The Quarterly Journal of the Florida Native Plant Society



# Palmetto



Bartram's Ixia • FLOR500 Project • Butterflies in Northeast Florida

# Visiting the William Bartram Trail in Florida

Tony and Florence Chatowsky

William Bartram was a naturalist, artist, and author from Philadelphia who explored Northeast Florida in 1774, sailing up the St. Johns River and describing the flora, fauna, and native people he encountered along the way. In 1765, his father, John Bartram, had been named the Royal Botanist in America by England's King George III, and William's interest in botany was primary. Many of the plants he collected in Florida were shipped to England.

To read Bartram's observations and his remarkable descriptions of life along the St. Johns, the book *Travels of William Bartram* is recommended. It was originally published in 1791 and became an international best seller.

In addition to reading about his exploits in Florida, you can also follow Bartram's historic trail – from his entrance into Florida on Amelia Island, up the St. Johns River, and onward to Blue Springs, south of Deland. This article will focus on sites associated with Bartram that are near the Jacksonville area.

In the spring of 1774 Bartram, age 35, arrived by boat from St. Simons Island, Georgia, and landed on the north shore of Amelia Island. He crossed over Egan's Creek (now Clark's Creek) to visit the plantation of Lord Egmont, where the town of Fernandina Beach now stands. Egmont's plantation grew cotton, corn, sweet potatoes, vegetables and indigo – the latter being in demand at the time as a blue dye.

Bartram sailed south with Mr. Egan, the plantation's manager, through Amelia Narrows (today's Intracoastal Waterway) camping overnight on a high overlook (most likely the Bluffs at the north end of Big Talbot Island). Proceeding down the waterway they probably stopped at Kingsley Plantation on Fort George Island where William had previously visited with his father. Near the south end of the island

they sailed down Sisters Creek and entered the St. Johns River.

To access these sites on Bartram's Trail, take Heckscher Dr. (Rt. 105) east from I-95 (exit 358) or from I-295 (exit 41) to Fort George Island. At Sisters Creek Park on the Intracoastal Waterway you can see where Bartram sailed by - look south to where he entered the St. Johns River. Route 105 becomes A1A, and heading north passes the entrance to Kingsley Plantation, where he walked about and where you can learn about growing indigo. Continuing north, A1A crosses Little Talbot Island to Big Talbot Island. On the north end is the Bluffs – nearby where Bartram camped, there is now a picnic area.

Following A1A north across Amelia Island will lead to Fort Clinch State Park and a view of the shoreline that Bartram landed on. After leaving the Fort proceed west on Atlantic Avenue (A1A) to Egan's

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We have a continuing interest in articles on native plant species and related conservation topics, as well as high-quality botanical illustrations and photographs. Contact the editor for guidelines, deadlines and other information. **Editor:** Marjorie Shropshire, Visual Key Creative, Inc. palmetto@fnps.org • (772) 285-4286 • 1876 NW Fork Road, Stuart, FL 34994



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is to preserve, conserve, and restore the native plants and native plant communities of Florida.

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# Palmetto







ON THE COVER:
A lovely blue flower graces the rare Bartram's ixia,
Calydorea caelestina
(Photo by Craig Huegel).

### **Features**

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For more than 150 years, botanists searched in vain for Bartram's ixia. Not until 1931 was definitive proof of its existence provided in a publication by another famous Florida botanist, John Kunkel Small. Craig Huegel explores why this lovely plant is so elusive.

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Xavier Cortada invited biologists, botanists and artists to identify and depict wildflowers that were around when Ponce de Leon first landed on our shores. The resulting FLOR500 project marks the moment when Florida's history changed forever.

### 12 Sharing Memories With Butterflies

It's not hard to find butterflies, if you know where and when to look. Bill Berthet shares photos of a few of his favorite species, and provides tips for viewing them in Northeast Florida.

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# Bartram's Ixia (Calydorea caelestina)



When William Bartram left the Carolinas and headed out across Northeast Florida in the spring of 1774 he brought with him his incredible eye for detail and his ability to detect what was new to the world of botany. In May, somewhere near New Smyrna, he chanced upon the diminutive iris that bears his name – Bartram's ixia (*Calydorea caelestina*). Eventually, he described and illustrated it himself (he gave it the Latin name, *Ixea caelestina*) in his now-famous *Travels* book, published in 1791. His description and his wonderful illustration of this beautiful new wildflower sparked the interest of a great many botanists and naturalists, but William was not especially good at describing the locations of his discoveries and Bartram's ixia is notoriously good at staying out of sight.

