

# Fly-over country for Osprey and Eagles

Eagle Pines, Hole 12, Par 3.

Target golf, pine straw and sandy waste areas.





Osprey Ridge #3. Par 3. Aim left.

## A Tale of Two Courses

## Bonnet Creek Golf Club

Location: Lake Buena Vista, FL.

Ownership: Walt Disney Company
Courses: Osprey Ridge, 18 holes
(See Page 56); Eagle Pines, 18
holes (See Page 49).

Playing policy: Resort — public
Management: Mike Beaver, Director of Golf and Tennis; Larry
Kamphaus, CGCS, Manager of
Golf Maintenance and Kevin
Prentice, Head Golf Professional.

BY JOEL D. JACKSON, CGCS

It was the best of times, it was the worst of times, it was the age of automation, it was the age of manual labor, it was the epoch of environmentalism, it was the epoch of development, it was the season of Fazio, it was the season of Dye, it was the winter of opening and overseeding, it was the spring of transition, we had everything before us, we had nothing before us, we were going direct to Golf Digest's Top 100, we were going direct the other way...

Paraphrasing the opening of Charles Dickens' classic, A Tale of Two Cities, might be overstating it slightly, but Disney's Bonnet Creek Golf Club, home to the Osprey Ridge and Eagle Pines golf courses, has become a classic in it's own right.

The sweeping boldness of Tom Fazio's Osprey Ridge and the creative innovations of Pete Dye's Eagle Pines side by side offers dramatic contrasts just as the cities of London and Paris did in Dickens' tale.

I often wondered if Pete and Tom overtly planned the contrasts between the two courses with Pete saying, "You take the high road and I'll take the low road and I'll get to opening before ye." The operative word in Osprey Ridge from day one was "Ridge". As Pete cleverly sculpted a low-rolling course on Eagle Pines, he sent all his excess fill north for Tom to construct a network of ridges that separates holes and provides some pretty impressive elevated tees on Osprey Ridge.

But I'm getting ahead of myself. Why build Bonnet Creek at all? The fortunes of Disney golf had ridden quite nicely for twenty years on three Joe Lee-designed courses: Lake Buena Vista, Palm and Magnolia. With the addition of Oak Trail, a Ron Garl 9-hole walking course next to the Magnolia, all the bases seemed cov-

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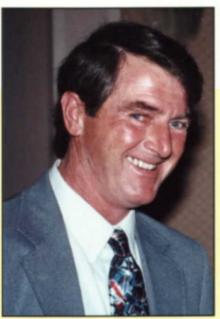
ered. In fact, the 25th anniversary of the annual PGA event, The Disney-Oldsmobile Classic, will be celebrated on the original courses this October.

Each of those courses have had their greens rebuilt to USGA specifications over the past three years. Two important factors became the driving forces in adding to Disney's golf course inventory. First, like many Central Florida courses, Disney was turning away play in the winter. Second, Disney was building more hotels which would mean more guests to accommodate year round. And so it was that the Disney Development Company(DDC) was commissioned to build Bonnet Creek.

its own manmade irrigation lake which is recharged with effluent water...

With environmental protection and enhancement foremost in mind, the project

began. A wildlife study revealed a colony of gopher tortoises in an upland habitat on the Osprey Ridge site. The tortoises were moved to a temporary holding area during construction. Wetland areas were



## Scott Welder

Osprey Ridge Golf Course Superintendent

Originally from: Evansville, Indiana

Family: Wife, Doris. Children: Daughter, Tonya.

Education: Studied architecture at Brevard Junior College. Studied landscaping at

Valencia Community College.

Employment: Walt Disney World, Superintendent since 1988; worked for company since 1971. Previously served as Superintendent of Palm and Lake Buena Vista Courses.

Hobbies/Interests: Fishing, old cars, golf.

Professional affiliations: FTGA; GCSAA; Director, Central Florida GCSA.

Memorable moments: The opening of Bonnet Creek.

Advice: Be a "hands on" person. Hard work does pay off.

Mentors: Larry Kamphaus, a close associate for 24 years and sharer of information and knowledge. Joel Jackson, a true professional golf course superintendent. Pat Hennessey, my fellow superintendent at Bonnet Creek, who showed me that hard work pays off.

