



# SCAN *South Carolina Association of Naturalists*

Post Office Box 5651, Columbia, South Carolina 29250-5651

---

October 2014

Hello Everyone.

Last month we enjoyed a pleasant visit to Sugar Loaf Mountain Recreation Area in Sandhills State Forest. The weather was absolutely wonderful and we had a good turnout of members. In attendance were Red Smith, Bill Hamel, Wayne Grooms, Kathy Boyle, Jan Ceigler, Rita Zollinger, Greg Ross, Kim McManus, Paul Kalbach, Tom Jones, Mary Douglass, Marty and Dave Kastner, Ben Gregory, Jules Fraytet, Jimmy Boylston, Kate Hartley, Lynn Greenlee, and Gordon Murphy.



We started the morning out by hiking the nature trail that starts near Mountain Lake. It was apparent that this area has not been burned in quite some time as the shrub layer was pretty thick. But there were still lots of flora and fauna to be seen. One of the first things that caught the eye was the multitude of interesting fungi. All shapes, sizes and colors.

As previously mentioned, the shrub layer was thick, and we did not see any seeps dominated by herbaceous species, however the areas where the water table was close to the soil surface were evident by the presence of gallberry. The soils in the Sandhills State Forest are sandy, which lets rainwater percolate downward relatively quickly



until it hits a confining layer, where it then flows down gradient. Where the confining layer is close to the soil surface, plants such as the gallberry, which tolerate additional water, dominate. The predominant confining layer in this part of the state is kaolin clay, which can be readily seen in the deeper roadside ditches within the State Forest. Had the area where the trail is located had been burned regularly, one would expect to see a predominance of herbaceous wetland species where the gallberry dominates, including pitcher plants. Another treat found along the trail was evidence of the presence of Native Americans. The base of spear point was found on the backside of the Forest, adjacent to

private property.

After a quick lunch back at the parking lot, we took a hike up the road to Sugar Loaf Mountain. This area, which is burned regularly, harbors typical sandhills zeric vegetation dominated by long-leaf pines, complete with red-cockaded woodpecker cavity trees. There is a huge sandstone boulder located near the Sugar Loaf Mountain parking area. Yet another clue as to what is located hidden



beneath the soil surface here. More sandstone boulders were also seen along the trail leading to the top of Sugar Loaf Mountain. The first glimpse of fall color change could also be seen from the trail. Black gum and sourwood trees provided a splash of red against the predominantly green canopy. The view from the top of





the “mountain” was impressive.

Thanks to Kim McManus and Paul Kalbach for scouting and hosting the trip to Sugar Loaf Mountain Recreation Area!



We are approaching the end on another year and it is time to have a planning meeting to pull together a fieldtrip schedule for 2015. If you have any destinations in mind, please forward your ideas to the appropriate Regional Director, or me, so the locations can be vetted for accessibility prior to setting the schedule. This year we had several last minute venue changes due to accessibility issues. We owe our thanks to the Regional Directors for the last minute scrambling they had to do in order to find alternative locations.



Also, if you would like to be involved with keeping SCAN the great organization that it is, you may want to consider volunteering for one of the officer positions. If interested, please let me or Greg Ross know and we will help you find the perfect fit in our organization.

This month we will be exploring Andrew Jackson State Park in Lancaster County. See you soon!

- Gordon

Oct 25, 2014

Andrew Jackson State Park meeting house parking lot @ 10:30 AM

### Jackson State Park

The park combines history, art and community activities into a setting that has made it one of the S.C. State Park Service's most popular attractions. This is the only park in the system dedicated to a U.S. president and features a museum that details the boyhood of the nation's seventh president (whether he was born in NC or SC is still a matter of contention) in what then was known as the Waxhaws of the South Carolina backcountry. One highlight of the park is the equestrian statue of "Old Hickory" sculpted by Anna Hyatt Huntington of Brookgreen Gardens fame. There is also a replica late 18<sup>th</sup> century one-room schoolhouse, an amphitheater, as well as a campground, fishing lake, picnicking facilities and trails. In addition, one can expect to see trees, birds, bugs ... ☺

Quick reminder; this is a State Park, so there are parking fees, but on the other hand, there are facilities, so as they say, you have to pay to p...