For more than 150 years, botanists searched in vain for Bartram's ixia. It was not until 1931 that definitive proof of its continued existence was provided in a publication by another famous Florida botanist, John Kunkel Small. It is no wonder that it took so long. Bartram's ixia is a challenge to locate even when you know where it is supposed to be. Native to moist open savannas and flatwoods, Bartram's ixia is a deciduous perennial that dies completely back to its tiny bulb in late fall. Should you search for it from November to February, you would find no evidence that it was present. Sometime in late winter, a single pleated leaf emerges. This is often followed by a second several weeks later, but both leaves rarely stand taller than 6 inches and are no wider than 1/4 inch. Of course, they blend in

completely with the surrounding wiregrass and other herbaceous vegetation the plants occur with.

Over time, the bulbs produce additional "bulblets", but even then, the small colonies are extremely difficult to detect.

It's not until the plants bloom that Bartram's ixia is readily detectable. A single flower stalk is produced and it reaches its mature height of 12-16 inches by April. Only a single flower opens on any given day, but a succession of flowers are produced on this stalk for up to two months, between mid-April and mid-June. Each bloom is spectacular, and these give away the plant's presence. Individual flowers are comprised of five large blue-violet petals with three bright yellow stamens. The dark blue style is shaped like a frilly trumpet and is almost hidden in the middle. Each flower is more than two inches across.

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### Bartram's Ixia

You might believe that Bartram's ixia would be an easy plant to spot when flowering, but it is not. The flowers are exceedingly ephemeral. They open as the sun rises and they close completely, wither and disappear by about 10 a.m. My observations are that they are most often pollinated by bumblebees. Bartram's ixia also does not bloom well if the environmental conditions are not right. It responds to hydrology, for example, and seems to do best during wet springs. It also responds to fire. Like so many wildflowers native to open savannas, Bartram's ixia appears quickly following a fire and just as quickly goes semi-dormant when their habitat does not burn for several years. The plants survive for years in this condition. They just don't bloom. This may be why so many of the 60+ populations that have been reported in Florida have not been seen in recent years.

Bartram's ixia is a state-listed endangered species. It is also an endemic or near-endemic. A single population has been reported, but not verified, from southern Georgia. In Florida, it occurs only in a seven-county area just south of Jacksonville. This is a very difficult plant to hunt in the wild, especially without a guide that knows its location from previous years. It is not a difficult plant to propagate or grow, however, and it is sometimes offered by commercial sources. I have kept it in my Pinellas County landscape for many years with great success.

### **About the Author**

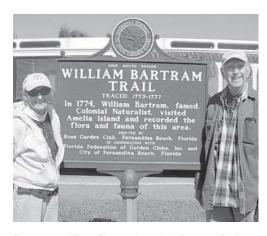
Craig Huegel has a Ph.D. in Animal Ecology from Iowa State University. He is the author two books on Florida's native plants — *Native Wildflowers and Other Ground Covers for Florida Landscapes* and *Native Plant Landscaping for Florida Wildlife*, published by the University Press of Florida.

## Visiting the William Bartram Trail in Florida

Creek Greenway, a nice trail winding along Egan's Creek. Continuing along A1A will lead to the site of Lord Egmont's Plantation and the town of Fernandina Beach, a good place to eat, and a place where William Bartram stayed and dined.

Bartram Trail sites near downtown Jacksonville include the Timucuan Ecological & Historic Preserve and Fort Caroline National Memorial. From I-295, take exit 47. From Monument Road to Fort Caroline Road there are good views of the section of the St. Johns River that William sailed up with Mr. Egan. Another Bartram site is the Arlington Boat Landing (in Arlington, across the Mathews Bridge) where Bartram obtained a small boat with sails and where Mr. Egan left Bartram and continued on to St. Augustine.

The historic settlement of Cowford on the river narrows is now the city of Jacksonville, a site best viewed from the downtown Jacksonville Landing and Riverwalk. From Cowford, Bartram, sailing alone, spent his first night camping in the vicinity of Stockton Park in Ortega, located on Ortega Boulevard, off Route 17 along the west side of the St. Johns River. Stop here for a nice view of the water.



Florence and Tony Chatowsky on the Bartram Trail.

Bartram crossed over to the river's eastern shore in a storm and if you cross the river heading east on I-295 you will approximate his path. Turning south on Route 13 (I-295, exit 5) will lead you to the William Bartram Scenic Trail and a series of locations that he visited. Begin with the Mandarin Plantation Historic Site, typical of a plantation belonging to Mr. Marshall that Bartram visited in the area. Proceed to Alpine Groves River Park near the town of Switzerland, where he visited the plantation of Mr. Francis Fatio, an early settler from Berne, Switzerland. Native plant

communities located on the higher elevations at Alpine Groves consist of mixed and temperate hardwoods. On the lower elevations, near the St. Johns River, you will find a mixed wetland hardwood community that provides habitat for the American alligator and various wading bird species.

