

PHILOSOPHY



Dr. Wohlpart reflects, “In my teaching and my scholarship—and certainly in the University Colloquium: A Sustainable Future—I ask two big questions which provide a lens for my work. First, how are we placed on Earth? That is, how do we dwell, and how does our dwelling lead to a particular way of thinking and acting? Second, how might we re/place ourselves on Earth in more meaningful ways? That is, how might we reconstruct our dwelling, offering other ways of thinking and acting so that our physical placedness on Earth provides us with a deeper spiritual, emotional, and psychological experience?”

I believe, how we dwell determines how—and even whether or not—we receive the gift of Being, the gift of the presencing of humans, animals, plants, rocks, sky, wind, and sun in our lives. A different relationship to the world around us existed for our hunter-gatherer forebears and exists for many Native American cultures that have a different way of thinking and acting in the world. Significantly, some have suggested that provides the foundation for who we are as humans, for our relationship to Earth, for how we dwell, think, and act, a foundation that has not been eliminated in the last 10,000 years of recorded human history, but certainly one that has been forgotten, erased, written over, and ignored.

In teaching Colloquium, we are asking students to engage in remembering their place and through this remembering we are hoping that they will foster a deeper connection to the world.”



Martha Kriek asks, “How important is the Everglades, habitat preservation and the species that rely on the unique systems that can only be found in SW Florida?”

For some of us, the answer is simple – critically important. As adults living in this area, we have witnessed mass destruction of key habitat. Luckily, there are many people who believe in the importance of preserving habitat and are doing what is possible to ensure proliferation of native species.

Why invest time, effort and money into habitat preservation and environmental education? One answer – our children. We owe them a world equal to or better than the world in which we currently live. It is their legacy. With this legacy, they also inherit responsibility. The same responsibility we have now. How will they accomplish their work? They must be taught to love and care for native species and habitats as we do.

Environmental programs are woven into district curriculum. They help students become better problem solvers and critical thinkers. They allow students to understand the importance of working collaboratively and how to communicate their ideas to others. By presenting activities in places like Corkscrew, students begin to make connections about the importance of preserving natural areas where wildlife can thrive. They will have the skills necessary to generate new ideas for whatever profession they may choose. They will also be prepared to understand what is necessary to preserve the land for the generations that will follow them. They will know in their hearts that one person can make a difference and when we work together we can accomplish more.”



Martha Kriek
CCPS teacher, 26 years
CCAS Board Member
and Education Chair

“When schools and environmental groups work together, they can offer unique field experiences for students at all levels. These experiences cannot be duplicated in the classroom.”



Dr. Jim Wohlpart
Florida Gulf Coast University
Dean of Undergraduate Studies

“Field trips to such places as Corkscrew Swamp Sanctuary provide students with the opportunity to experience, first hand, their place, to feel the wind on their skins, to know the trees, to move backwards in time and be freed of our customary ways of thinking about the world. And in this journey they become replaced—they become new beings who understand that their connection to place matters.”



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Joyce Shunney

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CORKSCREW SWAMP
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Education Report 2012-2013



The Collier County Public School District considers science, technology, engineering and math (STEM) education critically important for students to succeed at all levels and become globally competitive in today’s work force .

Corkscrew Swamp Sanctuary provides an invaluable outdoor classroom that engages educators, young children and university students in scientific exploration and prepares higher level students for careers in the sciences.

Audubon Florida’s conservation agenda, based on sound science, drives policy and provides cutting edge educational and professional opportunities.

In May 2013, Collier County Public Schools brought together administrators, classroom teachers, school board members and a diverse group of community partners, including Corkscrew Swamp Sanctuary, to discuss the importance of science, technology, engineering and math (STEM) education. Statistics prove that there is an imperative need to educate students at a very young age on basic principles of these disciplines in order for them to succeed, period. Research has proven that students in 4th grade underperforming in math, science or reading have only a 12% likelihood of attending college.

When considering effective and creative ways to engage students in STEM education at an early age, it was determined that there is an equal need to support elementary educators in teaching scientific concepts. The Corkscrew education program succeeds in supporting both students and educators. Targeted workshops help teachers to present ecological concepts in fun and engaging ways both in the classroom and during field trips to the Sanctuary. Volunteers and staff work right beside our Partner Educators. Students benefit.

Statistics reflect that from 2013-2018, 411,000 new science and technology jobs are predicted in Florida alone. Nation-wide, three million science, technology and engineering positions may remain unfilled due to lack of qualified applicants, while many young professionals sit jobless. STEM education places an emphasis on career development and internship opportunities to prepare students to succeed in these fields.

Corkscrew scientists and land managers continually engage university students and graduates in research, field work and internships that help them to gain the necessary skills to advance in STEM careers. These are the very professionals we rely on to carry out our critical conservation work. Essentially, we are ensuring the future of Audubon.

What truly sets Audubon apart is philosophy and ethic. Our work is driven by deep-rooted connections to the earth and a strong belief that it is our responsibility to protect wild places and wild species. An effort supported by our committed sponsors, partners and Friends of Corkscrew.

Please enjoy our annual Education report and celebrate with us as we experience increased success and outcomes that exceed expectations!

Rebecca Beck
Center Director

Debbie Lotter
Education Coordinator

FOSTERING INTEREST & COMPETENCY IN SCIENCE

Through targeted classroom lessons aligned to state standards, students prepare for engaging field activities that teach scientific concepts in fun and exciting ways. Audubon Workshops help elementary educators gain confidence in teaching science through inquiry based activities. Corkscrew naturalists mutually benefit by learning from classroom teachers. Students gain valuable knowledge which they share with educators, parents and peers.