Things to do:

1. Hike the Crawford Trail.
2. Hike the Garden of the Waxhaws Trail - one-mile loop, with boardwalk sections around the lake and educational posts.
3. See the autumn blooms of the endangered Schweintz's sunflower (see attached information sheets).
4. Visit the museum and replica 18<sup>th</sup> century schoolhouse.
5. Snap a photo of Anna Hyatt Huntington's statue - Boy of the Waxhaws.

### Latitude / Longitude

- Latitude: 34.841246
- Longitude: -80.806879

DIRECTIONS (see map), these are just suggestions;

From I-77 exit onto Hwy. 5 E., follow Hwy. 5 until it intersects with Hwy. 521 N. The park is located ½ mi. on the right.

From I-85, exit 102 onto Hwy. 5, follow Hwy. 5 until it intersects with Hwy. 521 N. The park is located ½ mi. on the right. [Note: Hwy 5 twists and turns, but is well marked – just pay attention and follow the signs. Ignore Google Maps]

Afterwards, we'll visit the award winning 521 BBQ & Grill, about 7 miles north on Hwy 521.  
7580 Charlotte Hwy., Fort Mill, SC  
(803) 548-7675

Located on south end of a strip mall, just after the first light, on the right side of the road.

**DIRECTIONS;**

From I-77 Exit onto Hwy. 5 E. Follow Hwy. 5 until it intersects with Hwy. 521 N. The park is located ½ mi. on the right, 9 mi. N. of Lancaster.

From I-85, Exit 102 onto Hwy. 5 Follow Hwy. 5 until it intersects with Hwy. 521 N. The park is located ½ mi. on the right, 9 mi. N. of Lancaster. [Note Hwy 5 twists and turns, but is well marked – just pay attention and follow the signs. Ignore Google Maps]



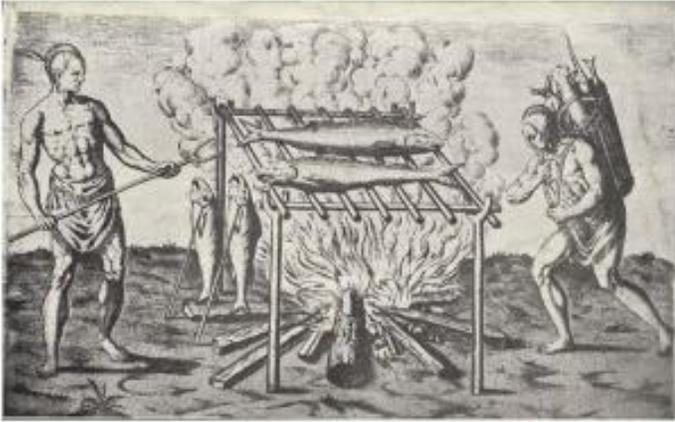
# THE COLEOPTERISTS SOCIETY



An International Society Devoted to the Study of Beetles



# The Waxhaw Indians



Long before European explorers came to the Americas, the Waxhaw Indians inhabited the area near Cane Creek in the Catawba River Valley. They were a small tribe of the Siouan language group. The origin of their name is not known for sure, but it may mean 'People of the Cane,' in the common trade language used between native groups. Like most native populations in the area, they tended to congregate and build small settlements near the rivers, which provided food, transportation, and of course, water. The Waxhaws were referred to as 'flatheads' by early explorers and other

natives. This nickname no doubt came from the tribes harmless practice of placing small sandbags on the foreheads of infants, resulting in wide-set eyes and a reshaped, flat forehead. In 1566, Captain Juan Pardo and a party of about a hundred men visited the Waxhaw Indians in search of a route west to Mexico to circumvent the dangerous sea voyage around Florida. This is the first known European contact with the Native Americans in this area. St. Augustine, Florida, had only been founded the year before. Pardo describes the Waxhaw village as composed of long lodges, typical of Eastern woodland Indian tribes, for homes, and an abundance of game. After the initial contact by the Pardo expedition, trade developed between the Europeans and the natives. As a result, the Indians lost the ability, over time, to make weapons and tools in traditional ways, preferring instead to trade food and deer hides with the Europeans in exchange for muskets and axes. John Lederer arrived in 1670 and referred to the Indians as the 'Wisacky.' He noted that they were under the authority of the larger Catawba tribe.