Continue on to Picolata where Bartram saw the remains of Fort Picolata, now the site of river front homes. In Bartram's day a large Indian village was located on the west side of the St. Johns, now the present day town of Palatka. A Quality Inn sits on the riverfront site where Indians farmed beans, squash, corn, sweet potatoes, melons and tobacco.

As Bartram continued south, sailing and paddling up the St. Johns River he proceeded against the current — the St. Johns is one of the few rivers in the United States that flows north.

All of these easily accessible William Bartram Trail sites are within a reasonable day's drive from Jacksonville and would make good side trips to enjoy alone, or in conjunction with the 2013 FNPS Annual Conference activities.



# Principles of Ecological Landscape Design

Travis Beck

Published by Island Press, February 2013. 296 pages. Available as hardcover \$60, paperback \$40, or Kindle \$22.

### Review by Ginny Stibolt

I jumped at the chance to read this text because I was curious about how a landscape architect would incorporate ecological science with design. The premise of Travis Beck's book is impressive: "From now on, the ecological function of our planet can only come from a network of preserved, restored, managed and constructed landscapes. To maintain the function of this network and the quality of life that it offers, we will have to change the way we think about landscape design." His mission is to integrate ecology into landscape design projects, which in turn, addresses the environmental crises that are assumed to have been caused by human activities.

Beck assumes that readers will have enough background in design to apply the science into their projects. While there is plenty of science that is useful for any gardener, it's obvious that he is speaking to designers. Instead of supplying step-by-step instructions on how to complete a design, he provides the scientific background so the designers can create landscapes that are more sustainable. He points out that a well-planned landscape will change over the years, as it becomes a dynamic ecosystem in its own right. When gardeners and landscape managers know to expect this change, they can better plan for the future.

In each of the ten chapters, Beck addresses one ecological topic including biogeography, plant communities, the struggle for coexistence, soils, wildlife, disturbance and succession, and global changes. He provides background, covers research for each topic, and then finishes off with specific examples of how incorporating the science works. Each of the chapters is dense enough to require at least a couple of readings to absorb the topic fully.

For example in Chapter 9: "An Ever-Shifting Mosaic: Landscape Ecology Applied," Beck states that landscapes are filled with a huge variety of populations. He calls them patches – large or small, they are shaped by any number of conditions including differences in the physical environment, neighboring plant communities, herbivory, or human interventions such as mowing, tilling, or livestock use. He states that while the designer needs to consider the whole environment, the edges between patches need special consideration in planned landscapes. Various examples of edge patterns are evaluated for

their effectiveness in supporting the largest number of species populations.

Later in the chapter, Beck covers the ecological distortions of plant and animal populations in isolated patches, called islands, in relationship to their sizes. He covers research on island biogeography and how to manage metapopulations or regional populations. Designers will want to increase populations of some organisms like threatened butterflies or rare native plants, but at the same time reduce populations of invasive plants and animals.

In the section of Chapter 9 called "Strive for Connectivity," Beck uses Florida's Wildlife Corridor (citing Tom Hoctors's 2000 article in *Conservation Biology*) as the example of how to create connectivity where none existed. Beck states, "Connectivity offers the means to knit together remnant natural ecosystems, restored areas, and constructed landscapes into an ecological whole whose sum is greater than its parts."

He ends the chapter with this: "The landscapes we design are also landscapes in the ecological sense, mosaics of heterogeneous patches at any chosen scale. Good landscape design is always about creating forms that support intended functions, about the relationships of different elements, and about the context in which they are situated."

As much as I like this book, I was disappointed that all the photos were black and white. This may be fine for simple images, but I would like to have seen color for the sweeping landscape shots. The price of the book is hefty enough to have justified at least some color photos.

Even so, I'd recommend it to anyone serious about incorporating better science into landscaping projects from large restorations to small urban plantings. Armed with the collective knowledge in this book, your native landscapes are bound to be more successful and sustainable.

Travis Beck is Landscape and Gardens Project Manager at the New York Botanical Garden. He is a registered landscape architect with a master's degree in horticulture, a certified permaculture designer and a LEED Accredited Professional.

### **About the Author**

Ginny Stibolt earned her MS in botany at the University of Maryland and has written *Sustainable Gardening for Florida* and *Organic Methods for Vegetable Gardening in Florida* – both published by University Press of Florida. In addition Ginny has been a lead blogger for FNPS since 2010.

