

# Wildflower Surveys, 2010 and 2011: Corkscrew Swamp Vicinity

## Interim Report December 20, 2010

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### INTRODUCTION

The goal of these surveys is to document routes that motorists, cyclists, and hikers can view showy stands of native wildflowers. Surveys of the Corkscrew Swamp vicinity are part of an ongoing effort to expand the number of routes for viewing Florida native wildflowers.

This report represents the cumulative results of our site evaluations based on our observations in spring (reconnaissance trip) through fall 2010; sites will be re-surveyed in spring 2011. Survey dates were based on the experience of the investigators

### METHODS

The surveys of Corkscrew sites were primarily walking forays. The surveys were conducted on the following dates:

- Spring (reconnaissance trip) – April 4, 5
- Summer – June 8, 9
- Fall – October 26, 27

Our goal was to provide the best possible route that:

1. Highlighted showy stands of native wildflowers and native wildflower communities typical of a region.
2. Occurred along roadsides and where applicable, natural areas (parks, wildlife management areas, Forest Roads, etc.) easily accessible to the public that occur along those routes.

We presumed that within a region routes may vary by season.

We proposed to utilize methods similar to those used for the survey of the St. Johns River-to-Sea Bike Loop as listed below.

- Site has existing showy native wildflower or grass species that are flowering
  - **Enhancement** – Has (or has the potential to be) substantial, aesthetically-pleasing impact, if managed appropriately, the existing native wildflower species should be sustainable, and the extent of species should expand.
  - **View only** – All Corkscrew sites (all but one occur in parks, preserves, etc.; the other occurs on private land)

- **New planting** – Site is suitable for establishing a native wildflower planting that would have substantial, aesthetically-pleasing impact.
- **Do not develop** – Sites to avoid developing into or establishing as a native wildflower site:
  - Sites that would have had potential as new wildflower sites but were excluded because of invasive, nonnative species.

'Existing Species' refers to species within the right-of-way (ROW) as well as showy native species immediately adjacent to the ROW and easily seen. Species are referred to by their scientific name; common names of all species mentioned in this report are listed in Table 1 (p. 24).

All information and statements about each site reflect our consensus opinion.

Since all sites were on state or privately owned land, for all sites:

- We described the site, and recorded GPS coordinates (accurate to 5 m or less) and at least one digital image
- Indicated the best season(s) to view wildflowers.

A full-color map, ESRI-compliant shape files, and accompanying Excel spreadsheets will be generated for the final report.

## RESULTS

This Route is unlike those of the Big Bend or Panhandle in that the PhotoSites in this region are comprised mainly of important natural areas in Collier, Lee, and Hendry counties that are connected by a network of major roads and highways. These parks and preserves provide a varied collection of readily accessible short walks—some on attractive and easy-to-negotiate boardwalks—all of which feature an assortment of native wildflowers embedded within excellent examples of southwest Florida's natural ecosystems.

The exceptions are outstanding wildflower displays on CR 832 in or near the Okaloacoochee Slough State Forest (see pp. 14, 18, 19).

On our reconnaissance trip in early April, and our trip in June, significant showy displays roadside wildflowers were few and far between. The limited displays seemed to be due in large part to practices used to manage roadside ditches and swales. Vegetation in ditches and swales often was mechanically or chemically eradicated, which all but eliminated the possibility of showy native wildflowers that often colonize moist roadsides, especially in rural areas.

Showy displays of fall wildflowers was unexpectedly limited, especially given the excellent displays in the Big Bend and Panhandle, and that all PhotoSites of the Corkscrew Wildflower Routes were not subjected to mowing

PhotoSite was the term we used to describe the wildflower and wildflower communities we observed in the Big Bend and Panhandle; to be consistent, we used the same terminology for the Corkscrew region.

All PhotoSites in the Corkscrew Swamp vicinity were classified as ‘**View Only**’ since all locations were on state or privately owned land. PhotoSites are mainly in parks, preserves, etc. The only roadside PhotoSites are on CR 832 in Hendry County (in or near the Okaloacoochee Slough State Forest).

One of the potential Photosites mentioned in our summer interim report was Bird Rookery, part of the Corkscrew Regional Ecosystem Watershed (CREW) Land Water & Trust. Public access to the tram trail is expected by the end of 2011 so the Bird Rookery is included as PhotoSite in this report.

The second potential PhotoSite mentioned in our summer interim report was Estero Bay Preserve State Park (Lee County). Based on our summer visit, we decided not to re-visit the site in the fall. A significant amount of trail work remains before this site would be suitable for viewing wildflowers in a salt marsh community. This site is undergoing major restoration efforts, including the removal of existing nonnative and invasive trees, which has left it in disarray and in some places not particularly attractive. We will contact land managers prior to our spring trip to southwest Florida to determine whether a second visit is warranted based on the proposed dates when substantial restoration progress is likely to be completed. Accessibility and trail development were such that we can not recommend Estero Bay Preserve State Park as a PhotoSite at this point. Species observed on June 9 were: *Bidens alba*, *Borrchia frutescens*, *Buchnera americana*, *Coreopsis leavenworthii*, *Eupatorium mikanioides*, *Flaveria linearis*, *Galactia elliottii*, *Ipomoea saggitata*, *Phyla nodiflora*, *Pluchea foetida*, *Pluchea odorata*, *Polygala grandiflora*, *Rhynchospora colorata*, and *Sabatia stellaris*.

