



Loblolly Pines  
Clubhouse and  
Hole #18

## ACSP

In six prior installments, each of six categories of the Audubon Cooperative Sanctuary Program for golf course certification were presented. In this follow-up article, a single course's successful approach to certification is reviewed.

## ONE WITH NATURE —

# Loblolly Pines Golf Club

BY SHELLY FOY  
USGA GREEN SECTION

*I go to Nature to be soothed and healed, and to have my senses put in tune once more.*

- John Burroughs (1837-1921), American Naturalist

To those of us who are fortunate enough to spend time on a golf course, whether it is every day with our jobs, or occasionally for pleasure, no where is the above quote more evident. ➔



*Note the bahiagrass buffer on Hole #15 which requires less maintenance and provides habitat for cotton rat, rabbit and quail.*

## In July of this year, they became the 4th fully certified Cooperative Sanctuary in Florida

In Hobe Sound, Florida, golf and nature blend together in a special place called Loblolly Pines Golf Club. For Loblolly, there is but one philosophy: **one with nature.**

Loblolly is a residential development and private club with 200 members. The property is located on a sand ridge just west of the mangrove swamp flood plain of the intracoastal waterway. There are 305 acres consisting of 200 acres of non-play area, 50 acres of fine turfgrass and 55 acres of rough. Loblolly Pines is surrounded by several hundred acres of sand pine/scrub oak stands to the north, wetlands to the east and residential property south and west of the golf course. There are approximately 28 acres of woodlands (scrub oak and slash/sand pines) and 20 acres of open water.

In March, 1992, Dick Gray, then superintendent of Loblolly Pines, now in the middle of construction of The Florida Club in Stuart, joined the Audubon Cooperative Sanctuary Program for Golf Courses (ACSP) and took that first step of sending in the Resource Inventory. In February of 1995, Loblolly became certified in three categories and then in July, they became the fourth fully certified Cooperative Sanctuary in Florida.

The following is a summary of the information submitted by Loblolly Pines Golf Club in their quest to become a fully certified Cooperative Sanctuary.

One of the first and the most important steps in the ACSP is forming the resource committee. Loblolly is fortunate in that they have so many talented people that are a part of their family.

### NAME: AREA OF INTEREST

**Ralph and Mabel Vogel:** Research of new environmental practices for area wildlife, liaison for Landscape & Architectural Review Board, wildlife inventory.

**John and Janey Pratt:** Resident watch of animals and birds; such as current migrations and wildlife sightings, Garden Club liaison.

**Bill Wigton:** Habitat resources, wildlife inventory.

**John Jones:** Nestboxes.

**Tom Lucido:** Habitat Naturalization, Publicity.

**Dick Gray:** Course Superintendent, ACSP Project Coordinator.

**John and Susan Sullivan:** Educational displays, golfer awareness of Audubon project, Photographer.

*"The Resource Committee is extremely critical to the life of the movement. Superintendents come and go, members move, changes are inevitable. So it is very important that a large network of people are involved."* — Dick Gray ➔

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Snags provide habitat for cavity dwelling birds like this yellow-shafted flicker.

## WILDLIFE AND HABITAT MANAGEMENT

**Philosophy:** *One with nature. Leave it alone or restore it to its original condition.*

Below is a list of things that Loblolly does to encourage wildlife and habitat enhancement:

- Homeowners are required to dedicate rear 30 feet across their lot to a native buffer.
- Dead trees are topped and left standing on the golf course; branches are dropped and left for cover.
- Homeowners are encouraged to plant native plants which attract birds.
- There is a 20-foot buffer edge along lakes and ponds.
- Maintains specific habitat by replanting only with native species. Have planted over 2000 slash pines, sand pines, loblolly pines, southern red cedar and wax myrtle.
- Removal of invasive exotic plant material.
- Maintain wildflower areas on and around the golf course.
- Planted bahia buffer between bermuda fairways and native periphery which serves as habitat for cotton rat, rabbit and quail.
- Preserved extra acreage for gopher tortoises.
- Piles of coral rock and trees were added along lake banks for cover.
- Osprey platform constructed on golf course (have had sightings, no nest to date).
- Nest boxes include: wood duck, kestrel, owl, and bat.
- All lake areas provide cover for aquatic residents. ➡



A gray fox. One of many mammals calling Loblolly Pines home.