# 500 Artists, Gardens Commemorate Florida's 500<sup>th</sup> Birthday

XAVIER CORTADA



Xavier Cortada, Florida Mangrove, 55" x 116", acrylic on canvas, 2003 (www.cortada.com).

When I started out as a professional artist in the mid-1990s, I would engage others in painting collaborative murals to amplify their voices.

I would bring people together in public spaces to address important social concerns: street children in Bolivia's main plaza; former gang members in a Northern Philly barrio; Greek and Turkish Cypriots at the UN Green Line; Protestants and Catholics in Northern Ireland; AIDS workers in South Africa; kids jailed in Miami's adult prisons and psychiatric facilities.

Years ago, I remember telling a journalist that I could never see myself painting flowers.

As I type this, there is still some paint on my right forearm. It's from

painting wildflowers. I guess I'm not a good fortune teller and can be a little careless when cleaning up.

In the studio, I'm creating the fifth of eight wildflower paintings that I am exhibiting across all corners of our state during 2013: I guess I see flowers differently now. Let's call it growth.

And there's a reason for that: Wildflowers magically rise from the soil in a triumphant celebration of color and form. They are architectural masterpieces, miniature cathedrals. Ever building and ever decaying. And ever regenerating themselves again according to plan.

Wildflowers hold medicinal powers to combat diseases we have yet to encounter. To solve problems we have yet begun to imagine.

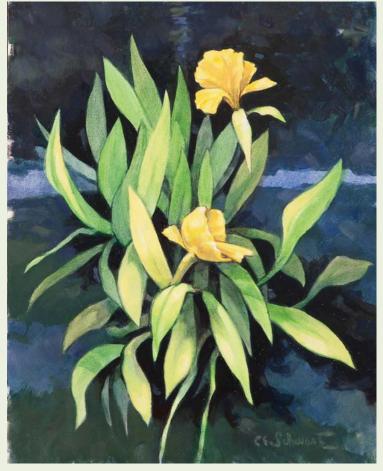
Wildflowers allow the planet's pollinators, with whom they co-evolved through time, to fulfill their joint responsibility of sustaining life's fragile web. An intricate and complex biological process that makes Earth verdant, sustains all animals (including humans), and balances atmospheric gases (that accelerate global climate change).

Obviously, wildflowers would naturally continue to blanket our planet were it not for the displacement caused by the concrete we've poured and the parcels we've platted to build our homes and grow our society.

In the spring of 1513, with its flowers in full bloom, Juan Ponce de Leon landed his three ships on the Below: René Lynch, "FLOR 61: American Lotus (*Nelumbo lutea*)" – Watercolor on Aquabord (clay coated Masonite), 24" x 36", 2012 (CC).

Carl Schwartz, "FLOR 372: Bandana-of-the-Everglades (*Canna flaccida*)" – acrylic, 16" x 12", 2012 (CC).









Above: April Sharpe, "FLOR 412: Wild Coco (*Eulophia alta*)" — mixed media on canvas, 30" x 36", 2012 (CC).

Chip Weston, "FLOR 238: Yellow Waterlily (*Nymphaea mexicana*)" – digital graphics, 10" x 8", 2012 (CC).

eastern shore of the peninsula where I live. Claiming the land for Spain, he named the place *La Florida*, (for the Spanish word *flor* or flower) because of the lush landscape and because of the day the explorers arrived, *Pascua Florida*, Easter.

As we commemorate the 500<sup>th</sup> anniversary of this encounter, I am working through the Florida International University College of Architecture + The Arts, where I serve as Artist-in-Residence, to develop FLOR500, a participatory art, nature, and history project that encourages participants to explore Florida's natural wonder.

Indeed, in developing the project, I wanted to create art that allowed our inhabitants to understand the multicultural

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# 500 Artists, Gardens Commemorate Florida's 500th Birthday

origins of our state, its fragile biodiversity, and its threatened coastlines. So I took the father of the Fountain of Youth mythology and his historic milestone as a point of departure to explore ways of rejuvenating the Sunshine State.

This exploration wasn't solely mine; I wanted as many Floridians as possible to really understand it. So, I went big.

### 500 Flowers

My first step was to seek out biologists and botanists from across the state to identify the wildflowers that were around when Ponce de Leon and his crew first landed our shores. As the architect of the project, I gave some guidelines: I wanted a diversity of color, region, and size. I wanted to focus on everything from weeds to flowering trees, so that people understood the varieties of flowering plants in Florida. And I wanted 500 – one for every year of the anniversary.