Other observations, issues, and suggestions that we want to highlight:

1. Recently burned forested areas and savannahs are good areas to view wildflowers, especially 2 to 4 weeks after a warm season burn.
2. Unlike the Big Bend and Panhandle area where moist to periodically inundated roadside ROWs in nonshaded sites located in nonresidential, rural areas frequently have showy displays of native wildflowers, vegetation in roadside ditches in Collier and Lee Counties is routinely eradicated.
3. Wildflower blooming times [as well as length of the blooming period] can be strongly affected by environmental conditions, especially by time elapsed since prescribed fire, so what we observed blooming might not be in bloom to the same degree in future years. For example, in fall 2009 there were spectacular displays of *Helianthus* spp. at the CREW Land & Trust Marsh Trail (see Anecdotal Obs. 2, p. 30) as well as at Audubon's Corkscrew Sanctuary.
4. We did not mention any ‘**New planting**’ sites because all PhotoSites were within lands managed by state agencies or private organizations.

## PhotoSites

Because of the nature of these locations, descriptive information (starting on the next page) is formatted differently than PhotoSites of the Big Bend and Panhandle.

*Note: The reconnaissance trip was on April 5-6, 2010, so the spring species observed do not necessarily represent a thorough accounting of species; a more thorough spring survey will be conducted in late March/early April 2011.*

- Corkscrew Swamp Audubon Sanctuary
- Corkscrew Regional Ecosystem Watershed (CREW) Trails
- CR 832, Hendry County
- Okaloacoochee Slough State Forest
- Koreshan State Historic Park
- Six-Mile Cypress Slough Preserve

PhotoSite details begin on the next page. Page locations for images of species in this report are referenced in parentheses.

PhotoSite / No.: Corkscrew Swamp Sanctuary / CS-1  
Ownership: Audubon Society  
Address: 375 Sanctuary Road West, Naples, FL 34120  
GPS: +26.375973 / -81.603470  
Web: <http://www.corkscrew.audubon.org/>  
Fee: Yes

Corkscrew Swamp Sanctuary offers a 2.25-mile raised boardwalk (suitable for strollers and wheel chairs) traversing four distinct natural communities, including pine upland, wet prairie, cypress swamp, and freshwater marsh. A shorter, 1-mile loop is also available.

Spring wildflowers (observed 4-6-10)

*Coreopsis leavenworthii*, *Iris hexagona* (p. 23), *Pontederia cordata*, *Sacoila lanceolata* var. *paludicola* (below), *Sagittaria graminea*, *Thalia geniculata* (p. 7), *Tillandsia fasciculata* (below), *Dendrophylax lindenii* (syn. *Polyrrhiza lindenii*; the famous Ghost orchid).



*Sacoila lanceolata* var. *paludicola*

*paludicola*



*Tillandsia fasciculata*

*Tillandsia fasciculata*



Summer wildflowers (observed 6-9-10):

*Ampelopsis arborea*, *Bidens alba*, *Cephalanthus occidentalis*, *Chamaecrista fasciculata*, *Cirsium lecontei*, *Conoclinium coelestinum*, *Coreopsis leavenworthii* (p. 16), *Crinum americanum* (below), *Eryngium yuccifolium*, *Helianthus agrestis*, *Hibiscus coccineus* (below), *Hibiscus grandiflorus* (p.18), *Ipomoea sagittata* (see p. 7), *Itea virginica*, *Kosteletzkya pentacarpos* (below), *Lythrum alatum* var. *lanceolatum* (below), *Melanthera nivea*, *Phyla nodiflora*, *Pluchea baccharis* (p. 10), *Polygala baldunii* (p. 19), *Pontederia cordata*, *Rhynchospora colorata*, *Sagittaria graminifolia*, *Sambucus nigra* subsp. *canadensis*, *Thalia geniculata* (p. 7)



Fall wildflowers (observed 10-27-10):

*Baccharis halimifolia*, *Bidens alba*, *Boltonia diffusa*, *Crinum americanum* (p. 6), *Elephantopus elatus*, *Eulophia alta* (p. 12), *Euthamia caroliniana*, *Hamelia patens*, *Hypericum cistifolium*, *Hyptis alata*, *Ipomoea alba*, *Ipomoea sagittata* (below), *Itea virginica*, *Ludwigia peruviana* (questionably native), *Melanthera nivea*, *Mikania scandens* (p. 8), *Oxypolis filiformis* (p. 17), *Polygonum hydropiperoides*, *Pontederia cordata*, *Saccharum giganteum*, *Sagittaria lancifolia*, *Sarcostemma clausum* (below), *Solidago fistulosa*, *Solidago stricta*, *Symphotrichum carolinianum* (p.13), *Thalia geniculata* (below)





**No.: CS-1a, Bird Rookery Trail**

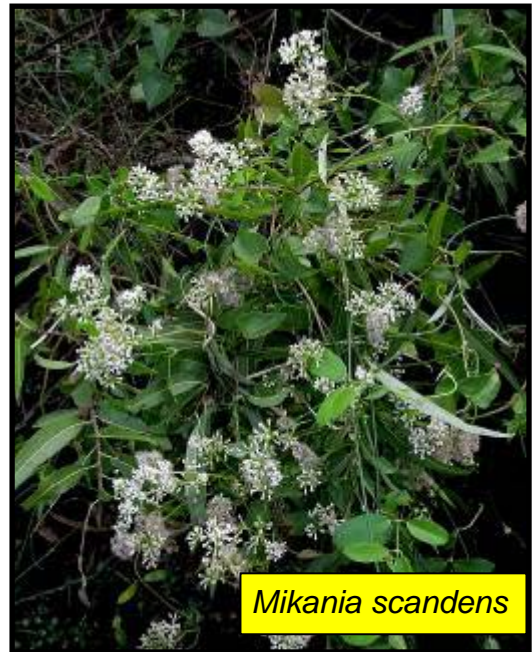
**Location: Trailhead entrance on**

**GPS (lat./long.): +26. 314362/ -81.635002 (boardwalk entrance)**

We were made aware of this site in the summer. At that time, we only observed a very small portion of the area, a short walk from the roadside parking area to the boardwalk at the trailhead. The area accessible to the public will be a ~10-mile tram road that surrounds a swamp. The north end of this site borders the south end of Audubon's Corkscrew Sanctuary.