# 'Our goal is to completely eliminate contamination of ground water from pesticide applications'

## PUBLIC/MEMBER INVOLVEMENT

**Philosophy:** *On this blue pearl, we are all accountable. Every effort is measurable, every animal is an owner. Everybody must be involved, the younger the better.*

• Hosts the Blue Pearl Tournament in cooperation with the Treasure Coast GCSA. In 1994, \$9,000 was donated to the Treasure Coast Wildlife Hospital. In 1995, \$8,000 is being put into the ACSP for schools.

• Displays ACSP registration, wildlife inventory, project info, etc.

- Regular articles in club newsletter.
- Member involvement in Nest Box project.
- Member involvement in native planting projects.
- Working on nature guide for members.
- Formed a garden club.

## WATER CONSERVATION

**Philosophy:** *Water only as needed: it's easier to add than subtract.*

"Because we are located on a sand ridge, there are a few drawbacks. One is moisture holding capacity. Our yellow sand, basically our parent material, has a perc rate of 20 inches per hour. Our white sand, an 18-inch mantle over the yellow, percs 30 inches per hour. Consequently, irrigation water is a precious commodity." — Dick Gray

The primary water source for Loblolly Pines is a local water company, which supplies the property with 400,000 gallons of effluent daily. A secondary water source is a deep well which is used on an *as-needed* basis. The storage lake is lined so no water is lost through percolation.

Conservation methods utilized:

- Watering on an *as-needed* basis, deep and infrequent.
- Use of drought-tolerant grasses.
- Higher cutting heights.
- Higher tolerance to dry spots in fairways.
- Use of moisture retaining soil amendments and wetting agents.
- Thatch reduction.

- Mulch around newly-planted material.
- Fertility programs emphasizing root mass.
- Roughs are not watered.
- Native plant material only.
- Computer operated irrigation system governs volume and pressure; low-trajectory adjustable arc impact sprinklers utilized.
- Irrigation technician scouts the system weekly, checking for leaks and faulty heads.
- Nozzles are changed with the season, small in the winter, larger in the summer.

## WATER QUALITY MANAGEMENT

**Philosophy:** *Our goal is to completely eliminate contamination of ground water from pesticide applications and minimize contamination from parking lot/roadway runoff.*

- Seven lakes, four are lined. All contain natural structure, coral rock, trees, etc. on the bottoms.
- Lakes separated from fairways by 10- to 12-foot border of 3- to 4-inch rough grass. This border serves as a filter from runoff into the lakes. On residential side, 20- to 30-foot natural buffer protects the lakes.
- Drainage from parking lots and roads percolates through high-sand parent material before reaches drains. Clubhouse parking drainage is directed into two sand traps and filtered into the water table.
- Annual water quality monitoring in place. Test regularly for pesticide residual, Biological Oxygen Demand (BOD), plus our basic water quality tests.
- Lakes were stocked in 1989 with bream, bass and catfish in all seven lakes, sterile grass carp in the lined lakes.
- Pond perimeters opposite of playing surfaces are allowed to develop naturally.
- Littoral shelves have been planted along all residential waterfront.



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# 'IPM is more than an on-again, off-again concept'

## INTEGRATED PEST MANAGEMENT (IPM)

**Philosophy:** *To us, IPM is more than an on-again, off-again concept. It is our method of operation.*

"The original theme here at Loblolly Pines was *back to nature*. From the beginning, we were committed to a golf course and residences that appeared to be a part of nature. We wanted to build a golf course that simply *fit in, naturally*.

"Because of this desire we committed to a native buffer, as a means to frame each hole, that ranges from 30-foot to over 100 feet deep along the entire boundary of nearly every hole. To this we added native trees and grasses, along with a covenant in our POA agreement that restricts the use of exotics near the rear of any residence.