Dr. Richard P. Wunderlin at the University of South Florida led the effort in selecting the 500 wildflowers. All 500 flowers featured on the project website link back to their respective pages in the Florida Atlas of Vascular Plants website he's developed, www.florida.plantatlas.usf.edu.

### 500 Artists

I then invited 500 Florida artists to go out into their communities and find and depict those 500 flowers. Curators across eight regions are actively recruiting professional artists who will learn about these wildflowers and portray them for others to enjoy. Importantly, the artists license their artwork as creative commons so that schools and libraries throughout Florida are free to download and exhibit the works in their communities.

The 500 art pieces and information about each artist and flower are exhibited as a virtual bouquet on the project website.

### 500 Gardens:

Students from 500 Florida schools and libraries are being encouraged to plant 500 wildflower gardens and dedicate them to one of 500 historic Florida figures selected by our team of historians.

Librarians wanting to create FLOR500 gardens are asked to:

- Review the FLOR500 list of featured honorees in the their region and select a historic figure they want to honor when they plant their public wildflower garden.
- Begin to develop a class/library project or process (such as a collaborative work or a contest) where students/ library visitors create an original portrait of the selected historic figure. They may also submit a 250-word essay (about the honoree and/or why the library is honoring this person), and reference materials and links to information about the honoree.
- Libraries will receive a box of seeds from Foundation co-op mid-summer. They will plant the seeds in their

- garden. At the planting ceremony, participants will read the essay and display the portrait.
- Librarians will document the dedication celebration and upload photos, portraits and essays online.

### 500 Historic Figures

The roster of 500 includes individuals who have helped mold our state's history since March 3, 1513, when Ponce de Leon set sail from Puerto Rico on the Santa Maria de Consolación, Santiago, and San Cristóbal. The list of individuals was compiled by historians from history museums across the state under the leadership of Dr. Jeana Brunson at the Museum of Florida History.

The first FLOR500 garden was planted at the Museum of Florida History in Tallahassee on March 22, 2012 and dedicated to the indigenous people of Florida. We planted *Coreopsis lanceolata*, the official state wildflower.



The first FLOR500 Garden featured *Coreopsis lanceolata*, the official state wild-flower. It was planted in front of the Museum of Florida History in Tallahassee, Florida on March 22, 2012 and dedicated to Florida's indigenous people. From left to right, Florida artist Xavier Cortada, Secretary of State Ken Detzner and Jeff Caster from DOT plant Florida wildflowers outside the R.A. Gray building. PHOTO BY GLENN BEIL/Democrat

On November 27, another garden was dedicated in Miami's Vizcaya Museum and Gardens to Juan Ponce de Leon and the Taino people of the Caribbean he left behind as he journeyed to Florida. There, at the edge of Biscayne Bay, the place he sailed by 500 years ago now has three species planted in his name:

- FLOR#458 Blue Porterweed (*Stachytarpheta jamaicensis*)
- FLOR#474 Scorpionstail (Heliotropium angiospermum)
- FLOR #490 Rockland Shrubverbena (Lantana depressa)

During the rest of 2013, I will be visiting other Florida cities to plant similar FLOR500 gardens. In March I planted a garden at a library in Naples. This month, I'll be planting another in a parochial school in Fernandina Beach and at a gallery in Gainesville. The next four gardens are slated for the fall in Pensacola, Tampa, Orlando and Stuart.

### Beyond 500

The FLOR500 project marks the importance of the moment when the history of our state changed forever and gives us a glimpse of what its landscape was like 500 years ago.

These gardens are created to inspire Floridians to replicate the effort and plant gardens at home to honor the natural history of Florida and of its people. The more that participate, the stronger the project.

Indeed, all Floridians are asked to participate in the 500<sup>th</sup> anniversary by growing native wildflower gardens at home, and in the process, help reduce drought and improve biodiversity.

Each time I visit a new community to plant a garden, I invite 100 participants to transform one of my original drawings of a Florida wildflower into 100 living gardens. My drawing is cut into 100 tiled pieces; each tile comes with a packet of Florida wildflower seeds. Participants are asked to take the drawing and seeds home and plant a garden dedicated to a Floridian that is special to them — anyone who currently lives or who has lived in Florida during the past 500 years.

In the process, not only will they pay tribute to someone special in their lives, but they will learn about their environment and help improve Florida's biodiversity by growing native plants.

Upon planting the garden, they are asked to upload the dedication and their photos online at <a href="https://www.flor500.com">www.flor500.com</a>.

### Virtual Presence

The project does have a strong virtual presence on the web and on facebook.com/flor500.

