

# Calusa Land Trust

and Nature Preserve of Pine Island, Inc.



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**Newsletter**

[www.calusalandtrust.org](http://www.calusalandtrust.org)

**August 2006**

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## **Trailhead Vista Acquisition Completed!** By Harold Bruner (464-2436)

We are pleased to announce that through a combination of generous membership contributions, fund-raising, and mitigation funds, we have reached our goal of raising \$250,000 to complete the purchase of Trailhead Vista. You may remember that in September 2005 we entered into a one-year contract to purchase 18 parcels that included the entrance to our St. Jude Nature Trail. The seller accepted a \$100,000 down payment and gave us up to a year to pay the remaining \$150,000.

A unique combination of events provided the largest single source of funds. During the development of “Moody River Estates in North Fort Myers in 2004, a pair of bald eagles began to build a nest. The site plan for the development had to be adjusted to accommodate the new nest and the developer was required to contribute \$100,000 to acquire additional eagle habitat off-site. The developer chose the Calusa Land Trust to receive this donation.

Although there are no eagle nests on the properties we acquired, there is an active nest immediately across the narrow street (see arrow in photo). Government officials agreed that the habitat provided by these 18 parcels was important enough to justify the use of the entire \$100,000 to complete the \$250,000 purchase of these lands for permanent preservation.



It was only through the combined efforts of many people that we will be able to pay for this valuable parcel ahead of the September deadline. A sincere thanks goes out to those who donated funds targeted for this acquisition, to those who contributed to our fund raising efforts, and to those who helped arrange the approval of the mitigation funds for this use. The continued success of our organization really does hinge on private donations of money, labor, and expertise from our many members and friends. Thank you!

Along with ownership comes stewardship responsibilities; Bud House reports below on our early efforts to enhance this eagle habitat with native pine trees.

## Tree Planting at Trailhead Vista

By Bud House (283-3493)

In our last newsletter, we announced our hopes to begin restoring Trailhead Vista as soon as possible. After removing exotics, the next step invariably involves landscaping with native species. We decided to dive right in. In the past when we have undertaken large planting projects such as this one, we have opted for May or June as the best months so that the upcoming summer rains would provide needed irrigation. However, Mother Nature has not always been cooperative, so this time the Land Management Committee decided to delay the planting until July, and this idea has worked beautifully.

We wanted a design plan and we were lucky to have Jim Beaver, a past CLT Director, draw one up for us. On the Friday before the planting, Ed Chapin and I laid out his plan using orange flags so everyone would know where to dig. Our pine trees came from two places: we bought about 50 juvenile trees from Rick Joyce, who has a large plant nursery in North Fort Myers; the other 30 we already had, ready to go.

On Saturday the troops arrived and dove in, digging holes, carefully shaking the trees from their pots, placing them in the ground, adding a little fertilizer with a dose of water, and backfilling while carefully tamping the baby pines into their new homes. It was tiring work, but extremely satisfying as well. Why not take a drive sometimes and check it out for yourself?

Many thanks to our CLT volunteers and members of the Native Plant Society! Pictured from the left: (back row) Bruce Anderson, Brian Cotterill, Liz Donley, Carolyn Murphey, Mark Laux, Debbie Preston, Tom Coleman, Judy Ott, Bud House, Lois Coleman; (front row) Ed Chapin, Joan Culver, Brenda Anderson. Not in photograph: Bill Mantis, Hank and Carolyn Littleton.



## Tours & Trails Report

By Brenda Anderson (283-1878)

The Calusa Blueway Paddling Festival was held in Matlacha on June 2-4, 2006. There was a substantial turnout even though it was the "First Annual." The festival included numerous vendor booths and displays from local organizations, as well as a kayak fishing tournament on Saturday and two kayak races on Sunday.

We had a large display of our newly updated paddling and hiking trail maps (also now available on our website) and we provided handouts of trail descriptions. Donna Venesky's overlay map of Pine Island's preserved land was displayed as well. Brian Cotterill provided his laptop computer with the PowerPoint slide show that we showed at the CLT annual meeting earlier this year. Pat Williams brought her things and successfully sold CLT T-Shirts both Saturday and Sunday while answering questions fielded by the numerous visitors to our displays. On Saturday afternoon Ed Chapin led a tour of the St. Jude Trail to seven festival participants.