"So in effect, we have a 21,000-linear-foot ribbon of golf course, bordered on both sides by a thick native habitat of scrub oak, slash pines, sand pines, rosemary, cabbage palms, myrtle, native grasses and water, over 40 acres of habi-

tat, most of it continuous.

"Our original concept is still our concept. Not only does this concept stress the philosophy of co-habitation, it also stresses higher tolerance to pests. We'll live with a few more weeds; we'll tolerate more insect damage, we'll lower our standards in certain areas in an effort to reduce the use of pesticides and increase the number of birds, mammals, snakes, turtles, frogs, fish, etc.

"As to pesticide application, *as needed* is the code word. We apply pesticides *as a reaction to* and not *in case of* as a general rule. Scouting and record keeping have given us enough historical data that we can anticipate trouble. This allows us to nip it in the bud—or nymph stage. As for rates, we apply the lower third of the recommended rate and add whatever materials we can to increase our efficiency."

—Dick Gray

### IPM practices utilized –

#### IRRIGATION:

- Effluent, nutrient rich, so algae is

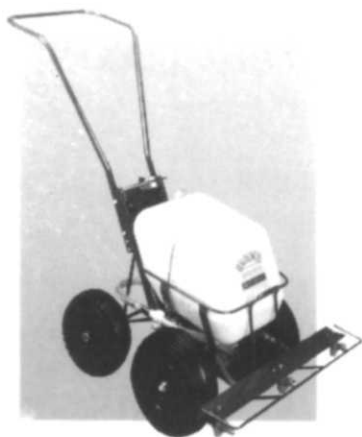
always a threat. To compensate, water is used only as needed, and the turf is never allowed to thin to the point of soil exposure.

- Judicious water use, cutting height, aeration and verticutting keep algae to a bare minimum.

#### FUNGICIDES:

- Keeping the course on the dry side also keeps fungicides to a minimum.
- When required, *as needed* only.
- Alternate contacts with systemics and combine them when possible to make fewer applications.
- The decision to use fungicides is made after determination that favorable weather changes are not probable.
- Raise cutting height during winter to compensate for chlorophyll shortage. This procedure reduces vulnerability to fungi and therefore reduces reliance on fungicides.
- Use of improved varieties of bentgrass and ryegrass.
- Judicious use of fertilizers. ➔

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Stocking the lakes at Loblolly  
Pines with bass, bream, and  
catfish, and letting pond  
perimeters not in play to  
develop naturally provide food  
and cover for this great egret.

#### **Insecticides/nematicides:**

- Season, target and weather determine timing of applications.
- Scouting programs in place, beginning the week prior to the full moon, starting in March and continuing through October.
- Three days before full moon, necessary pesticide applications made on *as needed* basis to flagged areas only.
- All applications are posted.
- Treat mole crickets *as needed* with applications made during the full moon. Feeding stimulants and detergents are added for increased control.
- Spot treatment.
- Toleration of nematodes, again with raised tolerance. The club accepts nematode damage as *part of*. Where possible, raised cutting heights to allow for more root mass and application of a little more fertilizer and water in these particular areas. ➡

# 'We are proud to have Loblolly as a fully certified course in our Cooperative Sanctuary program and commend their philosophy to manage land at one with nature'

## Herbicides:

- With exception of one annual pre-emergent application, herbicides are applied only *as needed*.

- Do not water roughs, keeps weeds down. Rotary mowers are used in roughs to control broadleaf weeds.

- Lightweight mowers with high clip frequencies are used to ensure turf density, which results in fewer weeds.

- Judicious control of equipment and traffic patterns helps with weed problems.

- Hand pull weeds that can't be mowed.

- Sterile grass carp used in lakes.

- Blue marker dye used with applications to avoid overuse of herbicides.

- TOLERANCE is the key. We as a club accept species such as broadleaf, grassy, sedges, etc., as part of the natural Loblolly look.