I use the Internet to help scale up and support my participatory eco-art projects. It is an efficient way to inform individuals about how they can engage in the project locally and provide a platform for them to communicate what they've created and see what others have done elsewhere.

As more people commit themselves to addressing the problem, it helps to know that they are not going at it alone. It is inspiring to know that there are others out there just as passionate about solving a particular problem and just as active in solving it.

In a time when we can feel so disconnected, large-scale projects unify us in our resolve and allow us to engage in trans-community rituals that bring us together across all sorts of divides.

### **New Ways of Thinking**

FLOR500 is a huge undertaking. It has lots of reach. But it isn't just about numbers and inspiration, it is also

about innovation. Having more people engaged in artmaking means that they are thinking more creatively and that generates more opportunities for innovation.

These projects, in essence, serve as an invitation for people to come, experience, and act. Through their participation they can provide valuable feedback on how to make the process and project better.

But the biggest contribution comes in that participants are asked to imagine, to see things differently, and help innovate new ways of thinking about things. Indeed, these projects serve as platforms for them to create new projects of their own.

The effort furthers my long-standing commitment to eco-art projects that engage the community and expose human impact on the environment.

My hope is that by planting one garden at a time, we are planting seeds of change. Change that is needed so that when we, as a community of engaged individuals, look to the next 500 years, we can find better ways to coexist with nature. And with one another.

### **About the Artist**

Xavier Cortada created art at the Earth Poles to generate environmental awareness at every point in between. In 2007, the artist used the moving ice sheet beneath the South Pole as an instrument to mark time; the art piece will be completed in 150,000 years. In 2008, Cortada planted a green flag at



Xavier Cortada

the North Pole to encourage reforestation in the world below (see www.nativeflags.org).

Cortada often collaborates with scientists in his artmaking: Cortada used samples (and inspiration) provided by researchers in

Antarctica to create his National Science Foundation-sponsored works there. He has also worked with a population geneticist on a project exploring our ancestral journeys out of Africa 60,000 years ago, with a molecular biologist to synthesize an actual DNA strand made from a sequence randomly generated by participants visiting his museum exhibit, and with botanists in eco-art projects to reforest mangroves, native trees and wildflowers. At CERN, Cortada worked with a physicist to develop a site-specific art installation and performance piece capturing the five search strategies which the CMS experiment has used to discover a new Higgs-like particle.

Cortada serves as Artist-in-Residence at Florida International University's (FIU) College of Architecture + The Arts (CARTA).

# Sharing Memories With Butterflies

Article and photos by Bill Berthet

I'm a butterfly hunter and have traveled the world to photograph interesting butterflies, but there are some amazing butterflies right here in Northeast Florida. I have wonderful memories of photographing butterflies in Jennings State Forest, Branan Field Mitigation Park Wildlife and Environmental Area, Ralph E. Simmons Memorial State Forest, Sawmill Slough Preserve on the University of North Florida campus, and at Little Talbot Island State Park, one of the few remaining undeveloped barrier islands in Northeast Florida. It's not hard to find butterflies, if you know where and when to look.







### Photos:

- 1. 'Sweadner's' Juniper Hairstreak (*Callophrys gryneus sweadneri*)
- 2. Yehl Skipper (*Poanes yehl*)
- 3. Berry's Skipper (Euphyes berryi)
- 4. Dion Skipper (Euphyes dion)
- 5. Dotted or Seminole Skipper (*Hesperia attalus slossonae*)
- 6. Appalachian Brown (Satyrodes appalachia)
- 7. 'Sweadner's' Juniper Hairstreak (Callophyrs gryneus sweadneri)
- on red cedar (Juniperus virginiana)
- 8. Eastern Pygmy-Blue (Brephidium isophthalma)
- 9. Mourning Cloak (Nymphalis antiopa)
- 10. Mourning Cloak (*Nymphalis antiopa*)
- 11. Meske's Skipper

- (Hesperia meskei straton)
- 12. Eastern Tailed Blue (Cupido comyntas)
- 13. Dusky Road-Side Skipper (*Amblyscirtes alternata*)

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### **Sharing Memories With Butterflies**

### Jennings State Forest

Ever been down a dusty potholed road? Live Oak Lane can sometimes be that way, but during the months of September and October, this lane, continuing to the power line road, has a long parade of Spanish needles (*Bidens alba*), as well as *Carphephorus*, *Liatris*, *Elephantopus*, *Vernonia*, and other flowering plants that attract critters. During a six-hour survey last September, I observed 45 different butterflies and recorded the findings on the North American Butterfly Association website (<a href="http://sightings.naba.org/sightings/850">http://sightings.naba.org/sightings/850</a>). Notable finds included 'Sweadner's' Juniper Hairstreak (*Callophrys gryneus sweadneri*) on elephants foot (*Elephantopus* spp.), and Yehl Skipper (*Poanes yehl*) S2/S3 whose immature stage feeds on switchcane (*Arundinaria gigantea*) (photos 1, 2).

