



Corkscrew Swamp Sanctuary Education Report 2008-2009

Corkscrew Swamp Sanctuary is a working model of how a green business can achieve conservation goals while remaining economically sustainable through tourism dollars, contributions and merchandise sales. Key components are the natural wastewater treatment plant, the boardwalk made of sustainably harvested timber, 13,000 acres of native habitats managed to maintain the health of wild and human populations and highest quality environmental education for participants of all ages.

**The Education Department strategy is to LEAD by example,
enable others to LEARN sound environmental practices and empower
students and visitors to incorporate conservation into their LIVES.**

As a **leader** in Environmental Education, Corkscrew Swamp Sanctuary is continually adding strands to our “web of life long learning”, producing a widening ripple effect of influence in our community. Years ago we offered fledgling educational programs. In 2009, 5000 students learned about the environment at Corkscrew and 100 educators mentored students in a natural setting.

The effects of adding strands that strengthen our web are tangible. We are expanding **learning** opportunities for public school teachers and college faculty. Our new “Partner Educator” program trains teachers to be Naturalists and **lead** their students on the Boardwalk and in Discovery Station activities. Thirty-five members of the FGCU community became Partner Educators and four teachers launched Partner Educator programs for elementary schools. Corkscrew provides the elements which make this program work for all participants by assessing the needs of the teachers, providing technical and collegial support, connecting them to the goals of the Sanctuary and creating enthusiastic supporters of our outdoor classroom.

Younger students continue to **learn** about their relationships to nature through Curriculum Programs. They are becoming concerned citizens and informing their parents and friends of the value of conservation for people **living** in neighborhoods in Southwest Florida. University students engaged in the Colloquium Course became active this year in reducing their carbon footprint and incorporating sustainable practices into their daily **lives**.

Read on to learn more about the impacts of our programs.
Many thanks to all who participate in Education Department programs.
Congratulations for another outstanding year!

Rebecca Beck
Director of Education

Candace Forsyth
Donor Relations



Curriculum Programs: Student Action!

Students from local elementary schools are crossing a bridge from curious observers of the natural world to informed citizens engaged in its protection. They are applying their classroom lessons, individual projects and concepts formed at the Sanctuary to a bigger picture. They are considering conservation issues, their roles in protecting the superb natural resources that exist in their backyards and understand their responsibility to the environment. The following sample letters from 5th graders to their neighbors, parents and friends illustrate the transition.

Dear Golden Gate Estates area,

I know you're all busy and everything but there is something urgent that I need to inform you about. It's called W-I-L-D-L-I-F-E and it's very important for our community...deep down they're really our brothers and sisters, for we all live on this earth. And if we could all just share the earth, then it would all be peaceful. Next, I would like to talk about how peaceful it was out on the boardwalk in the swamp. And they had simple rules. 1. No polluting. 2. No littering. 3. Leave the environment they way it was when you got there. 4. Don't mess with the environment. And if the rules were just like that here it would be peaceful But it is not now.....now it's polluted with our wastes and is carelessly being destroyed by our actions. And now is the time to fight back for all the animals. So, what do you say?

Are you in or out? *Montana Menely, 5th Grade, Sabal Palm Elementary School*

Dear Golden Gate citizens;

"I am here to point out some things that you may be missing in your average, every day life. Do you know what happens in the natural habitat? Well listen up, you'll want to hear this. First of all, not meaning to be rude, but to help stop pollutionizing you need to cut down on construction work. Why? Well, cause all the fumes and gases go up into the air and make it hard not just for us to breathe but also for birds. You know that trees breathe too right, well that cuts the air off for them and they'll start to die out. If you're a person who does take care of nature than keep it up because it will pay off at the end!

Mallory Matos, 5th Grade Sabal, Palm Elementary School



Dear Neighbors,

You shouldn't build roads or houses over the Sanctuary. It has many mammals, fish, birds and reptiles. If you destroy the Sanctuary, the animals won't have any homes. Then all the animals will die from that. The most important bird that is there is the wading bird. This bird was almost wiped off the face of the earth. They were used for their plumes for hats. *Juan Juarez, 5th Grade, Sabal Palm Elementary School*

Dear Citizens,

When I first saw the roseate spoonbill I saw that its feathers are different colors and they are beautiful, but if you pollute they won't be. If you throw a cigarette out of the window you can burn down a whole ecosystem filled with animals. Did you know that if you pollute the water with trash you are harming animals. Well you are.

Leah Klink, 5th Grade Sabal, Palm Elementary School



Dear Citizens,

Many animals are being extinct and it's mostly caused by humans. What is killing animals is pollution, throwing garbage in the water and a lot more. And also many homes of animals are being destroyed. Citizens of Golden Gate, I have just explained what is destroying the habitat. So I think we all should stop pollution. And help to keep the water clean because animals drink that. So please, we need your help.