Fall wildflowers (10 mile tram road):

*Bidens alba*, *Canna flaccida*, *Crinum americanum* (p. 6), *Hamelia patens*, *Ipomoea alba*, *Ipomoea cordatotriloba*, *Ludwigia peruviana* (questionably native), *Mikania scandens* (below), *Nymphaea odorata*, *Polystachya concreta* (below), *Pontederia cordata*, *Sagittaria* sp. (prob. *S. filiformis*), *Solidago sempervirens*, *Thalia geniculata* (p. 7), *Utricularia foliosa* (p. 17)





**No.: CS-2, Cypress Dome Trail**

**Location: Trailhead entrance on CR 850 (Corkscrew Rd.), ~5 miles south of SR 82**

**GPS (lat./long.): +26.456110 / -81.562752**

CREW Cypress Dome Trails combines two trails, varying from 1.4 to 2.5 miles long. The trails traverse pine flatwoods, seasonal freshwater marshes and the margins of cypress domes.

Spring and summer wildflowers the same as the Marsh Trail.

Fall wildflowers observed (10-26-10):

*Carphephorus corymbosus* (p. 22), *Elephantopus elatus*, *Eryngium aromaticum* (below), *Euthamia caroliniana*, *Hypericum crux-andreae*, *Liatris tenuifolia* (below), *Melochia corchorifolia* (below), *Piloblephis rigida*, *Solidago odora*



**PhotoSite:** Corkscrew Regional Ecosystem Watershed (CREW)  
**Ownership:** CREW Land and Water Trust  
**Address:** 23998 Corkscrew Road, Estero, FL 33928  
**Web site:** <http://www.crewtrust.org/>  
**Fee:** No

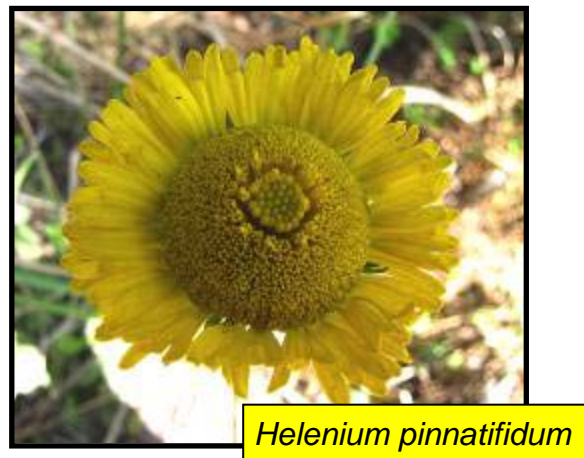
**No.:** CS-3, Marsh Trail

**Location:** Trailhead entrance on CR 850 (Corkscrew Rd.), ~1.5 miles south of SR 82  
**GPS (lat./long.):** +26.49244 / -81.53416

CREW Marsh Trail offers more than 5 miles of trails through pine flatwoods, sawgrass marsh, oak hammocks, pop ash sloughs, and along seasonal ponds. Shorter walks can be fashioned via numerous loops. A trail map is available at each trailhead.

Spring wildflowers observed (4-5-10):

*Amorpha fruticosa*, *Buchnera americana* (p. 20), *Chaptalia tomentosa* (below), *Coreopsis leavenworthii* (p. 16), *Crotalaria* sp., *Gaura angustifolia*, *Helenium pinnatifidum* (below), *Heliotropium angiospermum* (below), *Hieracium megacephalon*, *Hypericum crux-andreae*, *Linaria canadensis* (p. 14), *Lobelia feayana*, *Melanthera parvifolia*, *Piloblephis rigida*, *Pinguicula pumila*, *Polygala nana*, *Polygala grandiflora*, *Rhynchospora colorata*, *Rudbeckia hirta*, *Ruellia caroliniensis*, *Sabatia stellaris* (below), *Salvia lyrata*, *Samolus ebracteatus*, *Sisyrinchium angustifolium*, *Viola* sp.





Summer wildflowers (6-8-10):

*Asclepias lanceolata*, *Asclepias tuberosa* (below), *Asimina reticulata*, *Bacopa monnieri*, *Bejaria racemosa*, *Bidens alba*, *Buchnera americana* (p. 20), *Callicarpa americana*, *Calopogon tuberosus*, *Chamaecrista fasciculata*, *Conoclinium coelestinum*, *Coreopsis leavenworthi* (p. 16), *Elytraria caroliniensis*, *Eryngium yuccifolium*, *Gallactia elliottii*, *Heliotropium polyphyllum* (p. 10), *Hypericum cistifolium*, *Hypericum crux-andreae*, *Hypericum tenuifolium*, *Ipomoea sagittata* (p. 8), *Justicia angusta* (p. 12), *Kosteletzkya pentacarpos* (p. 6), *Lygodesmia aphylla*, *Lyonia fruticosa*, *Melanthera nivea*, *Melochia spicata* (below), *Mitreola petiolata*, *Penstemon multiflorus*, *Physostegia purpurea* (below), *Pinguicula pumila*, *Pluchea baccharis* (below), *Polygala baldunii* (p. 19), *Polygala grandiflora*, *Polygala incarnata*, *Pterocaulon pycnostachya*, *Rhynchospora colorata*, *Rudbeckia hirta*, *Ruellia caroliniensis*, *Sabatia stellaris* (p. 10), *Sagittaria lancifolia*, *Teucrium canadense*, *Vernonia blodgettii* (below)