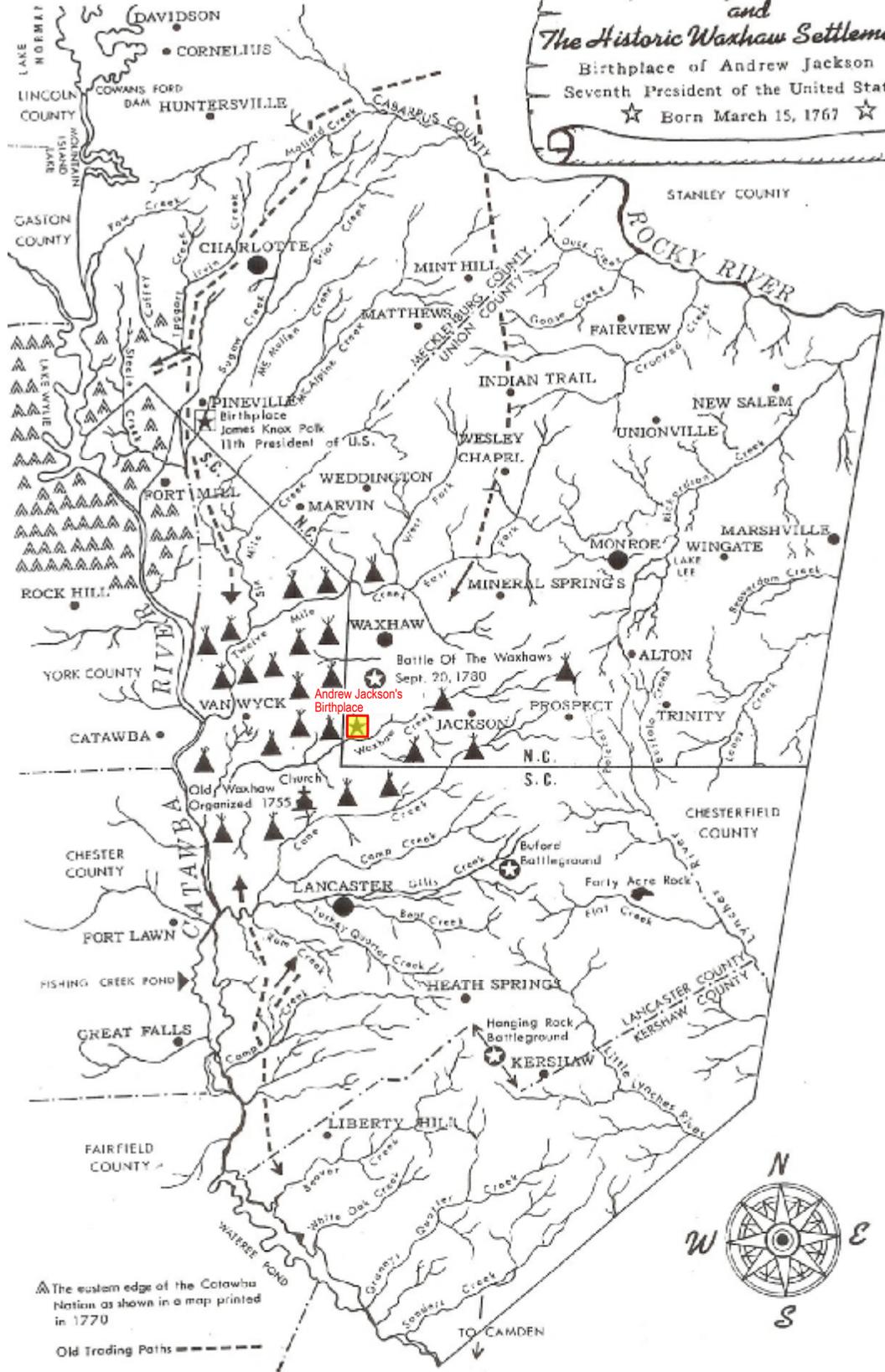
John Lawson, commissioned by the Lord Proprietors of England in 1701 to survey the interior of Carolina, kept a detailed journal of his travels. According to Lawson, the Waxhaw lodges were "large and lightsome ." The Indians made his stay quite comfortable. They sat on deerskins and dined on stewed peaches and corn.

He noted their practice of flattening their foreheads, and also that they owned the largest iron cooking pots either he or any of his English trading companions had ever seen. Historians speculate that close to 2,000 Waxhaws lived here in two villages when Lawson made his journey.