**About Osprey Ridge:** The tremendous popularity of the course makes conditioning a challenge. We have a large volume of play and no 1 & 10 tee set up to give us time to work on the first hole unless we're closed. We use a Toro Hydroject aerifier in the winter to help relieve compaction.

roped off just like tournament fairways. Miles of silt fencing was also installed along all wetlands that bordered the construction sites. All storm runoff is contained and filtered by spreader swales, internal drainage, man-made marshes, ponds, and lakes.

All perimeter irrigation is part circle, watering only the golf course. On Eagle Pines, Dye went even further by irrigating only tee tops with small heads and leaving large areas between tee and fairway unirrigated in the ever famous "waste area" concept. We will visit the waste area topic later.

Each course has its own man-made irrigation lake which is recharged with effluent water which makes each course a filter and recharge location for water resource conservation and recycling. All of the other Disney courses have been retrofitted to use effluent water.

The Bonnet Creek irrigation is controlled a by a Rainbird Maxi computer system complete with a weather station to provide on site data to customize the daily watering needs. Each controller in the field has its own preset rain switch to turn off that zone if it should receive rainfall that exceeds the selected amount. The system is not fool proof. If the weather station records sufficient rainfall it shuts down the whole system. After studying the rainfall patterns across the two courses six rain gauges were installed to double check the computer's shutdown commands and to provide data to adjust watering times.

Both architects did an excellent job designing drainage systems that move surface runoff to drain basins quickly. Much of the design credit goes to the on-site Design Associates, Steve Masiak for the Fazio group and Michael O'Connor for Pete Dye. The only thing they couldn't control was the soil content on some of the holes.

Invariably it seems in the construction phase of every project that heavy hard-pan and clay soils find their way to the surface of fairways instead of being buried under mounds. Naturally, during periods of heavy rainfall those areas don't percolate as readily as sandier profiles, thus prolonging the challenge and aggravation to superintendents and golfers everywhere.

Another lesson learned during this project is that USGA spec greens really should have an inner and outer head system. Inner for the the putting surface and outer for the slopes, bunkers, etc. Normally the surrounds of the green will not be as porous as the green's well itself with its special sandy mix and intricate drainage system.

Trying to follow the recommended deep watering techniques can be a problem when watering two radically different areas with one head. This concern is not unique to Bonnet Creek, but one that can be avoided in future projects every-

Landscaping the courses was easy. Look around. What's

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Osprey Ridge #14, par 4. Bunkers and ridges.

## **Osprey Ridge**

already here? Pines. Oaks. Cypress. Bays. Hickories. Maples. Wax myrtles. OK! Plant some more where you need them. Extensive use was also made of low maintenance native grasses like cordgrass and gulf muhly, which has a dynamite pink bloom in the fall.

Bahiagrass was planted in unirrigated roughs and areas that required stabilizing like some of the remote lake banks.

The only other non-native plantings on the grounds are a splash or two of annual beds along the entrance road; a ground-cover bed of jasmine on a steep slope behind the clubhouse; and a small Shillings holly bed for Mickey's nose on the putting green. That's what I said, "Mickey's nose!" The boss in profile. You have to see it to believe it!

Growing in the courses, especially Osprey Ridge, was a challenge just from



Oaks and hickories surround Osprey Ridge # 13.

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an access point of view. The course is a links layout with the ninth and tenth holes the farthest point from the maintenance facility.

The four closest holes 1, 2, 17 and 18 were the last to be completed. Holes 3 though 16 were on the other side of a wetland area. Construction of a permitted wooden bridge to span the wetland was also completed late in the project.

Therefore, equipment and personnel had to be driven or transported several miles around the property on a perimeter canal bank road that put extra wear and tear on new equipment not normally incurred during grow in.

There were haul roads that cut through the Eagle Pines course but they were often impassable due to heavy rains and rutting by construction equipment. A Cushman is no match for a scraper or a dump truck.

And when the project got down to the last four holes it was September and not much time left to sprig before fall weather

could set in. The final holes were sodded wall to wall except the greens surfaces. In doing so, a caravan of sod trucks made their way to Bonnet Creek from every available sod farm. Having said that, no one should be surprised if we came up with some color and texture differences in some of our Tifway 419 areas.

That was in 1991 and since then Tifway 419 has been the point of much discussion about contaminated or mutated turf fields. And now, unfortunately, even Tifdwarf purity has come into question. In fact, the FGCSA and FTGA are now funding DNA research that will hopefully hasten the return of certified turf to Florida. It will not be a quick fix. It is not a good guy v.s. bad guy problem. It has more to do with returning to a turf certification program, and the DNA testing is just one tool to help us get there.