*Asclepias tuberosa*



*Physostegia purpurea*



*Vernonia blodgettii*



*Pluchea baccharis*

Fall wildflowers/ showy grasses observed (10-26-10):

*Acmella oppositifolia*, *Aristida spiciformis*, *Baccharis halimifolia*, *Bacopa monnieri*, *Bidens alba*, *Boltonia diffusa*, *Buchnera americana* (p. 20), *Carphephorus odoratissimus*, *Chrysopsis mariana*, *Conoclinium coelestinum*, *Coreopsis floridana*, *Coreopsis leavenworthii* (p. 16), *Elephantopus elatus*, *Elytraria caroliniensis*, *Eulophia alata* (below), *Euthamia caroliniana*, *Flaveria linearis*, *Hydrolea corymbosa*, *Justicia angusta* (below), *Lilium catesbaei*, *Lobelia glandulosa*, *Melanthera nivea*, *Melochia corychorifolia* (p. 9), *Mikania scandens* (p. 8), *Mitreola sessilifolia*, *Oxypolis filiformis* (p. 16), *Pinguicula pumila*, *Pityopsis graminifolia* (p. 22), *Polygala baldunii* (p. 19), *Saccharum giganteum*, *Solidago sempervirens*, *Sorghastrum secundum*, *Stillingia aquatica*, *Symphyotrichum carolinianum* (p. 13), *Verbesina virginica* (p. 13)







*Verbesina virginica*



*Symphyotrichum carolinianum*

**PhotoSite /No.: CS-4**

**Location: CR 832, Hendry Co., about 2.9 miles east of SR 29**

**GPS (lat./long.): +26.583333 / -81.383333**

**Description: 10+ acres; private land on north side; spring PhotoSite only**

Spring wildflowers observed (4-6-10):

*Linaria canadensis*





**PhotoSite: Okaloacoochee (“OK”) Slough State Forest**

**Ownership: Florida Division of Forestry**

**Address: 6265 County Road 832, Felda, FL 33930**

**Web site: [http://www.fl-dof.com/state\\_forests/okaloacoochee.html](http://www.fl-dof.com/state_forests/okaloacoochee.html)**

**Fee: Required for some designated areas, and for use of some facilities**

This 32,000-acre state forest northeast of Immokalee spans Collier and Hendry County. PhotoSites for the OK Slough are easily accessible off CR 832 (Keri Road). There are three PhotoSites, CS-5, CS-6, and CS-7.

**No.: CS-5, Boardwalk Trail on Sic Island Road**

**Location: Sic Island Road – CR 832, about 3.9 miles east of SR 29; trailhead – less than 0.2 miles south of CR 832**

**GPS (trailhead; lat./long.): +26.59927 / -81.37430**

**Fee: No**

The short trail leads through flatwoods and terminates at a birding boardwalk overlooking a freshwater marsh. Wildflowers also occur along Sic Island Road north (~0.2 miles) and south (~0.6 miles) of the Boardwalk trailhead parking area.

Spring wildflowers (trail + Sic Island Road; 4-5-10):

*Cirsium horridulum*, *Cirsium nuttallii*,  
*Coreopsis leavenworthii* (p. 16),  
*Hibiscus* sp., *Pluchea odorata* (right),  
*Pontederia cordata*, *Sabatia stellaris* (p. 10), *Sagittaria lancifolia*, *Utricularia* sp.

Summer wildflowers (trail + Sic Island Road; 6-8-10):

*Conoclinium coelestinum*, *Coreopsis leavenworthii* (p. 16), *Phyla nodiflora*,  
*Pluchea odorata*, *Polygala lutea* (p. 16),  
*Rhynchospora colorata*, *Sabatia stellaris* (p. 10)









Fall wildflowers (observed 10-26-10):

*Boltonia diffusa*, *Oxypolis filiformis* (below), *Pontederia cordata*, *Sagittaria lancifolia*,  
*Utricularia foliosa* (below) *Utricularia purpurea* (below)



*Utricularia purpurea*



*Utricularia foliosa*



*Oxypolis filiformis*

No.: CS-6, CR 832

Location: CR 832, about 5.0 miles east of SR 29

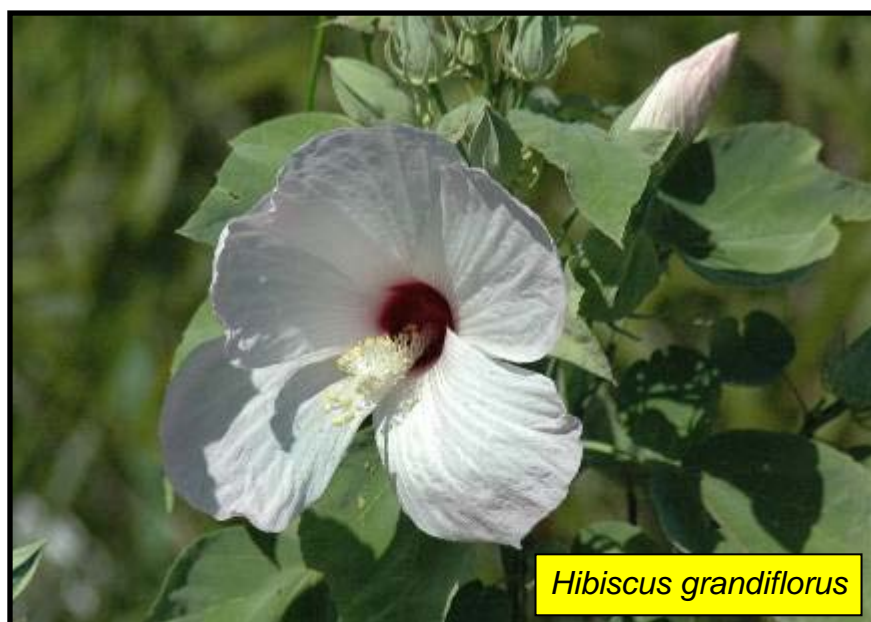
GPS (lat./long.): +26.60046 / -81.36643

Description: 5 acres; north side; summer PhotoSite only

Fee: No

Summer wildflowers (6-20-10):

