for one of your golf courses while reducing labor.

## Roughs and Waste Areas

### Observations

There are many acres of maintained rough at the Jekyll Island Golf Club. Roughs were in varied condition with the worst conditions along cart path and under trees, which is to be expected. The irrigation systems currently on the property are often inadequate to water all the roughs. Overall, the roughs that are in full sunlight and out-of-the-way of excessive cart traffic are in great condition. Roughs

often take a fair amount of inputs including irrigation, fertilizer, pesticides, and mowing. This labor can be reduced with the use of low-maintenance native areas or waste areas. Reducing the amount of acreage of maintained turfgrass roughs should be a primary goal of any future renovation plans.

## Recommendations

1. Experiment with converting turfgrass areas to low-maintenance sandy waste areas. These areas should be consulted upon by your golf course architect to ensure that they accommodate the design and strategy of the golf course. These native sandy waste areas may be similar to a property like Pinehurst No. 2 but should be unique to the Jekyll Island Golf Club and bring a special aesthetic, unique to the property.
2. There is a great opportunity to transform all of the teeing ground surrounds on the property into sandy waste areas. As the native soils are a sandy loam, this type of project could reduce maintained acreage of roughs, that are rarely used, into native sandscape waste areas and greatly reduce both labor and inputs. The Golf Club at Spring Island near Okatie, South Carolina has done a wonderful job of converting all of their tee surrounds to sandy waste areas and only maintaining turfgrass on their tees and direct surrounds. This look will allow for golf carts to drive in the sandy waste areas directly up to their teeing areas and provide a Lowcountry aesthetic compatible with the natural landscape of Jekyll Island Golf Club. Not only would this strategy transform the property and feel of the golf course, but it would also reduce inputs, increase the pace of play, and eliminate the need for certain tree management. Natural grasses, native grasses, and plant materials should sporadically be grown throughout these waste areas and planted in such a way to reduce future maintenance.

## Tree Management

### Observations

Trees are an important part of the golf course and landscape of Jekyll Island Golf Club. The Lowcountry combination of live oaks draped in Spanish moss with pine trees is a wonderful setting for golf in the Lowcountry. While trees are critical for both design and feel of the property, they often compete with turfgrasses for sunlight, water, and nutrients. It is often said that you can have good trees or good turfgrass, but I believe that it is important to have the right trees in the right place and balance tree health with turfgrass health. While trees do dominate much of the landscape at Jekyll Island Golf Club, they must be balanced, especially around putting greens. As I alluded to earlier, trees must be managed to provide adequate sunlight on your putting greens in the next few months. Otherwise, certain putting greens, including Pine Lakes Holes 3, 13, and 14 will continue to struggle due to tree competition.





*Figure 5: Trees are a beautiful aspect of Jekyll Island and need to continue to be managed. Trees compete with turfgrasses for sunlight, water and nutrients and have a severely negative impact on putting green health.*



*Figure 6: Trees on the south and east of turfgrass areas greatly reduce turfgrass health. You can have good trees or good turfgrass.*





*Figure 7: Trees not only compete with turfgrasses but overgrown trees impede lines of play and can increase the difficulty of the golf course.*

## Recommendations

1. Begin to prune and remove trees on the southern and eastern sides of putting greens, including Pine Lake Holes 3, 13, and 14 to provide adequate sunlight to these putting greens. Putting green decline is evident on these golf holes which reduces the overall golf experience.
2. Reduce overgrown native areas including palm trees, shrubs, and volunteer trees around the property to widen fairways based on design and strategy. Many of these areas have overgrown and can only be maintained in the winter months based on staff size. Continue to work with your golf course architect to highlight areas that need to be removed and returned to sandy waste areas or maintained turfgrass.

## Infrastructure and Master Plan

### Observations

Much of the irrigation and drainage systems at Jekyll Island Golf Club are very old and no longer functioning properly. The satellites that control the irrigation system are very out of date and no longer functioning properly. The sprinkler heads and controllers are no longer in production and need to be replaced with modern equipment. A modern irrigation system will improve efficiency and coverage as well as turfgrass quality.

On the same note, the drainage systems on Oleander are either nonexistent or no longer functioning properly. Drainage ditches are present throughout the property but have overgrown, reducing their functionality.