By 1720, most of the Waxhaws had been wiped out by the dreaded diseases brought over by European settlers, particularly smallpox. The rest were decimated during the Yamasee Wars, which pitted them against South Carolina colonists and larger, more powerful, tribes. The majority of Waxhaws who survived are believed to have been absorbed into the neighboring Catawba tribe. Others joined the Seminole tribes in Florida.

*The Garden of the Waxhaws and The Historic Waxhaw Settlement*  
 Birthplace of Andrew Jackson  
 Seventh President of the United States  
 ☆ Born March 15, 1767 ☆



▲ The eastern edge of the Catawba Nation as shown in a map printed in 1770

Old Trading Paths - - - - -

▲ Waxhaw Indians Before 1750

GRA ART 1964 3426309



# *Helianthus schweinitzii*

From Wikipedia, the free encyclopedia

*Helianthus schweinitzii*, known by the common name **Schweinitz's sunflower**, is a perennial wildflower endemic to the Piedmont physiographic province of North Carolina and South Carolina. It is classified in the Sunflower Family (Asteraceae). Nationwide it is one of the rarest plants in the United States, but within its range it is not uncommon along utility and highway rights-of-way in North Carolina and South Carolina. There are only about 90 known populations, many containing less than 40 plants each. It was listed as a federal endangered species on May 7, 1991.<sup>[1]</sup>

Schweinitz's Sunflower grows from 1 to 4 m tall. Its stems are usually solitary, branching only at or above mid-stem. It flowers for about two to three weeks in early October. It is named for Lewis David von Schweinitz (1780-1834), a Salem, North Carolina clergyman and botanist who discovered the species. It was first described by botanists John Torrey (1796-1873) and Asa Gray (1810-1888).

It is believed by some that Schweinitz's Sunflower formerly occupied prairie-like habitats or Post Oak-Blackjack Oak savannas maintained by some degree of disturbance. Historically, this was provided by fire and/or native grazing animals such as Elk and American Bison, but these species were never common in North or South Carolina, so it is much more likely that suitable habitat was maintained by periodic controlled burns by native Americans. However, repeated mowing during the flowering and fruiting season is harmful to the species.<sup>[1]</sup> Schweinitz's sunflower is known from a variety of soil types but is generally found growing on shallow, poor, clayey and/or rocky soils.<sup>[2]</sup>

## References

- <sup>a</sup> <sup>b</sup> Hilton Pond Schweinitz Sunflower Recovery (<http://www.hiltonpond.org/ResearchSunflowerMain.html>). Retrieved on 2008-07-29.
- <sup>a</sup> "Schweinitz's Sunflower" (<http://www.fws.gov/nc-es/plant/schwsun.html>), U.S. Fish and Wildlife Service. Retrieved on 2008-07-29.

### *Helianthus schweinitzii*



#### Conservation status



Vulnerable (NatureServe)

#### Scientific classification

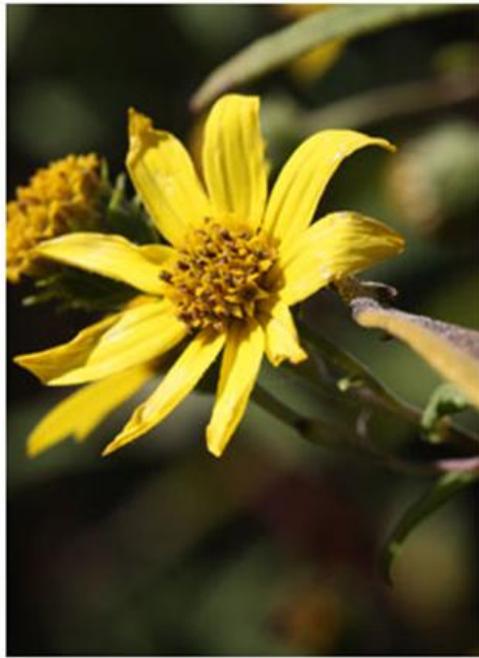
Kingdom: Plantae  
(unranked): Angiosperms  
(unranked): Eudicots  
(unranked): Asterids  
Order: Asterales  
Family: Asteraceae  
Subfamily: Helianthoideae  
Tribe: Heliantheae  
Genus: *Helianthus*  
Species: ***H. schweinitzii***