*Hibiscus grandiflorus* (below; images recorded on 6-20-10 by Brenda Thomas, CREW),  
*Thalia geniculata* (p. 7)





No.: CS-7, CR 832 at Oil Well Pad Road  
Location: About 5.3 miles east of SR 29  
GPS (lat./long.): +26.60136 / -81.36002  
Fee: No

NOTE: This site was not apparent until summer, when it was extremely showy. The site was unexpectedly nonshowy in the fall.

Summer wildflowers (6-8-10):

*Bacopa moseiri*, *Bigelovia nudata* subsp. *australis* (below), *Caperonia castaneifolia*, *Coreopsis leavenworthii* (p. 16), *Elytraria caroliniensis*, *Hibiscus grandiflorus* (p. 18), *Linum medium*, *Mitreola petiolata*, *Phyla nodiflora*, *Pluchea baccharis* (p. 11), *Polygala balduinii* (below), *Rhynchospora colorata*, *Sabatia stellaris* (p. 10)



**PhotoSite / No.:** Koreshan State Historic Site / CS-8  
**Ownership:** Florida Division of Recreation and Parks  
**Address:** 3800 Corkscrew Road, Estero, FL 33928  
**GPS (trailhead; lat./long.):** +26.43601 / -81.81942  
**Web site:** <http://www.floridastateparks.org/koreshan/default.cfm>  
**Fee Required:** Yes

This 200-acre park is located in southern Lee County on Corkscrew Road, about 2.2 miles west of I-75. The park has a short, grassy trail (fire lane trail; ~0.3 miles) on the western edge of the park that borders a pine flatwoods on its east side. The flatwoods was burned in March 2010. As a result of the burn, many native wildflowers were scattered throughout the flatwoods and along the trail. To see the most wildflowers, ramble throughout the flatwoods, but seek permission first.

Summer wildflowers (6-9-10):

*Ageratina jucunda*, *Aletris lutea*, *Asimina reticulata*, *Bejaria racemosa*, *Buchnera americana* (below), *Callicarpa americana*, *Chamaecrista fasciculata*, *Coreopsis leavenworthii* (p. 16), *Diodia virginiana*, *Eupatorium mohrii*, *Euphorbia polyphylla*, *Hypericum reductum*, *Hypericum tetrapetalum*, *Indigofera caroliniana*, *Lachnocaulon anceps*, *Lobelia paludosus*, *Lygodesmia aphylla*, *Lyonia fruticosa*, *Mitreola sessifolia*, *Piloblephis rigida*, *Pluchea baccharis* (p. 11), *Polygala grandiflora*, *Polygala nana*, *Polygala setacea*, *Peltophorum pterocarpum*, *Rhexia mariana*, *Rhexia nutallii*, *Sabatia grandiflora* (below), *Scoila lanceolata* (p. 21), *Sagittaria graminifolia*, *Sagittaria lancifolia*, *Vaccinium myrsinites*, *Xyris caroliniana* (p. 21), *Xyris* sp. (p. 21)







*Xyris caroliniana*



*Sacoila lanceolata*



*Xyris sp.*



Fall Wildflowers/showy grasses (observed 10-26-10):

*Ageratina jucunda*, *Andropogon glomeratus*, *Aristida spiciformis*, *Aristida stricta*, *Balduina angustifolia*, *Bejaria racemosa*, *Bigelovia nudata* subsp. *australis* (p. 19), *Carphephorus corymbosus* (below), *Carphephorus odoratissimus*, *Chamaecrista fasciculata*, *Coreopsis leavenworthii* (p. 16), *Crotalaria rotundifolia*, *Eryngium aromaticum* (p. 9), *Euthamia caroliniana*, *Liatris tenuifolia* (p. 10), *Mikania scandens* (p. 8), *Mitreola sessilifolia*, *Muhlenbergia capillaris*, *Palafoxia feayi*, *Piloblephis rigida*, *Pityopsis graminifolia* (below), *Sabatia brevifolia*, *Saccharum giganteum*, *Sericocarpus tortifolius*, *Sorghastrum secundum*, *Xyris caroliniana* (p. 21)



PhotoSite / No.: Six Mile Cypress Slough Preserve / CS-9

Ownership: Lee County

Address: Six Mile Cypress Parkway, 1.5 miles north of Daniels Parkway, accessed via I-75 Exit 13

GPS (trailhead; lat./long.): +26.57132 / -81.82598

Web site: <http://www.leeparks.org/sixmile/>

Fee Required: Yes (parking)

This 2,500-acre county park includes a fully accessible 1.2-mile-long boardwalk traversing hammock, pine flatwoods, cypress slough, and lakeside habitats.