One of the best outcomes of building a golf course is creating new habitat. In the late stages of grow-in aquatic plants like spike rush and bull rush were established along the lake and pond banks to provide cover and habitat for the fish populations that would follow.

It was satisfying to watch small 2 to 3 inch long fry of large mouth bass, bream, and catfish grow into catch and release size so quickly. After the fish came the fishers. Herons, cormorants, ospreys and even eagles. During the first year of operation nine osprey nesting poles were installed to provide homes for the namesake of Osprey Ridge. This spring, patience (sometimes a rare commodity in golf) paid off as a nesting pair of Ospreys took up residence and started a family on the pole between Osprey Ridge's #7 and Eagle Pine's #15.

The Bonnet Creek Golf Club is a member of the Audubon Cooperative Sanctuary Program. Many of the initiatives already taken during original construction will help qualify for full certification.

The Bonnet Creek Golf Club opened its doors in late December 1991. I secretly think, that during the conceptual plan-

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Looking back down #14, Osprey Ridge, a tough par 4.

OSPREY RIDGE



Osprey Ridge #17, a two-tiered challenge.

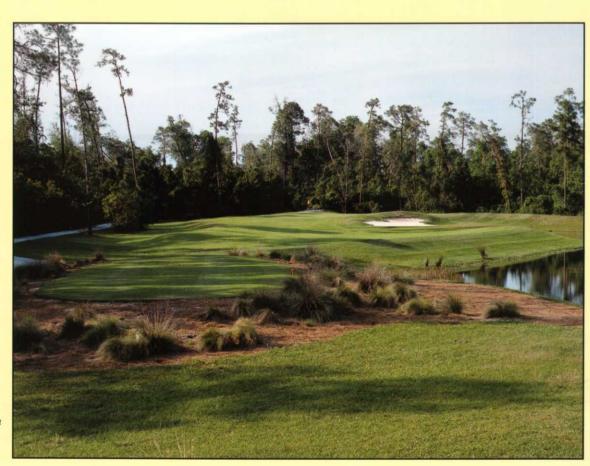
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### **COVER STORY**



Eagle Pines' L-shaped 3. A par 3 over water.

## Eagle Pines



Eagle Pines #7 with pine straw accents and a marsh lake.



A short par 4, Eagle Pines 8, invites big hitters to go for it.

'There is
probably no one
who has
experimented
more with
textures and
contrasts as part
of the design of a
course...'

ning for Bonnet Creek, Golf Director, Mike Beaver, heard a voice whispering in the pines. It said, "Build it and they will come."

And come they have in record numbers. Just ask the maintenance staff as they try to beat the first golfers down the #1 fairways to the green. But when the players come, they play courses rated in the Top 10 resort courses in the USA. Both courses have participated in the finals of the Oldsmobile Scramble.

They have hosted the Bryant Gumbel, Charles Barkley, and Frank Viola Celebrity Pro-Am tournaments. By virtue of its 1 & 10 tee start capability, Eagle Pines has also hosted the 1994 Disney-Oldsmobile Classic PGA event and the LPGA's HealthSouth Inaugural this year.

You don't get those kind of credits by having the sorcerer's apprentice conjure up thousands of broomsticks mowing and grooming the course. Like Walt always said, "It takes people!"

It was my pleasure and good fortune to return to Disney in June of 1991 and partner with superintendents, Scott Welder and Pat Hennessey, under the very capable direction of Manager of Golf



Toughest par 3 on Eagle Pines. Hole 15.

Course Maintenance, Larry Kamphaus, CGCS to help make the Bonnet Creek project a reality.

Suffice it to say that in my travels I

have never met any superintendents that have exceeded their capacity for hard work, commitment, hands on versatility, ability and perseverance. They are a great



The 17th green on Eagle Pines at the end of a long par 4.

bunch of gentlemen to work with. I will not dwell in this area too long lest I am accused of gilding the lily. But sometimes, we don't say thank you enough to the people we work with every day.

Scott left his post as superintendent of the Lake Buena Vista Club in January 1991 to serve as the on site superintendent to work with DDC and to represent the Golf Division during construction. He and Larry provided DDC with input on equipment lists and necessary infrastructure for the project. They also were responsible for helping DDC enforce construction specifications and suggest some obvious changes overlooked in the contract.