#### Binomial name

***Helianthus schweinitzii***

Torr. & A.Gray

4. Tubers narrow, fusiform; leaves subsessile, petioles < 1 cm long...*H. schweinitzii*\*



***Helianthus schweinitzii*\***

(rare [Fed E, S3 G3]; roadsides, powerline cuts, dry woodlands or "Piedmont prairies"; Pd; late summer to fall)

# Gulf South Research Corporation

[Return to the Endangered Plants of the  
Southeastern US Database](#)

## Schweinitz's sunflower

*Helianthus schweinitzii*



Schweinitz's sunflower images are copyrighted by:

**Michael Wolfe**  
**Environmental Consultant**  
**WATER OAK**  
**301 Water Oak Lane**  
**Matthews, NC 28104**  
**(704) 844-6750 (Office/Fax)**  
**[Send Email To: Michael Wolfe](mailto:Michael.Wolfe@wateroak.com)**  
**[WATER OAK environmental consulting firm](http://www.wateroak.com)**

## **Status under the U.S. Endangered Species Act**

**Federally Endangered (May 7, 1991)**

### **State Heritage Status Rankings**

**North Carolina (S3), South Carolina (S1)**

#### **Description:**

Schweinitz's sunflower is a rhizomatous, perennial herb producing solitary stems, up to 1 to 2 m in height from a cluster of carrot-like tuberous roots. The stem branches only at or above mid-stem, with the branches departing from the stem at about a 45-degree angle. The stem is usually pubescent but can be nearly glabrous; it is often purple in color. Schweinitz's sunflower produces opposite leaves on the lower section of the stem, transitioning to alternate leaves above. The leaves are variable in shape, lanceolate, and typically wider near the base, typically larger in size near the base of the plant and gradually reduced upwards. Lower stem leaves are approximately 1.5 to 2.5 cm in width and approximately 10 to 20 cm in length and approximately 5 to 10 times as long as wide. The upper stem leaves below the inflorescence branches, are approximately 1 cm in width by 5 cm in length. All leaf margins are entire or may have a few obscure serrations and tend to be somewhat revolute. The leaf texture is somewhat thick and stiff. The upper leaf surface is rough to the touch with broad based spinose hairs pointing toward the tip of the leaf. The lower surface is more or less pubescent having soft white hairs, which obscures the leaf surface (USFWS 1992).

Schweinitz's sunflower produces small yellow flower heads in September to October. The fruit is a glabrous nutlet 3.3 to 3.5 mm in length with rounded tips.

"The following combination of characters separates *H. schweinitzii* from all other eastern North American species in the genus: heads small (the involucre less than 1 centimeter across), stems at least sparsely strigose or hirsute below the inflorescence, leaves sessile to short-petiolate (petiole less than 1.5 cm in length), very rarely to lanceolate, broadest near base, 5 to 10 times as long as wide" (USFWS 1992).

#### **Habitat:**

Schweinitz's sunflower inhabits clearings in, and edges of, upland oak-pine-hickory woods on moist to dryish clays, clay-loams, or sandy clay-loams that often have a high gravel content and are moderately podzolized. The underlying rock types are highly weatherable, generally contain low amounts of resistant minerals such as quartz, and generally weather to fine-textured soils. Requires the full to partial sun of an open habitat, which was formerly maintained over the species' range by wildfires and grazing by herds of bison and elk. Now most occurrences are confined to roadsides (USFWS 1992 and Weakley 2002).

Schweinitz's sunflower habitat tends to be dominated by members of the Asteraceae, Fabaceae, and Poaceae families. This association emphasizes an affinity of the habitats to both longleaf pine-dominated sandhills and savannas of the southeastern coastal plain and to glades, barrens, and prairies of the Midwest and Plains.

### **Range:**

Schweinitz's sunflower is endemic to the piedmont of North and South Carolina. There are 53 extant occurrences known, most of them along roadsides where they are difficult to protect. The species has lost much of its native habitat to forest succession due to the elimination of natural disturbances, and to conversion to pine plantations, and urbanization (NatureServe 2005).

The North Carolina populations are located in Union, Stanly, Cabarrus, Mecklenburg, and Rowan Counties. The species has been extirpated from Stokes and Montgomery Counties in North Carolina. All the extant and historic sites for the species in South Carolina are in York County. Thirty-eight percent of the historically extant populations have been destroyed. Most of the remaining populations are small, with four of them containing less than 40 individuals each (USFWS 1992).