**Based on our spring, summer, and fall observations, this is a spring site noted mainly for showy displays of *Iris hexagona*.**

Spring wildflowers (4-6-10):

*Conoclinium coelestinum*, *Coreopsis leavenworthii* (p. 16), *Iris hexagona* (below), *Pontederia cordata*, *Sagittaria lancifolia*



*Iris hexagona*

The occurrence of summer and fall wildflowers was very sporadic: **summer** – *Bidens alba*, *Callicarpa americana*, *Cephalanthus occidentalis*, *Conoclinium coelestinum*, *Coreopsis leavenworthii* (p. 16), *Hypericum hypericoides*, *Ipomoea sagittata* (p. 7), *Lythrum alatum* var. *lanceolatum* (p. 6), and *Pluchea baccharis* (p. 11); **fall** – *Baccharis halimifolia*, *Bacopa caroliniana*, *Bidens pilosa*, *Melochia corchorifolia* (p. 9), *Mikania scandens* (p. 8), *Pontederia cordata*, *Sagittaria lancifolia*, *Sarcostemma clausum* (p. 7), *Symphytotrichum carolinianum* (p. 13), *Thalia geniculata* (p. 7), and *Utricularia* sp. (p. 17); nonnative: *Ludwigia peruviana* (questionably native)



Table 1. Scientific and common names of species mentioned in this report. The common names are those listed by the Atlas of Florida Vascular Plants (<http://florida.plantatlas.usf.edu/>) as of July 13, 2010. Form: WF = Wildflower; GR = Grass; SG = Sedge; SH=Showy shrub; VN = Showy vine; R = Rush; TR=Tree.

Scientific name	Type	Common name
<i>Acmella oppositifolia</i>	WF	Oppositeleaf Spotflower
<i>Ageratina jucunda</i>	WF	Hammock Snakeroot
<i>Aletris lutea</i>	WF	Yellow Colicroot
<i>Amorpha fruticosa</i>	WF	Bastard False Indigo
<i>Ampelopsis arborea</i> (showy fruit)	VN	Heartleaf Peppervine
<i>Andropogon glomeratus</i>	GR	Bushy Bluestem
<i>Aristida spiciformis</i>	GR	Bottlebrush Threeawn
<i>Aristida stricta</i>	GR	Wiregrass; Pineland Threeawn
<i>Asclepias lanceolata</i>	WF	Fewflower Milkweed
<i>Asclepias tuberosa</i>	WF	Butterfly Milkweed
<i>Asimina reticulata</i>	SH	Netted Pawpaw
<i>Baccharis halimifolia</i>	SH	Groundsel Tree
<i>Bacopa caroliniana</i>	WF	Blue Waterhyssop
<i>Bacopa monnieri</i>	WF	Herb-of-Grace
<i>Balduina angustifolia</i>	WF	Coastalplain Honeycombhead
<i>Bejaria racemosa</i>	SH	Tarflower
<i>Bidens alba</i>	WF	Beggarticks
<i>Bidens pilosa</i>	WF	Spanish Needles
<i>Bigelovia nudata</i> subsp. <i>australis</i>	WF	Pineland Rayless Goldenrod
<i>Boltonia diffusa</i>	WF	Smallhead Doll's Daisy
<i>Borrichia frutescens</i>	WF	Bushy Seaside Oxeye
<i>Buchnera americana</i> (also known as a <i>Buchnera floridana</i> )	WF	American Bluehearts
<i>Callicarpa americana</i>	SH	American Beautyberry
<i>Calopogon tuberosus</i>	WF	Tuberous Grasspink
<i>Campanula floridana</i>	WF	Florida Bellflower



<i>Canna flaccida</i>	WF	Bandanna-of-the-Everglades
<i>Caperonia castaneifolia</i>	WF	Chestnutleaf Falsecroton
<i>Carphephorus corymbosus</i>	WF	Florida Paintbrush
<i>Carphephorus odoratissimus</i>	WF	Vanillaleaf
<i>Chamaecrista fasciculata</i>	WF	Partridge Pea
<i>Chaptalia tomentosa</i>	WF	Wooly Sunbonnets
<i>Chrysopsis mariana</i>	WF	Maryland Goldenaster
<i>Cirsium lecontei</i>	WF	Leconte's Thistle
<i>Cirsium nuttallii</i>	WF	Nuttall's Thistle
<i>Cirsium</i> sp.	WF	Thistle
<i>Conoclinium coelestinum</i>	WF	Wild Ageratum
<i>Coreopsis floridana</i>	WF	Florida Coreopsis
<i>Coreopsis leavenworthii</i>	WF	Leavenworth's Coreopsis
<i>Crinum americanum</i>	WF	String-Lily
<i>Crotalaria rotundifolia</i>	WF	Rabbitbells
<i>Crotalaria</i> sp.	WF	Rattlebox
<i>Dendrophylax lindenii</i> ( <i>Polyrrhiza lindenii</i> )	WF	Ghost Orchid
<i>Diodia virginiana</i>	WF	Virginia Buttonweed
<i>Elephantopus elatus</i>	WF	Tall Elephantsfoot
<i>Elytraria caroliniensis</i>	WF	Carolina Scalystem
<i>Erigeron quercifolius</i>	WF	Oakleaf Fleabane
<i>Eryngium aromaticum</i>	WF	Fragrant Eryngo
<i>Eryngium yuccifolium</i>	WF	Button Rattlesnakemaster
<i>Eulophia alta</i>	WF	Wild Coco
<i>Eupatorium mikanioides</i>	WF	Semaphore Thoroughwort
<i>Eupatorium mohrii</i>	WF	Mohr's Thoroughwort
<i>Euphorbia polyphylla</i>	WF	Lesser Florida Spurge
<i>Euthamia caroliniana</i>	WF	Slender Flattop Goldenrod
<i>Flaveria linearis</i>	WF	Narrowleaf Yellowtops
<i>Galactia elliotii</i>	VN	Elliot's Milkpea