Overall, it was a big success and we hope to do even more for next year's festival.

## Ranger/Stewardship Report

by Ed Chapin (392-0090)

**Peter Ordway Mangrove Water Tours:** The first half of the Peter Ordway water tours will start on October 14 with an off-island trip to Fisheating Creek. This involves some road time but it is well worth the extra effort. We will caravan together leaving around 8:00 in the morning and probably get back early to mid-afternoon. Don't forget to pack lunches and plenty of water to drink. As with all canoe trips, you must register in order reserve a spot; call me at the above number or you can use e-mail (ecalusaed@aol.com). The schedules for the rest of our fall trips are listed in the chart below.

**Work Parties:** On May 6, eleven Rangers came out and worked on the Dobbs Preserve and St. Jude Nature Trail. We have been working on a new trail at the Dobbs Preserve for about two years and decided to concentrate on followup invasive plant control. It is a never-ending task! At the St. Jude Nature Trail, we also did some invasive plant control and trimmed the trail to make it more accessible. This is a very rewarding place to work as we are now seeing the native plants that have been planted over the last 15 years coming into full splendor. The native plants that were being crowded out by invasives are now doing very well. We saw a native pine lily last summer and hope to see more this summer.

Our next work party on June 3 brought out five volunteers and we worked on the Pine Island Flatwoods Preserve. This is a Lee County 20/20 Preserve which we co-manage with Lee County. We found a lot of Australian pine, melaleuca, Brazilian pepper, and ear leaf acacia coming up so that pretty much dictated what we needed to do — we covered about 3 acres that day.

On July 1, in the heat of the summer, we had a very good turnout of 16 volunteers to help plant native slash pines at our new Trailhead Vista (see Bud's article above). Starting early, we managed to get about 80 slash pines into the ground and watered by 10:30. If you drive by you will see about thirteen small groves of trees with 5 to 7 trees in each group planted all along the property. In a few years, they will look great. I especially want to thank the local volunteers from the Florida Native Plant Society who came out in force to help us with this worthy project; the restoration of this area off to a good start!

Below is a calendar of future work parties and water tours. August is our vacation month so there is nothing planned.

### **WORK PARTIES**

Saturday, September 9	9 to noon	Krei Preserve <i>(meet at Jug Creek Cottages)</i>
Saturday, October 7	9 to noon	Picnic Island/ Back Bay Preserves <i>(meeting place TBA)</i>
Saturday, November 4	9 to noon	Dobbs/St. Jude Trail Preserves <i>(meet at Trailhead Vista)</i>
Saturday, December 2	9 to noon	Trailhead Vista <i>(meet at Trailhead Vista)</i>

### **PETER ORDWAY MANGROVE WATER TOURS \***

Saturday, October 14	8 to 2+	Fisheating Creek <i>(call for meeting place)</i>
Saturday, November 4	Noon to 3	Calusa Island <i>(call for meeting place)</i>
Saturday, December 16	Noon to 3	St. James Creek Preserve <i>(call for meeting place)</i>

\* **You must pre-register.** Call (392-0090) or write ([ecalusaed@aol.com](mailto:ecalusaed@aol.com)) Ed Chapin.

In addition to these activities, Calusa Land Trust volunteers again created a float for the annual Fourth of July parade down Stringfellow Road.

I think this was our best float so far. Thanks to all who helped in this effort — let's do it again next year!



### **PURPOSE OF THE CALUSA LAND TRUST:**

“... to acquire, hold, and manage environmentally sensitive lands, archaeological and historic sites, and other natural lands; to encourage education and research in the fields of conservation and preservation; to establish nature preserves or other protected areas to be used for scientific, educational, aesthetic, or passive recreational purposes; to cooperate with other entities having similar or related objectives; and to engage in any other activity relating to the furtherance of the foregoing objectives.”