Sometimes the wish list fell victim to "value engineering," but eventually the list will be completed by the "real engineers" who run the place. Scott serves as the Head Superintendent of the Bonnet Creek Club, and also has day to day responsibility for the Osprey Ridge Course.

Pat was promoted to Superintendent of Eagle Pines from his Assistant's position on the Palm course.

I promised to revisit the topic of "waste areas" and the time has come. Pete Dye is unquestionably one of the premier innovators and risk takers in golf course design. There is probably no one who has experimented more with textures and contrasts as part of the design of a course. His concern and passion for the environment are legendary. He incorporated nearly 65 acres(over one-third of the total Eagle Pines acreage) in pine straw "waste areas" around teeing areas and outer roughs. The initial visual effect was spectacular and would require, in theory, very low maintenance.

Please see Page 55

## Pat Hennessey Eagle Pines Golf Course Superintendent

Originally from: Holyoke, Massachusetts.

Family: Wife, Vivian. Children: Patrick, Ryan and Michael.

**Education:** Studied horticulture at Holyoke Community College and Valencia Community College.

**Employment:** CMS Landscaping, Holyoke, Mass., Foreman, 6 years. Walt Disney World, Foreman, 11 years; Superintendent, 4 years.

Hobbies/Interests: Golf, fishing, following sports, children's activities.

Professional affiliations: FTGA, GCSAA, Central Florida GCSA.

Honors: Top 10 Resort Golf Courses in USA.

Personal Philosophy: Treat all employees fairly. Be honest. Stress team effort; have workers take pride in what they do. For myself, do whatever it takes to get the job done.

**Advice:** Consult with other superintendents. Don't be afraid to seek advice. Be dedicated to your course and profession.

Mentors: My parents, who taught me the importance of values and family. My wife, who influenced me in obtaining goals. My colleagues at Walt Disney World.

About Eagle Pines: It was definitely a learning process for all of us after dealing with the older wall to wall turf courses and now managing large "natural" areas. They are not necessarily low maintenance. Weed encroachment can be a real problem. Also managing bermdua and St. Augustine side by side is challenging since they have different requirements.



The Eagle Pines 13th tee complex with gulf muhly in bloom. (Photo by Joel Jackson)

## **Eagle Pines Golf Course**

Designed by: Pete Dye. Assisted by Michael O'Connor.

Constructed by: Fore Golf — Devcon.

Opened: December 1991.

Major Renovations: Reduced 65 acres of pine straw down to 25 due to drainage problems and unmanageable washout areas.

Acreage: Total turf = 142 acres. Lakes = 25 acres.

Greens: 3.5 acres, Tifdwarf. HOC = .141 - .156. Average size = 7,500 square feet. Overseeded w/Poa trivialis @ 18 - 22 lbs. per 1,000 square feet. Green speed 8.5 - 9.5.

Tees: 3 acres, 419 Bermuda. HOC = .438 - .5. Overseeded w/Perennial Rye @ 15 lbs. per 1,000 square feet.

Fairways: 35 acres of 419 Bermuda, HOC = .5. Overseeding wall to wall, fall 1995.

Roughs: 50 acres of 419 Bermuda, St. Augustine (Delmar), Bahia. HOC = 1.25 - 1.75.

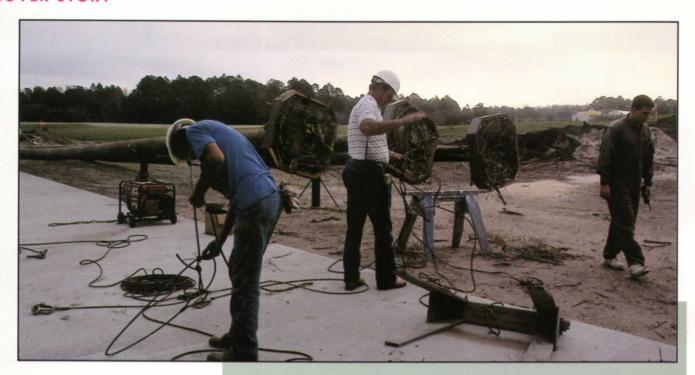
Overseeded w/Perennial Rye @ 250 lbs. per acre.