<i>Gaura angustifolia</i>	WF	Southern Beeblossom
<i>Hamelia patens</i>	SH	Firebush
<i>Helenium pinnatifidum</i>	WF	Southeastern Sneezeweed
<i>Helianthus agrestis</i>	WF	Southeastern Sunflower
<i>Heliotropium angiospermum</i>	WF	Scorpionstail
<i>Heliotropium polyphyllum</i>	WF	Pineland Heliotope
<i>Hibiscus coccineus</i>	WF	Scarlet Rosemallow
<i>Hibiscus grandiflorus</i>	WF	Swamp Rosemallow
<i>Hieracium megacephalon</i>	WF	Coastalplain Hawkweed
<i>Hydrolea corymbosa</i>	WF	Skyflower
<i>Hypericum cistifolium</i>	SH	Roundpod St. John's-Wort
<i>Hypericum crux-andreae</i>	SH	St. Peter's-Wort
<i>Hypericum hypericoides</i>	SH	St. Andrew's-Cross
<i>Hypericum tenuifolium</i> (= <i>reductum</i> )	SH	Atlantic St. John's-Wort
<i>Hypericum tetrapetalum</i>	SH	Fourpetal St. John's-Wort
<i>Hyptis alata</i>	WF	Clustered Bushmint
<i>Indigofera caroliniana</i>	WF	Carolina Indigo
<i>Ipomoea alba</i>	WF	Tropical White Morning-Glory
<i>Ipomoea cordatotriloba</i>	VN	Tievine
<i>Ipomoea sagittata</i>	WF	Saltmarsh Morning-Glory
<i>Iris hexagona</i>	WF	Dixie Iris
<i>Itea virginica</i>	SH	Virginia Willow
<i>Justicia angusta</i>	WF	Pineland Waterwillow
<i>Kosteletzkya pentacarpos</i>	WF	Virginia Saltmarsh Mallow
<i>Lachnocaulon anceps</i>	WF	Whitehead Bogbutton
<i>Liatris tenuifolia</i>	WF	Shortleaf Blazingstar
<i>Lilium catesbaei</i>	WF	Catesby's Lily
<i>Linaria canadensis</i>	WF	Canadian Toadflax
<i>Lobelia feayana</i>	WF	Bay Lobelia
<i>Lobelia glandulosa</i>	WF	Glade Lobelia



<i>Ludwigia peruviana</i> (questionably native)	WF	Peruvian Primrosewillow
<i>Lyonia fruticosa</i>	SH	Coastalplain Staggerbush
<i>Lythrum alatum</i> var. <i>lanceolatum</i>	WF	Winged Loosestrife
<i>Melanthera nivea</i> (= <i>parviflora</i> )	WF	Small-Leaf Squarestem
<i>Melochia corchorifolia</i>	WF	Chocolateweed
<i>Mikania scadens</i>	VN	Climbing Hempvine
<i>Mitreola petiolata</i>	WF	Lax Hornpod
<i>Mitreola sessifolia</i>	WF	Swamp Hornpod
<i>Muhlenbergia capillaris</i>	GR	Hairawn Muhly; Muhly Grass
<i>Nymphaea odorata</i>	WF	American White Waterlily
<i>Oxypolis filiformis</i>	WF	Water Cowbane
<i>Packera glabella</i>	WF	Butterweed
<i>Palafoxia feayi</i>	WF	Feay's Palafox
<i>Penstemon multiflorus</i>	WF	Manyflower Beardtongue
<i>Phyla nodiflora</i>	WF	Turkey Tangle Frogfruit; Capeweed
<i>Physostegia purpurea</i>	WF	Eastern False Dragonhead
<i>Piloblephis rigida</i>	WF	Wild Pennyroyal
<i>Pinguicula pumila</i>	WF	Small Butterwort
<i>Pityopsis graminifolia</i>	WF	Narrowleaf Silkgrass
<i>Pityopsis oligantha</i>	WF	Grassleaf Goldenaster
<i>Pluchea baccharis</i>	WF	Rosy Camphorweed
<i>Pluchea foetida</i>	WF	Stinking Camphorweed
<i>Pluchea odorata</i>	WF	Sweetscent
<i>Polygala balduinii</i>	WF	Baldwin's Milkwort
<i>Polygala grandiflora</i> ( <i>Polygala violaceae</i> )	WF	Showy Milkwort
<i>Polygala incarnata</i>	WF	Procession Flower
<i>Polygala lutea</i>	WF	Orange Milkwort
<i>Polygala nana</i>	WF	Candyroot
<i>Polygala setacea</i>	WF	Coastalplain Milkwort
<i>Polygonum hydropiperoides</i>	WF	Swamp Smartweed

<i>Pontederia cordata</i>	WF	Pickereel Weed
<i>Pterocaulon pycnostachyum</i>	WF	Blackroot
<i>Rhexia mariana</i>	WF	Pale Meadowbeauty
<i>Rhexia nutallii</i>	WF	Nuttall's Meadowbeauty
<i>Rhynchospora colorata</i>	SG	Starrush Whitetop
<i>Rudbeckia hirta</i>	WF	Blackeyed Susan
<i>Ruellia caroliniensis</i>	WF	Carolina Wild Petunia
<i>Sabatia brevifolia</i>	WF	Shortleaf Rosegentian
<i>Sabatia grandiflora</i>	WF	Largeflower Rosegentian
<i>Sabatia stellaris</i>	WF	Rose-of-Plymouth
<i>Saccharum giganteum</i>	GR	Sugarcane Plumegrass
<i>Sacoila lanceolata</i>	WF	Leafless Beaked Ladiestresses
<i>Sacoila lanceolata</i> var. <i>paludicola</i>	WF	Leafy Beaked Ladiestresses
<i>Sagittaria filiformis</i>	WF	Threadleaf Arrowhead
<i>Sagittaria graminea</i>	WF	Grassy Arrowhead
<i>Sagittaria lancifolia</i>	WF	Bulltongue Arrowhead
<i>Sambucus nigra</i> subsp. <i>canadensis</i>	SH	American Elder
<i>Samolus ebracteatus</i>	WF	Water Pimpernel
<i>Sarcostemma clausum</i>	VN	White Twinevine
<i>Sericocarpus tortifolius</i>	WF	Whitetop Aster
<i>Sisyrinchium angustifolium</i>	WF	Narrowleaf Blue-Eyed Grass
<i>Solidago fistulosa</i>	WF	Pinebarren Goldenrod
<i>Solidago odora</i>	WF	Anisescented Goldenrod
<i>Solidago sempervirens</i>	WF	Seaside Goldenrod
<i>Solidago stricta</i>	WF	Wand Goldenrod
<i>Sorghastrum secundum</i>	GR	Lopsided Indiangrass
<i>Sorghastrum secundum</i>	GR	Lopsided Indiangrass
<i>Stillingia aquatica</i>	SH	Water Toothleaf
<i>Symphyotrichum carolinianum</i>	WF	Climbing Aster
<i>Symphyotrichum carolinianum</i> (also known as <i>Ampelaster carolinianus</i> )	SH	Climbing Aster