— *From the articles of incorporation of the Calusa Land Trust (Article II)*

[a continuing column about stewardship of Calusa Land Trust nature preserves]

## The Story of the Pine Trees of Pine Island

*They are the namesake of the island. They ARE the landscape.*

### Part One

Historically, Pine Island had about 12,000 acres of “pine flatwoods,” an ecosystem dominated by longleaf or slash pines. This type of forest burned periodically due to lightning strikes, which increased soil nutrients and generated new growth that was attractive to wildlife. This periodic burning did not usually harm the centuries-old pine trees, but it eradicated competitive species and maintained the ecosystem as a dominant pine flatwood forest.

Similar to other aboriginal Florida inhabitants, we surmise the Calusa Indians used the massive longleaf pines for making canoes, for their pitch products, and for weaving baskets. The Spanish and then other Europeans who began settling Pine Island in the 19th Century quickly understood the importance of the pines as a natural resource. Under the umbrella term of “naval products,” these pines were capable of producing over a hundred products including turpentine, pitch (resin), ship masts, and of course lumber.

In pre-Colonial times, a massive pine forest ecosystem extended across the southeastern United States from Mississippi, east to Tennessee and south to Lee County which is the southern limit of the longleaf pine. Logging of this great forest started in the 1880s and continued until it was pretty much logged out by the 1950s. Significant portions of this ancient expanse of pine forest have been re-planted with rows of hybrid pine monocultures that produce your typical wood pulp and those 2x4s you get at Home Depot to build your deck.

Pine Island is home to primarily two species of pines, the longleaf and the slash pine. The virgin pine trees of Pine Island did not get logged until the beginning of the 1930s after the first bridge was constructed across Matlacha Pass. Logging began and subsequently intensified during WW II, producing heartwood and yellow pine for the war effort. By the early fifties, the area was basically logged out. Why don't we see the remains of enormous stumps? In the fifties, “stumpers” came in and removed them. Using a common practice for those days, the stumps were picked up by heavy equipment, loaded onto trucks, and hauled to the railroad yards at Acline Road near Punta Gorda. From there they were shipped to north Florida for processing into naval products.

Today the larger longleaf and slash pines we see on Pine Island actually comprise a second growth pine forest around 50 - 60 years old. We speculate the virgin, first growth pines were two to three hundred year old trees. Identifying these pines is not easy; most people cannot tell the difference. There are a number of common names, such as yellow pine, heartwood pine, loblolly pine, calusa pine, and sand pine that make identifying our native pines confusing. The scientific names of the two dominant Pine Island pines are *Pinus palustris* (longleaf pine) and *Pinus elliottii* (slash pine). Visually, the trunk of the longleaf is straighter than the slash pine, making it a



prized tree for lumber. The slash pine grows more irregularly and has a twisted grain, but the pitch content is better in the slash pine. Additionally, in comparison with the slash pine, the longleaf pine is generally a more robust, taller, straighter tree, bigger in girth, attaining heights at maturity of 80 to 100 feet. Not surprisingly, it is a favorite nesting tree of eagles.

Another way to identify these pines is while they are blooming. The longleaf buds are silvery and look somewhat like a candle. The slash pine buds are shorter, brown, and not very conspicuous. As juveniles, both species go through a “grass stage,” looking more like a clump of grass (or aliens from Mars) than a young tree. During this three to five year phase, they are growing a root system to support future growth. Once established, the young pines take off rapidly, growing up to three feet in one year. Pine cones, which are a cluster of seeds, are twice as large on a longleaf pine (6-9 inches) than on a slash pine (3-4 inches). Also, longleaf pines have clusters of three needles (6-8 inches long) while the slash pine has clusters of 2 (sometimes 3) needles usually less than six inches long. Longleaf pines will drop lower branches. Slash pine is more of an understory tree often having lower and more irregular branching.

There are many unanswered questions about our pines, such as why the longleaf is not currently the dominant species on Pine Island. One theory is simply that slash pines grow faster than longleafs so we currently have a predominance of slash pine. Given another fifty years (and the hope that we still HAVE pine trees on this island), the longleaf pine may catch up, outgrow the slash pine, and reclaim its place as the dominant pine species.

Another question is why both the longleaf and slash pines start off growing at a normal pace and then, unlike the growth patterns of these species in other areas, these pines dramatically slow their growth (as demonstrated by their growth rings).