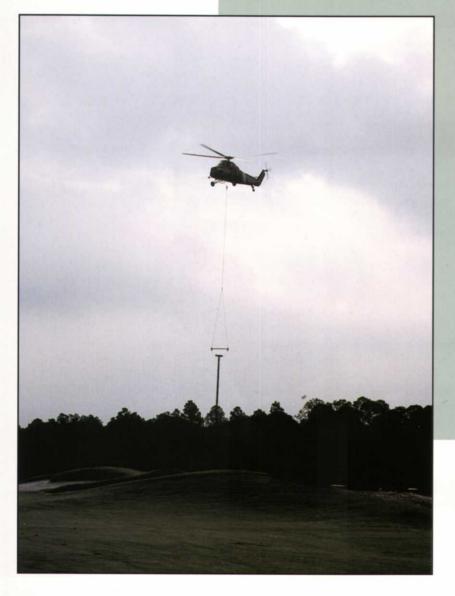
Irrigation: Source: Re-use. Equipment: Flo-Tronex Variable Speed Pump Station, Rain Bird Maxi 5, Hydraulic System.

Total Staff: 20, including superintendent.

Wildlife Inventory: Club Membership Audubon Cooperative Sanctuary. Birds - Thrush, blue jay, cardinal, mockingbird, towee, red bird, crow, LBB's, herons, egrets, ibis, eagles and hawks. Mammals - deer, bobcat, panther, otter, raccoon, oppossum, squirrel, rabbit. Fish - stocked population.

Playing Characteristics: Large undulating greens make good putting a premium to achieve par. Wide rolling fairways keep ball in play. Hole layouts reward good shotmaking for approaches to the greens. Large native areas frame manicured turf and offer spectacular visual contrasts. Not overly long. Good players on their game have a chance to shoot a good score. Course record 61 by Jay Overton.



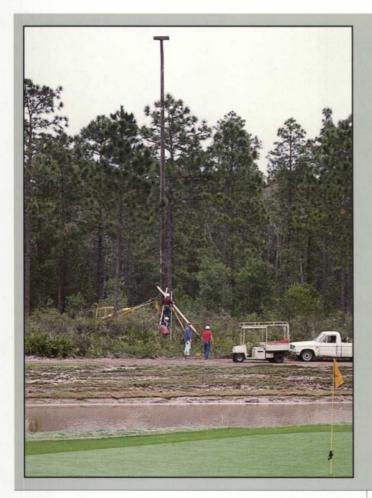


Top, preparation; left, transportation.

Photos By Joel Jackson

# Osprey Pole Installation

Opposite page: left, installation; right, Patience is rewarded. First nesting pair arrives three years later.







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# Fish Stocking at Bonnet Creek

Top, Transporting the young fry; Middle, Acclimating for water temperature differences. Bottom, Release! Photos by Joel Jackson

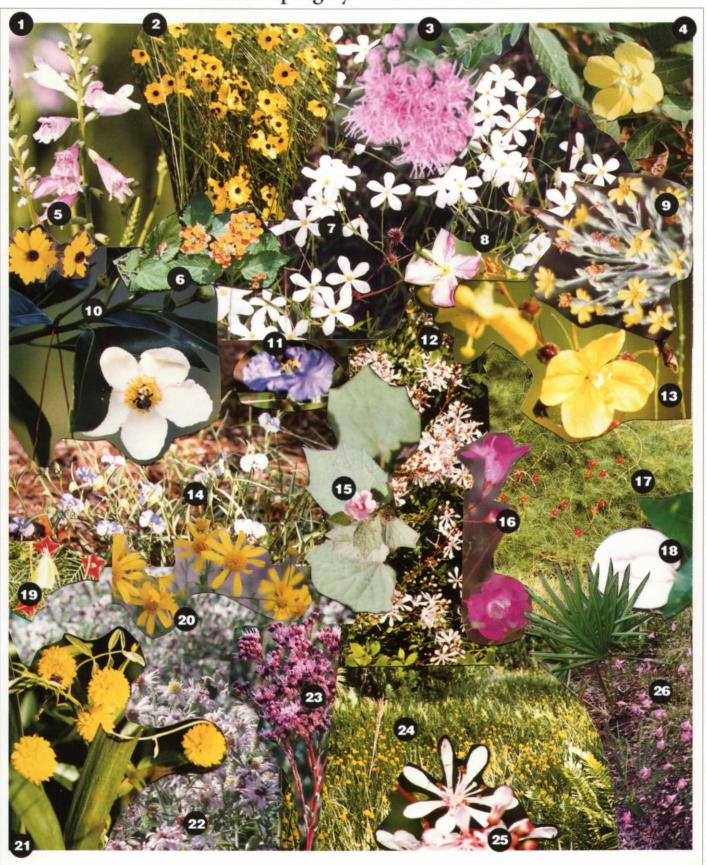




Largemouth bass, sunfish (bream) and catfish were released.