<i>Teucrium canadense</i>	WF	Wood Sage
<i>Thalia geniculata</i>	WF	Alligatorflag
<i>Tillandsia fasciculata</i>	WF	Cardinal Airplane
<i>Utricularia foliosa</i>	WF	Leafy Bladderwort
<i>Utricularia purpurea</i>	WF	Eastern Purple Bladderwort
<i>Utricularia</i> sp.	WF	Bladderwort
<i>Vaccinium myrsinites</i>	SH	Shiny Blueberry
<i>Verbesina virginica</i>	WF	Frostweed
<i>Vernonia blodgettii</i>	WF	Florida Ironweed
<i>Viola</i> sp.	WF	Violet
<i>Xyris caroliniana</i>	WF	Carolina Yelloweyed Grass
<i>Xyris</i> sp.	WF	Yelloweyed Grass

#### NonNative

<i>Peltophorum pterocarpum</i>	TR	Yellow Poinciana
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## Appendix – Anecdotal Observations

Information about native wildflowers observed in the Corkscrew Swamp vicinity was provided by Brenda Thomas of the CREW Land & Water Trust, Estero. Anecdotal observations conveyed via email are direct quotes so as to avoid any misinterpretation.

### AnecObs1

#### Bird Rookery

“...Then it dawned on me last night that I gave you the wrong *Ophioglossum* species. It was not *palmatum*, but *petiolatum* I had seen growing on one of the logs in the ditch, side by side with *Malaxis spicata*.”



### AnecObs2

#### CREW marsh

“...I attached some pictures of the sunflowers in the marsh....”





### AnecObs3

Attached is a list of some of the more common, showy flowers (including a couple of gorgeous grasses) that you will find at the CREW Marsh Trails and CREW Cypress Dome Trails in Collier county. These trails are located in South Florida between Estero (Lee County) and Immokalee (Collier County) on Corkscrew Rd. (County Road 850). The variety of ecosystems at CREW creates a diversity of habitat choices and so CREW is known for its wildflowers. We hold a Wildflower Festival every March to showcase the beautiful flowers blooming that time of year. CREW Land & Water Trust was established in 1989 to coordinate the land acquisition, management, and public access for the 60,000-acre Corkscrew Regional Ecosystem Watershed.

Common Name	Scientific Name	Date or Season	Habitat Description
Lopsided Indian Grass	Sorghastrum secundum	Fall - Sept. through Oct.	Pine Flatwoods
Sugarcane			
Plumegrass	Saccharum giganteum	Fall - Sept. through Oct.	Marsh
Pine Lily	Lilium catesbaei	Fall - Sept. through Oct.	Pine Flatwoods
Blazing Star	Liatris species	Fall - Sept. through Nov.	Pine Flatwoods
Pineland Purple	Carphephorus odoratissimus	Fall - Sept. through Nov.	Pine Flatwoods
Climbing Aster	Aster carolinianus	Fall - Sept. through Nov.	Marsh
Bay Lobelia	Lobelia faeyana	Spring	All along trails and in grass along Corkscrew Rd.
Penny Royal	Piloblephis rigida	Spring	Pine Flatwoods
Small Butterwort	Pinguicula pumila	Spring	Pine Flatwoods at edges of marsh
Wild Coco	Eulophia alta	Fall - Sept. through Nov.	Pine Flatwoods
Bluehearts	Buchnera americana	All year	Pine Flatwoods and edges of marsh
Marsh Pink	Sabatia stellaris	All year	Marsh
Wood Sage	Teucrium canadense	Spring and Summer	Marsh
Grass Pink	Calopogon tuberosus	Spring	Marsh
Gulf Muhly Grass	Muhlenbergia capillaris	Fall - Sept. through Nov.	Pine Flatwoods
Prairie Milkweed	Asclepias lanceolata	Spring through Fall	Marsh
Tickseed	Coreopsis leavenworthii	All year	Pine Flatwoods
Southeastern			
Sunflower	Helianthus agrestis	Fall - Sept. through Oct.	Marsh
St. Johnswort	Hypericum species	All year	Pine flatwoods and marshes
Pitted Stripseed	Piriqueta caroliniana	Spring	Pine Flatwoods and edges of marsh
Toothpetal Orchid	Habenaria species	All year	Pine Flatwoods and oak hammock

Ladies-Tresses	Spiranthes species	All year	Pine flatwoods and marsh edges
Water Pimpernel	Samolus ebracteatus	Spring through summer	marsh edges
PawPaw	Asimina reticulata	Spring	pine flatwoods