Also there is a question whether or not genetic crossbreeding has occurred between our original pine trees and modern hybrid “crop” pines. The answer may very well lie in our island soil, as old seed stock can remain viable for hundreds of years. Given the chance, these seeds can generate new offspring for future generations and satisfy our curiosity as to their genetics.

Hurricane Charley left an indelible mark on the Pine Island pines. Not only did Charley’s winds claim a heavy toll of downed pines, but they also left the pines susceptible to the dreaded Southern pine bark beetle which then finished off many of our remaining stressed-out pines. The Latin name for the Southern pine bark beetle is *Dendroctonus frontalis* which means tree killer – a clue to the insidiousness of this wretched bug. When a female beetle locates a stressed pine, she emits a pheromone which brings in thousands of fellow beetles to bore into the cambium layer and eventually kill the tree. When a colony is comfortable that they have sufficient recruits, they will send out an additional pheromone telling other beetles to get lost and find their own pine tree. Over a period of perhaps six months, these beetles killed many of the pines left upright after Charley, especially on the north end of the island which went under the eyewall of the hurricane. Controlling these beetles is outside the scope of this article but more information is readily available at [http://eny3541.ifas.ufl.edu/pbb/PBB\\_ID.htm](http://eny3541.ifas.ufl.edu/pbb/PBB_ID.htm) – so we can act as good stewards of our pines by offering them some protection from *Dendroctonus frontalis*.

Why should we be so concerned about pine trees on Pine Island? For starters, they are our island’s namesake. They are also incredibly beautiful framed against the sky. But perhaps the most important reason is that they are an integral part of the pine flatwood ecosystem, home to numerous species of animals and plants that we like to see and want to keep around. Think about the bald eagles, gopher tortoises, hawks, deer, snakes, bears, and raccoons which would have no home without this system. Saw palmetto, the spiky-leaved undergrowth plant most

typical in pine flatwoods, provides food and habitat for wildlife and has pharmacological importance for human medicine as well. Finally, to wax poetic, there is simply something quite special about the feel and fragrance of breezes filtered through pine trees.

How can we protect our pines? First, it helps to get as much of the remaining pine flatwoods ecosystem into some type of conservation status. Next, we can diligently remove exotics as soon as they invade and plant more trees whenever and wherever we get the chance. Third, we can do what we no longer let nature do for us: occasionally burn the pine forest by using a carefully controlled “prescribed burn.” In the absence of the periodic wildfires that historically burned the forest on a regular basis, dropped pine needles and branches now build up on the forest floor; this is called “duff.” When the duff gets really thick and carelessness or a lightning strike sparks a fire, there is so much fuel on the forest floor that the fire can devastate the entire ecosystem, even killing mature pine trees.

A controlled or prescribed burn is scaled down and carefully timed so as not to hurt the mature pines and palmetto roots. The mature trees have an insulating layer that protects them from the less intense prescribed burn; the burn consumes the duff, invasive exotics, and competitive growth, which in turn reduces the potential fuel load that could trigger an uncontrolled wildfire. Another goal of some prescribed burns is to burn off sections of the forest leaving a pattern of spots or “mosaics” of undisturbed areas where wildlife can take refuge and find food. Also this leaves stands of healthy plant undergrowth. On rotation, the mosaic areas that were left green the first time around may be slated for a prescribed burn the next burn season.

Today the pine trees of Pine Island are being replaced by homes and farms. Appreciate and protect the pine flatwood habitat that remains and help plant more or else we may have to change the name to Palm Island! In preparing building sites, leave the majority of the native plants and trees and just clear the area required for a house, utilities, and a fire prevention buffer zone. Try landscaping with pine trees, especially if none remain. Of the original 12,000-acre old growth pine flatwoods, we now have less than 3,000 acres left of second-growth pine forest. So please plant them, protect them, and of course enjoy them. After all, this is still Pine Island!

That’s all for now from the Ranger Hut.

Ed Chapin  
and Gracie the Ghost Writing Gopher Tortoise

*Watch for Part Two of the “Pines of Pine Island,” when Ranger Ed remembers the rest of the information he wanted to write!*

*Note: Ed Chapin has been the Chief Ranger for the Calusa Land Trust for many years and wants to pass on some hands-on management lessons about taking care of the native habitats of Pine Island. Gracie helps out because Ed can’t type for beans.*