Corkscrew Naturalists & Elementary Educators



"I have been at Sabal Palm Elementary School since we began our partnership with Corkscrew Swamp Sanctuary 9 years ago. What started out as a simple fieldtrip to Corkscrew guided by knowledgeable staff and volunteers has turned into a great learning experience for teachers and students alike. I have been guiding my students for the past 3 years. I feel that I learn something new every time I go. Many times I am even learning from my students because they have learned so much through their research. I always look forward to this trip because it is a day that I am able to take my classroom outdoors. It isn't simply students sitting and listening to a teacher tell them about the animals and plants; this is a day when everyone can teach!" *Melissa Rodrigue, Sabal Palm 5th grade*

"Working at a Title 1 school and having the opportunity for our students to experience the Insect Adventure fieldtrip is phenomenal. Many times people take for granted the nature that surrounds us, but after a day with 40 second graders their views would change. As teachers, we were able to build our lessons around the insect theme and incorporate it across curriculum. It was a great way to enhance our teaching." *Lely Elementary 2nd grade team*



Insect Adventure graduates read to first graders

"Kids are enthusiastic and eager to learn and ask questions. They are even more eager to have an adult actually listen to them if they ask a question or want to say something. The rewards that come from leading kids on programs are intangible. They come when an eight year old is half way through a boardwalk hike and asks, 'How old do you have to be to work here?' Knowing that kids are going to grow up and care about the wild and that you may have contributed in some small way to that is immensely satisfying." *Dick Brewer, Corkscrew Volunteer*

Partnering for Success



"The need for more science, technology, engineering, and math professionals has never been greater. In order to prepare the STEM professionals of tomorrow, STEM education needs to begin as early as possible in a child's education career. We need to take advantage of the fact that young children are born explorers and problem solvers who are naturally interested in science, technology engineering, and math.

We very much appreciate the fact that Corkscrew Swamp Sanctuary has been a key Collier County Public Schools partner in STEM education for many years. By introducing our second and fifth graders to environmental education, conservation, endangered species, and real world experiences like the ones they get at the Sanctuary, students will hopefully develop a lifelong interest in STEM and our environment. Thank you to all the sponsors who support these programs and are helping to introduce tomorrow's leaders to these amazing opportunities today."

Lisa Morse, CCPS Coordinator, Community Partnerships & Engagement



RESEARCH & CAREER DEVELOPMENT

Audubon Scientists & University Students



Dr. Shawn Liston, research manager for Southwest Florida, holds adjunct faculty status at Florida Gulf Coast University and Edison State College. Shawn feels strongly that her expertise as a research scientist allows her to reach students in a unique way. Bridging the gap between the classroom and the real world is critical for building student interest in STEM fields and prepares them for the workplace.



Serving as a field classroom for higher-education environmental science and ecology students, this year Shawn hosted several groups of researchers creating the mutually-beneficial opportunity for students to gain real world field experience while providing Audubon scientific reports and data from our Swamp.

FGCU undergraduate geology students examined soil properties of cypress/wet prairie/pine flatwood ecotones. Ohio State and FGCU graduate students conducted studies of wetland carbon sequestration and methane emission within the Sanctuary. University of Florida students studied the growth characteristics of sabal palmettos.

Conducting research at Corkscrew enables students to learn new sampling protocols, use specialized equipment, and practice identification of native flora, fauna and landscape characteristics. Field skills complement students' coursework making them marketable in the work force and help Audubon to groom the next generation of scientists and conservation advocates.



Audubon & Americorps



"Americorps field work is important. Just as vital is educating the team about our watershed and local flora and fauna. Making connections between healthy ecosystems achieved through land management practices based on sound science and experience has far reaching implications."

*Allyson Webb,
Panther Island
Resource manager*

AmeriCorps National Civilian Community Corps is a federal, team-based program committed to helping non-profit organizations with environmental stewardship, urban and rural development, disaster relief, infrastructure improvement, and energy conservation. Teams are comprised of up to twelve young adults, ages 18-24. During spring 2013, Corkscrew hosted team Delta 1 from the southern region campus.

A three week "work and learn" program was strategically planned. Goals were to complete intensive exotic plant removal projects and provide a larger picture of Corkscrew and its vital role in regional conservation of the Western Everglades. During their three week project, Delta 1 treated approximately 75 acres of Brazilian pepper and 45 acres of popcorn sedge on Panther Island in the northwest section of the Sanctuary.

"Corkscrew staff members assured that we had the motivation to complete our tasks and the knowledge and passion to appreciate it. We went face-to-face with our newest enemies: Brazilian Pepper, Popcorn Sedge and Torpedo Grass. We were also provided some incredible educational opportunities, including a swamp walk, sea turtle monitoring and estuarine stewardship. We shadowed volunteers on the boardwalk, learning about different species and interacting with visitors. The bulk of our education came from hands-on experience doing resource management on Panther Island. We gained a greater appreciation for nature and learned that all things are connected and, therefore, irreplaceable."

Mady, Delta 1 team member



Peer Driven Inspiration



University Colloquium invokes discussion about local and global sustainability. "The role of a student naturalist is to interpret the course objectives for our peers. I have come to understand that the terms 'student' and 'teacher' are synonymous. Students are learning and the ability to interpret facts, figures and concepts is developed throughout the course of the position. Every field trip I lead is a learning experience and an opportunity to develop skills for a post-collegiate career.

I have developed clear and confident public speaking abilities, my interpretation style has developed significantly and my leadership position has solidified into a clear role in situations that require it. These skills have already proven helpful during my internship, during coursework, and for extra-curricular activities. The position as a student naturalist is a rare opportunity to develop not only my resume, but especially myself as a person by expanding my world view." *Joan Firth, FGCU student naturalist*