A master plan has been developed for the entire property to renovate both the Pine Lakes Courses as well as Great Dunes and the front 9 of Oleander with a new practice facility and potential renovation of the Indian Mound Golf Course. This master plan and potential renovation are long-overdue throughout the property at Jekyll Island Golf Club. Currently, the property is executing between 64,000 and 68,000 rounds per year which do not necessitate 63 holes of golf. Golf has become a game of practice, and time is precious for many golfers. The idea of improved practice facilities and a short course or par-3 course would meet the current trends in the game of golf. These types of facilities maximize your resources and property while being one of the most profitable parts of any golf facility.



*Figure 8: Putting greens have shrunk severely over time as seen in the distance between 'greenside' irrigation heads and the edge of greens.*





*Figure 9: Aging irrigation systems are failing at Jekyll Island. Irrigation is the lifeblood of any golf course.*

## Recommendations

1. Continue the plan to replace irrigation satellite boxes and control systems. These upgrades will improve current functionality and can be used during and after a potential renovation.
2. Hire a contractor to remove all plant material from and around drainage ditches around the property. Some of the piping systems between lakes are no longer functioning. That infrastructure also needs to be addressed during a potential renovation project.
3. Explore opportunities for various bunker construction methods prior to renovation. I would recommend exploring opportunities to use either the Capillary Concrete™ porous aggregate bunker liner system or the Better Billy Bunker™ system. Both of these products are very similar and provide an excellent base for any bunker project. I would also explore artificial sod stack faces as well as different bunker sands to help guide your decision for bunker construction methods during a potential renovation.

## Labor and Budget

### Observations

At the time of my visit, the golf course maintenance team included a director, a superintendent, an assistant superintendent, an equipment manager, and 11 staff members. As I said before in this report, that is simply not enough people to maintain 400 acres and 63 holes of golf. The maintenance team is currently operating with a budget between 1.8 and \$2 million. While this budget may be adequate for 18 or 36 holes of golf, it is entirely inadequate for 63 holes of golf based on today's cost of goods and services, as well as the increasing cost of labor. Reducing the overall size and scope of the facility will

improve the golfer experience and reduce the need for increased staff and labor budgets while still serving and meeting the demand for golf rounds at Jekyll Island Golf Club.

## Recommendations

1. Explore using contract services to hire a seasonal workforce to supplement your current staffing sizes. Details are being missed including weed eating, edging, bunker maintenance, etc.
2. Increase the golf course maintenance budget to allow for more full-time staff including an assistant superintendent on each of the golf courses.
3. Consider labor demands as well as the maintenance budget during any potential renovation work at Jekyll Island Golf Club. While the demand for golf at Jekyll Island Golf Club will likely stay the same in the coming years, the way it has stayed the same over the last six to seven years, the availability of labor as well as the cost of labor, goods, and services will likely continue to increase. Any renovation work should certainly have labor as well as budget in mind to prevent future lack of maintenance and to protect the state's investment in the property.

## Summary

Thank you for the opportunity to visit Jekyll Island Golf Club. It was my pleasure to tour the facility and inspect the current golf course conditions and agronomic programs. I truly believe that the staff is doing a good job of maintaining the golf course within their current budget and staff size. The recent increase in the cost of goods and services as well as supply chain issues and decreased labor availability has had a severe impact on the operation of Jekyll Island Golf Club. This is consistent with almost every property I visit, and these considerations should be included in any potential golf course renovation. I firmly believe that the master plan is well-thought-out and hopefully will include a 25 to 35% reduction in bunker square footage as well as a 25 to 30% reduction in maintained turfgrass area. Opportunities abound at Jekyll Island Golf Club and I greatly appreciate you involving the USGA in your plans. I am available by phone or email to answer any questions pertaining to this report.

Respectfully submitted,

A handwritten signature in cursive script that reads "Jordan Booth". The signature is written in dark ink on a white background.

Jordan Booth, Ph.D.  
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Distribution:

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## Additional Considerations

The USGA appreciates your support of the Course Consulting Service. Please visit the [Course Care](https://www.usga.org/course-care) section of [usga.org](https://www.usga.org) to access regional updates that detail agronomist observations across the region. Also, please visit the [Water Resource Center](https://www.usga.org/water-resource-center) to learn about golf's use of water and how your facility can help conserve and protect our most important natural resource.

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As a not-for-profit agency that is free from commercial connections, the USGA Course Consulting Service is dedicated to providing impartial, expert guidance on decisions that can affect the playing quality, operational efficiency and sustainability of your course.

First started in 1953, the USGA Course Consulting Service permits individual facilities to reap the benefits of on-site visits by highly skilled USGA agronomists located in Green Section offices throughout the country.



For questions regarding this report or any other aspect of the USGA Course Consulting Service, please do not hesitate to contact our office.