Butterfly diversity and numbers increase near the moist or water-filled areas along the power line road – check hog wallows or seasonally flooded drainage areas. Carolina redroot (*Lachnanthes caroliana*) is the flower with the power to attract some seldom seen butterflies, including Berry's Skipper (*Euphyes berryi*) S1/S2, and Dion Skipper (*Euphyes dion*) S2/S3 (photos 3, 4). Wearing snake boots, walk this area, about two football fields in size. If you're fortunate you may find one or two redroot plants in a small opening, hidden and surrounded by tall grasses, where Berry's Skippers are nectaring. What a thrilling moment when you find and photograph a butterfly this rare! In Florida, sedges in the genus *Carex* act as the host plant for both of these skipper species.

### Branan Field Wildlife and Environmental Area

This 386-acre area, 13 miles southwest of Jacksonville, was established in 1989 as a Gopher Tortoise mitigation preserve through the Florida Fish and Wildlife Mitigation Park Program. During the months of August and September, in open pine flatwoods, you may scare up Dotted or Seminole Skippers (*Hesperia attalus slossonae*) S3, nectaring on *Liatris* and *Vernonia* (photo 5).

### My Home Butterfly Garden

Sometimes exciting memories are made in your own butterfly garden. Arriving home on a sunny, windless Saturday afternoon in September, I looked out the driver's side window and exclaimed "WHOA NELLIE...could it be...?" and ran to grab the camera. A few quick clicks and the butterfly was gone. After checking the *Butterflies through Binoculars* field guide, I was able to identify the rare Dukes' Skipper (*Euphyes dukesi calhouni*) S1, that had been nectaring in the front yard. This butterfly's immature stage feeds on sedges in the genera *Carex* and *Rhynchospora*.

### Sawmill Slough Preserve

On an April afternoon walk in this 382-acre wooded wetland habitat, stretching through the western portion of the University of North Florida campus, I came across a brown butterfly about

two inches in size, perched on a rotting tree trunk. It was the seldom seen Appalachian Brown (*Satyrodes appalachia*) S2 (photo 6). I took one step closer and the butterfly flew off like a bullet, back into its swampy habitat. This butterfly's immature stage feeds on sedges in the genera *Carex* and *Rhynchospora*.

### Little Talbot Island State Park

While driving towards the ranger station, watch for 'Sweadner's' Juniper Hairstreak (*Callophyrs gryneus sweadneri*) perched or flying high on or near the tops of its host tree, red cedar (*Juniperus virginiana*) (photo 7). If Spanish needles (*Bidens alba*) are in bloom, check to see if one of these rapidly flying, gorgeous green hairstreaks has stopped for a snack.

One of the tiniest butterflies in Florida, the Eastern Pygmy-Blue (*Brephidium isophthalma*) (photo 8) can be found nectaring on fogfruit (*Phyla nodiflora*) growing near the salt marsh tidal flats where this teeny butterfly's predominant host plants — annual glasswort (*Salicornia bigelovii*) and perennial glasswort (*Salicornia ambigua*) grow. This butterfly's immature stage can respire in the water, helping it adapt to the harsh salt marsh environment, and the daily ebb and flow of tides.

### Ralph E. Simmons Memorial State Forest

This forest's 3,638 acres include longleaf pine/turkey oak scrub/wiregrass communities, sandhills, seepage slopes, bottom land forest, and slope forest along the St. Mary's River, which borders Georgia. Butterflies abound, and from January to March, they are attracted to trees in the genus *Prunus*. Looking like semi-round twenty foot tall snowballs when in full bloom, Chickasaw plum, flatwoods plum and black cherry all attract numerous pollinators.

During the months of March and April, the longleaf pine/turkey oak scrub/wiregrass communities start displaying new growth, including the lovely sundial lupine (*Lupinus perennis*), the host and nectar plant of the Frosted Elfin (*Callophrys irus arsace*) S1.

At the same time, flowers in the genus *Vaccinium* take center stage in attracting nectaring invertebrates, and you may get a rare glimpse of the Dusky Roadside-Skipper (*Amblyscirtes alternata*) S1/S2, a timid and small fast flying skipper that can be a challenge to photograph.