- Pesticide applications always made with weather conditions in mind.

## CLOSING

Jean McKay, Staff Ecologist with the New York Audubon says, "Loblolly is a unique property that illustrates that wildlife and golf courses can coexist. They've also taken this philosophy beyond their

course to the community through their Blue Pearl Tournament. This tournament raised money for local schools to participate in making their schoolyards more environmentally friendly. We are proud to have Loblolly as a fully certified course in our Cooperative Sanctuary program and commend their philosophy to manage land at one with nature."

Dick Gray: "Our original concept in 1987 was *Back to Nature*, and to a large degree this theme dictated design and construction of the golf course. We weren't unique in this. Several golf courses had the same philosophy, probably throughout the history of golf. The benefit we derived from membership in the ACSP is twofold. First, it validated our efforts and intentions to our members, which created a lot of member involvement. Second, their awareness allowed us to enhance our original plan. From this natural look, we were able to gain credibility for the Blue Pearl and additional publicity that golf courses can be environmental enhancements. Everybody wins. The critters win. Mankind wins. Golf wins."

Dick has left Loblolly and has moved up the road where he is now Designer/Builder of The Florida Club, which is

under construction with a proposed opening date of August 1996. One thing that we can be sure of is that the critters around The Florida Club are in good hands.

Fred Hinkle is now the Superintendent at Loblolly Pines Golf Club. Fred and Dick have known each other for more than 15 years and are from the same hometown in Indiana

When Dick knew he would be leaving to build the new golf course, he called Fred and asked him to come to Florida to take over for him at Loblolly. It hasn't taken Fred long to get attached to his surroundings.

"I have seen a lot of golf courses in my time, but Loblolly is special," Fred said. He added that Loblolly will **definitely** continue to work with the ACSP and that everyone there is very committed to this program. He also says that he has seen more wildlife stick around this year than ever before.

Does it have anything to do with their involvement in the ACSP?

"I do think it plays a role, sure."

So, the commitment to environmental enhancement continues at Loblolly. After all, it is their way of life; **one with nature.**

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# WILDLIFE INVENTORY—LOBLOLLY PINES

## Birds:

Sandhill Crane  
 Kestrel/Sparrow Hawk  
 Cardinal  
 Bobwhite Quail  
 Scrub Jay  
 Fish Crow  
 Mockingbird  
 Osprey  
 Turkey Vulture  
 Red tail Hawk  
 Mourning Dove  
 Blue Jay  
 Common Crow  
 Common Grackle  
 Cowbird  
 Green Heron  
 Little Blue Heron  
 Great White Heron  
 Great Blue Heron  
 Cattle Egret  
 Great Egret  
 Snowy Egret

Common Egret  
 Pileated Woodpecker  
 Yellow Shafted Flicker  
 Downy Woodpecker  
 Red Bellied Woodpecker  
 Common Galinule  
 Blue Grey Knatcatcher  
 Red Winged Blackbird  
 Belted Kingfisher  
 Vireo  
 American Coot  
 Ibis  
 Roseate Spoonbill  
 Ring Billed Gull  
 Louisiana Heron  
 Chuck-wills Widow  
 Great Horned Owl  
 Killdeer  
 Double Crested  
     Cormorant  
 Anhinga  
 Mottled Duck  
 Royal Tern

Thrush  
 Palm Warbler  
 Common Seagull  
 Pelican  
 Woodstork  
 White Ibis  
 Hooded Merganser  
 Egyptian Geese  
 Bald Eagle  
 Whippoorwills

## Reptiles and Amphibians:

Alligators  
 Soft Shell Turtles  
 Gopher Tortoise  
 Coach Whips  
 Coral Snake  
 Indigo Snake  
 Lizards  
 Green Tree Frog  
 Southern Toad  
 Leopard Frog  
 Squirrel Treefrog

## Mammals:

Armadillo  
 Panther  
 Raccoon  
 Bobcat  
 Gray fox  
 Gray Squirrel  
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