Sadie Blanco, 5th Grade, Sabal Palm Elementary School



Partner Educators: Teachers in Action!

Last year we shared with you our goal to provide the guidance and necessary support to enable elementary teachers to **lead** student field activities. This year, we made that goal a reality! Through a pilot program, two 2nd grade and two 5th grade teachers took the leap outdoors to guide Curriculum Programs at Corkscrew. Their reflections below relay the positive influence of this program to them as teachers and in their relationships with students. Our goal is to continue to grow this program and eventually have ALL participating teachers serve as Naturalists.

"After visiting Corkscrew Swamp for five years and attending training, I felt prepared to guide my students. I had my notes and memories of past trips so I was ready to go. What I was not prepared for was the interaction with my students on a new level. They were so engaged with the environment and had so many questions and observations that our relationship quickly changed. In a classroom roles are clear: I'm the teacher, you are the student. At the Sanctuary, we were all students and teachers together. There were no clear right or wrong answers, just natural curiosity and mutual discovery. Being a guide for my students allowed me to engage with them in a new way and I created new memories from this trip." *Lidia Camp, 5th Grade, Sabal Palm Elementary*

"During the past several years, I have been fortunate enough to bring my second grade students to Corkscrew Swamp Sanctuary for a field study on insects. This year, I was given the opportunity to guide a group of my students through the stations and activities. Guiding my students offered me a unique perspective and allowed me to step out of my comfort zone. As opposed to just assisting and observing as I'd done in the past, I was able to really interact with and instruct my students. I was able to reinforce and extend the concepts that we had learned in the classroom and emphasize our science standards. The stations and activities were user friendly and the schedule easy to follow. Aspects of the scientific method such as prediction, observation, estimation, classification, and evaluation were incorporated into the activities and my students enthusiastically participated in them. I was able to provide a positive learning experience for my students that I would have been unable to replicate in the classroom. I am looking forward to developing my skills as a guide and working with Corkscrew to continue meet the needs of my students by utilizing this valuable program in the future." *Joyce Cordell, 2nd Grade, Corkscrew Elementary School*



Corkscrew and Florida Gulf Coast University Teaching Real Life Lessons in Sustainability

After hosting Florida Gulf Coast University's (FGCU) Colloquium course at Corkscrew for over a decade, simple changes have triggered a significant shift toward sustainability of this established collaborative program.

Designed to teach economic, social, and ecological sustainability, the course enables participants to become aware of environmental issues and find their "sense of place" in the natural environment they inhabit. Initially, one hundred FGCU students participated in

Colloquium annually. Today over 1,800 FGCU students visit Corkscrew each year. Recently we addressed the issue of large groups and limited Corkscrew staff for guided tours. FGCU Professors and Student Naturalists now lead field trips, dividing classes to enable students to travel the boardwalk in small learning groups.

Paradoxically, the crowds of students were arriving at the Audubon Sanctuary in separate cars to discuss ecological sustainability. We still faced the challenge of transportation and how to reduce our environmental impact.

"As of January 2009, buses transport entire Colloquium classes, reducing the carbon footprint, highway traffic and parking requirements," said Annette Snapp, Colloquium coordinator. "Bus trips mean more teaching time with the students and serve as a lesson in sustainability." The students agree. "The bus was the best carpool," said student Richard Callahan. "I realized we often use individual vehicles out of convenience rather than necessity." Another student, Travis Wagner, added that "using the bus reinforces the principles of sustainability that are being taught in this course."

Sustainable Practices Add Up!

Actions triggered by the FGCU Colloquium model are an impressive measure of Corkscrew Swamp Sanctuary's education work. By the end of 2009, the use of a bus instead of private cars will have **reduced** carbon emissions by 45 tons and **eliminated** 105,984 road miles.

Adventure Trail: Sponsors in Action!

School Sponsors provide the foundation for success in our programs. The financial security afforded by insightful citizens who help us meet our budget of \$50,000, allows Education staff to focus on achieving goals of providing dynamic programming and increasing the value and substance of activities.

With all that work going on, we are often pleasantly surprised when something special happens. This year the setting for one surprise was at the dip net station on the Adventure Trail. It began with a memorial contribution in honor of Corkscrew devotee Cynthia Yudelman. When designating their donation to School Sponsorships, Cynthia's relatives cited the value of outdoor experiences. Family representative John Bullitt said, "It was wonderful to see and read about the ways these children's eyes open up to the world when they walk the boardwalk and poke around in the water with their dip nets. It brought back fond memories for me of my own early childhood, exploring the woods and pond at Massachusetts Audubon Society's Drumlin Farm."