If all the stars align just right you may get to enjoy watching a Mourning Cloak (*Nymphalis antiopa*) SU, as it glides down in a zigzag pattern from the canopy of the forest, landing on fresh horse dung (photos 9, 10). Good luck getting a close photo! I have observed this butterfly's gregarious immature stage feeding on sugarberry (*Celtis laevigata*) and Carolina willow (*Salix caroliniana*).

September and October can be oozing butterfly diversity and numbers along trails that have flowers in the genera *Lachnanthes*, *Carphephorus*, *Liatris*, *Diodia*, *Dalea*, *Vernonia*, *Solidago*, and *Elephantopus*. Along with the largest diversity of the year, there also can be large numbers of a single seldom seen butterfly. For instance, I saw 24 Meske's Skippers (*Hesperia meskei straton*) S2/S3, in a few hours (photo 11). Nineteen were on one side of

the trail nectaring on *Carphephorus* and *Liatris*, flanked by nine more nectaring on flowers in the genus *Dalea*.

In March 2009 I spotted a small blue butterfly and figured it was a Summer Azure (*Celastrina neglecta*). Raising my trusty Eagle Optics 8 x 42 binoculars I noticed tails. Azures don't have tails, so this was the Eastern Tailed Blue (*Cupido comyntas*) S2, (photo 12). Several months later and nearly in the same spot, I caught my one and only glimpse of the American Snout (*Libytheana carinenta*).

Over the past five years, I have observed and photographed upwards of eight fall brooded Dusky Road-Side Skippers (*Amblyscirtes alternata*) S2, nectaring on *Diodia* in late August to the middle of September along the "*Diodia*" trail at Simmons State Forest (photo 13). Talk about frustrating – while you are crawling, trying to get

close enough to obtain a good image of these little guys, they are saying, "See ya later!" as they disappear off into the pine forest.

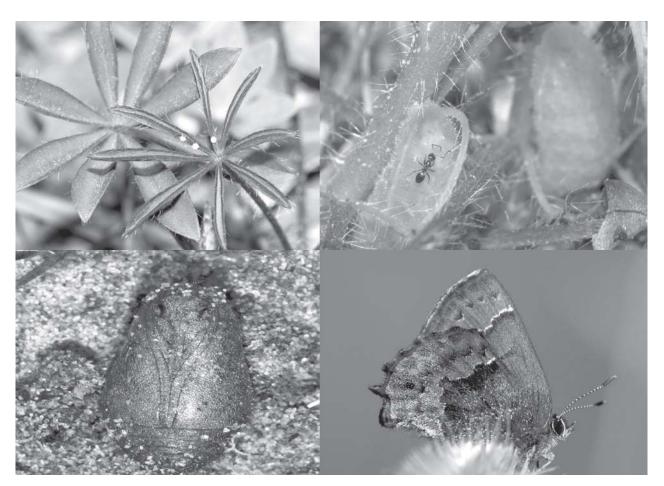
Exploring the bottomland forest, I saw my first Lace-winged Roadside-Skipper resting on an open leaf. What a gorgeous sight, illuminated by a light gap penetrating through the forest canopy! Another amazing experience was discovering and photographing a Hackberry Emperor (*Asterocampa celtis*) lapping up sap oozing from the bark of a tree.

Over years of looking for and photographing butterflies around the world, I have used the mantras "Today's The Day" and "Hope Springs Eternal" for keeping my motor running strong. I hope you will decide "Today's The Day" and visit some of the wonderful natural areas listed here. You never know what you'll see flying by.

### A Note About Ranking

Some of the butterflies mentioned in this article are rare and are ranked from S1 to S3. Ranks are based on many factors, including abundance, geographic range, relative threat of destruction, and ecological fragility. The Florida Natural Areas Inventory, (<a href="mailto:fnai.org">fnai.org</a>) a nonprofit organization dedicated to gathering, interpreting, and disseminating information critical to the conservation of Florida's biological diversity, defines state ranks for Florida as follows:

- S1 = Critically imperiled in Florida due to extreme rarity (5 or fewer occurrences or less than 1000 individuals) or extreme vulnerability to extinction due to some natural or man-made factor.
- S2 = Imperiled in Florida due to rarity (6 to 20 occurrences or less than 3000 individuals) or vulnerability to extinction due to some natural or man-made factor.
- S3 = Either very rare and local in Florida (21-100 occurrences or less than 10,000 individuals) or found locally in a restricted range or vulnerable to extinction from other factors.
- S4 = Apparently secure in Florida (may be rare in parts of range).



Metamorphosis of the Frosted Elfin Butterfly (*Callophrys irus arsace*). March – April, Ralph E. Simmons Memorial State Forest, Nassau County, Florida.



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