## Wildflowers at Bonnet Creek Golf Club

Landscaping by Mother Nature



#### Wildflower Identification Key 1. ? 14. Spreading Dayflower 15. Caesar Weed 2. Tickseed 16. False Foxglove 3. ? 4. Primrose Willow 17. Cypress Vine 5. Tickseed 18. Butterfly Pea 19. Cypress Vine 6. Lantana 20. Bitter Sneezeweed 7. White Sabatia 8. Grass Pink 21. ? 10. Lobolly Bay 23. Deer Tonque 24. ? 11. Dayflower 12. Tarflower 25. Tarflower

### from Page 46

13. Rattlebox

Two things happened to shatter that theory.

(1) Pine straw harvested and baled elsewhere, and then scattered on the ground in an artificial application did not hold up to traffic and required frequent replacement.

26. False Foxglove

(2) Sudden heavy thunderstorms moved the pine straw off of slopes and caused large mats of the pine straw chaff to clog drain basins.

To correct the tremendous labor impact of restoring these areas after a heavy rains and traffic, Pete concurred with the plan Scott, Pat, and Larry devised to reduce the pine straw area down to 25 acres.

Elevated sloping areas were sodded either with bermuda or bahia depending on the location and irrigation capability. Other areas were converted to sandy "waste areas."

Pete came back several times to view the handiwork and to report that he was still using pine straw areas, but this time he put them only where existing pine trees could naturally replenish the straw and the slopes were not a factor.

There is another design element that has proven to have its shortcomings. Pete used a lot of Delmar variety St. Augustine to surround the bunkers. It has proven to be very susceptible to uncontrollable patch diseases during the warm season. I understand that it may not be for sale any longer. If it is, stay away from it. It is a poor performer at least for us. Long range plans call for a phase out to Tifway 419 to eliminate management problems.

It's nice to know that even the old masters keep learning. That's what makes the best stand out. Along their way they leave us an Osprey Ridge and an Eagle Pines to enjoy. And so the tale is told. Perhaps not complete for the work is never done, but enough I hope to hold you till the next course is begun.

Editor's note: The author served as Superintendent of the Osprey Ridge Course from June 3, 1991 until his transfer to the Magnolia course on March 1, 1994.

# Troubled waters?



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Eagle Pines and Osprey Ridge crews. Photo by Joel Jackson

## **Osprey Ridge Golf Course**

Designed by: Tom Fazio. Assisted by Dennis Wise and Steve Masiak

Constructed by: Fore Golf/Devcon.

Opened: December 1991.

Acreage: Total turf = 130. Lakes = 32 acres.

**Greens:** 4 acres, Tifdwarf. HOC = .141 - .172. Average size = 8,200 square feet. Overseeded w/Poa trivialis @ 16-20 lbs. per 1,000 square feet. Green speed 8'6" - 10'.

Tees: 3.6 acres, 419 Bermuda. HOC = .438 - .5. Overseeded w/Perennial Rye @ 15-20 lbs. per 1,000 square feet.

Fairways: 40 acres of 419 Bermuda, HOC = .5.

Roughs: 60 acres of 419 Bermuda, HOC = 1.5 - 2.0. Overseeded w/Perennial Rye.

Irrigation: Source: Re-use. Equipment: Flo-Tronex Variable Speed Pump Station, Controls: Rain Bird Maxi 5.

Total Staff: 20, including superintendent.

Wildlife Inventory: Addition of osprey "nesting platforms". This year will have "first born" on the platforms. Platform between Osprey #7 and Eagle #15 has 2 eggs. Whole range of wading birds and song birds from A to Z. Bird of prey include Eagles, hawks, ospreys and owls. Everything else from alligators and armadillos to panthers and turtles.

**Playing characteristcs:** Can be stretched to 7000 yards. Elevated tees and ridges influence shot making. Wide fairways keep the ball in play. Large greens place premium on approach shots and putting skills. Gentle undulations on greens. What you see is what you get, but there's lots to see! Reachable, gambling par 5's.