This contribution funded a major renovation at the dip pond. Equipment was used to deepen the pond to meet the natural water table. The bridge deck was replaced with sustainably harvested lumber, railings reinforced and the banks shored up. The surprise came when wildlife recognized the value of the renovation. Students witnessed a new otter den, Red-shouldered Hawks fishing for crawdads, songbirds and raccoons coming to drink, an alligator swimming by. Sanctuary Director Ed Carlson watched with pride as a couple of young Wood Storks fed in the water. Another surprise discovered on the Adventure Trail was the arrival of a pair of Bald Eagles that built a nest in native slash pine and successfully fledged two juveniles. It's the first time in 50 years eagles have nested on the Corkscrew property.

**Between students, teachers, sponsors and native wildlife, ours is an ever growing and strengthening web, the web of life long learning.
Many thanks to our Sponsors for their continuing support!**



We encourage you to join our enthusiastic team! Become a School Sponsor. Provide financial support for programs that take kids outside, nurture future conservationists and provide a legacy to keep Corkscrew the green jewel of Southwest Florida. Becoming a Sponsor is easy and rewarding. Just indicate your area of interest on the pages at the end of this report. As a Sponsor you will be invited to join students on their field trips, receive feedback from students and teachers on their activities and will be acknowledged in the Education Report.

Education Programs



Insect Adventure 2nd Grade Curriculum Program

Capitalizing on children's inherent curiosity about insects and other residents of the micro-world, the Insect Adventure is designed to teach about insects while enabling students to look at their environment with a holistic view. Important concepts such as habitat, adaptations and interdependence are reinforced throughout the program, and students have the opportunity to employ several steps in the scientific method as they become junior entomologists.

DISCOVERY STATIONS: Traveling libraries prepare students for their environmental adventure through reading and research. Trail activities focus on insect anatomy, habitats, behavior and senses through the use of the scientific method.



Wild Florida Adventure 5th Grade Curriculum Program

There is no better place to study about watershed, fire, native habitats, integrated ecosystems and animal adaptation than Corkscrew Swamp Sanctuary. As junior naturalists, students engage in scientific scavenger hunts, species classification and nature writing. Students conduct detailed research projects on local birds, plants, reptiles, mammals and insects. Participants are introduced to Corkscrew's innovative natural wastewater treatment facility, the Living Machine.

DISCOVERY STATIONS: Traveling libraries assist students with individual research. Field stations include observation of skulls, skins, scat, tracks and a live gator from our swamp aquarium. Student field journals thread classroom lessons, boardwalk experience and personal reflections.



Partner Educator Program

In a mutual effort to improve field programs at the Sanctuary, Corkscrew Swamp, Collier County Public Schools and Florida Gulf Coast University set a goal to train Elementary Teachers and University Professors to serve as outdoor educators. Initiated in spring 2009, this program provides the impetus for participants to build new relationships with their students and expand personal horizons. As extension educators, they receive recognition and benefits that allow them to visit the sanctuary year round and participate in workshops to further their knowledge of natural resources and conservation issues.

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Special Thanks To:

Big Cypress Basin
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2009-2010 Sponsorship Opportunities

Sponsors endorse a variety of activities within the Education Department at Corkscrew Swamp Sanctuary. Contributions support elementary students and teachers for curriculum programs which include field trip activities, Sanctuary admission and classroom instruction. Teachers and University Professors are provided professional development opportunities and year long support. Donations underwrite coordination of programs and workshops for Corkscrew staff, Volunteers and Partner Educators who present field lessons.

Curriculum Program	Students	Program Fee	My Sponsorship
Insect Adventure 2nd Grade	50 students 2 classes	\$1500	\$
Insect Adventure 2nd Grade	150 students Entire school	\$5000	\$
Wild Florida Adventure 5th Grade	50 students 2 classes	\$1500	\$
Wild Florida Adventure 5th Grade	150 students Entire school	\$5000	\$
Discovery Stations 2nd and 5th Grade	Field supplies, student field journals, literature components	\$250-500	\$

Partner Educator Program	Description	Program Fee	My Sponsorship
Elementary and University	Professional Development Workshops	\$500	\$
Elementary and University	Program Implementation	\$1000	\$

How to Become a Sponsor



1. **CHOOSE** a Sponsorship Level.
2. Enclose **CHECK** or **VISA/MASTERCARD** information for the sponsorship amount.

My **CHECK** is enclosed.

Check # _____ Amount \$ _____

Please make checks payable to: **National Audubon Society.**

Please use my **CREDIT CARD.** (Information can also be accepted by telephone.)

Name: _____

Card# _____ Amount \$ _____

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3. Tear off this page and **MAIL** it with payment to:



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