---

### **References**

- | *NatureServe. 2005. Internet Resource. [NatureServe](#).(Accessed September 13, 2003)*
- | *Radford, A.E., Ahles, H.E., Bell, C.R. 1968. Manual of the Vascular Flora of the Carolinas. The University of North Carolina Press, Chapel Hill, North Carolina.*
- | *USDA, NRCS. 2002. The PLANTS Database, Version 3.5. Internet Resource [USDA Plants Database](#). National Plant Data Center, Baton Rouge, LA 70874-4490 USA. (Accessed September 13, 2003)*

**NC STATE UNIVERSITY**

h o m e

| l i s t

| w i n

### *Helianthus* L. (Asteraceae)

*Helianthus* comprises twenty-six species in North Carolina, including nine introduced taxa (i.e., *H. grosseserratus*, *H. laetiflorus*, *H. maximiliani*, *H. mollis*, *H. petiolaris*, and *H. tuberosus*). Only *Helianthus* listed (Fed E, S3 G3). *Helianthus floridanus* (S1 G3G4) is currently state listed as threatened. *Helianthus* -V (S2 G4). *Helianthus occidentalis* var. *dowellianus* is state historic (SC-H, SX G5).

North Carolina species of *Helianthus* can be divided into (1) annuals or perennials, and (2) species or those with well-developed cauline leaves. As the listed species are all perennials and exhibit characteristics provided for the annuals or those species with basally disposed leaves (see Weakley [2010] for categories and groups). Note that the color of the disk flowers can be variable within species and some, such as *H. laetiflorus* and *H. simulans*, will exhibit red, yellow, or mixed red-yellow disk flowers.

#### Federally listed taxon—

*Helianthus schweinitzii* (Fed E, State E | S3 G3)

**Habitat.** Thought to occur historically in prairie-like habitats or *Quercus stellata*-*Q. marilandica* savanna, now often associated with roadsides, powerline cuts, open woodlands

**Range.** Endemic to the Piedmont of the Carolinas.

**Additional resources.** NHP | USFWS | Recovery plan

#### Key to *Helianthus* in North Carolina

Key adapted from Schilling (2006 [FNA]) and Weakley (2008). Photos by Krings, unless otherwise indicated. Line drawings by Krings (1913). Maps courtesy of USDA PLANTS and the North Carolina Natural Heritage Program.

1. Leaves basally disposed, basal leaves persistent at anthesis [*H. atrorubens*, *H. heterophyllus*, *H. dowellianus*]...see Schilling (2006) or Weakley (2010)

1'. Leaves cauline, stem leafy for its length, basal leaves often lacking at anthesis...2.

2. Plant annual, tap-rooted (rarely surviving to second year) [*H. annuus*, *H. argophyllus*, *H. debilis*, *H. petiolaris*, *H. porteri*]...see Schilling (2006) or Weakley (2010)

2'. Plant perennial, rhizomatous and/or producing tubers...3.

3. Plant rhizomatous, but also producing tubers...4.

4. Tubers narrow, fusiform; leaves subsessile, petioles < 1 cm long...*H. schweinitzii*\* (+)

4'. Tubers broad, potato-like; petioles = or > than 2 cm long...*H. tuberosus* (+)

3'. Plant rhizomatous only, not producing tubers...5.

5. Stems below the capitulescence glabrous or nearly so, sometimes glaucous; phyllaries

6. Abaxial leaf surface glaucous, glabrate or glabrous, not gland-dotted...7.

7. Phyllaries 12–15, laminae 12–14 mm long...*H. glaucophyllus* (+)

7'. Phyllaries 23–28, laminae 15–20 mm long...*H. laevigatus* (+)

6'. Abaxial leaf surface not glaucous, pubescent, gland-dotted...8.

8. Rays few (usually 5 or 8); involucre 9 mm wide or less...*H. microcephalus* (+)

8'. Rays typically 10 or more (in larger heads); involucre usually > 9 mm broad...9

9. Leaves sessile, bases rounded to cordate, trinerved from the base...*H. divaricatus*

9'. Leaves sessile to petiolate, bases narrower, triplinerved...10.

10. Anther appendages yellow...11.

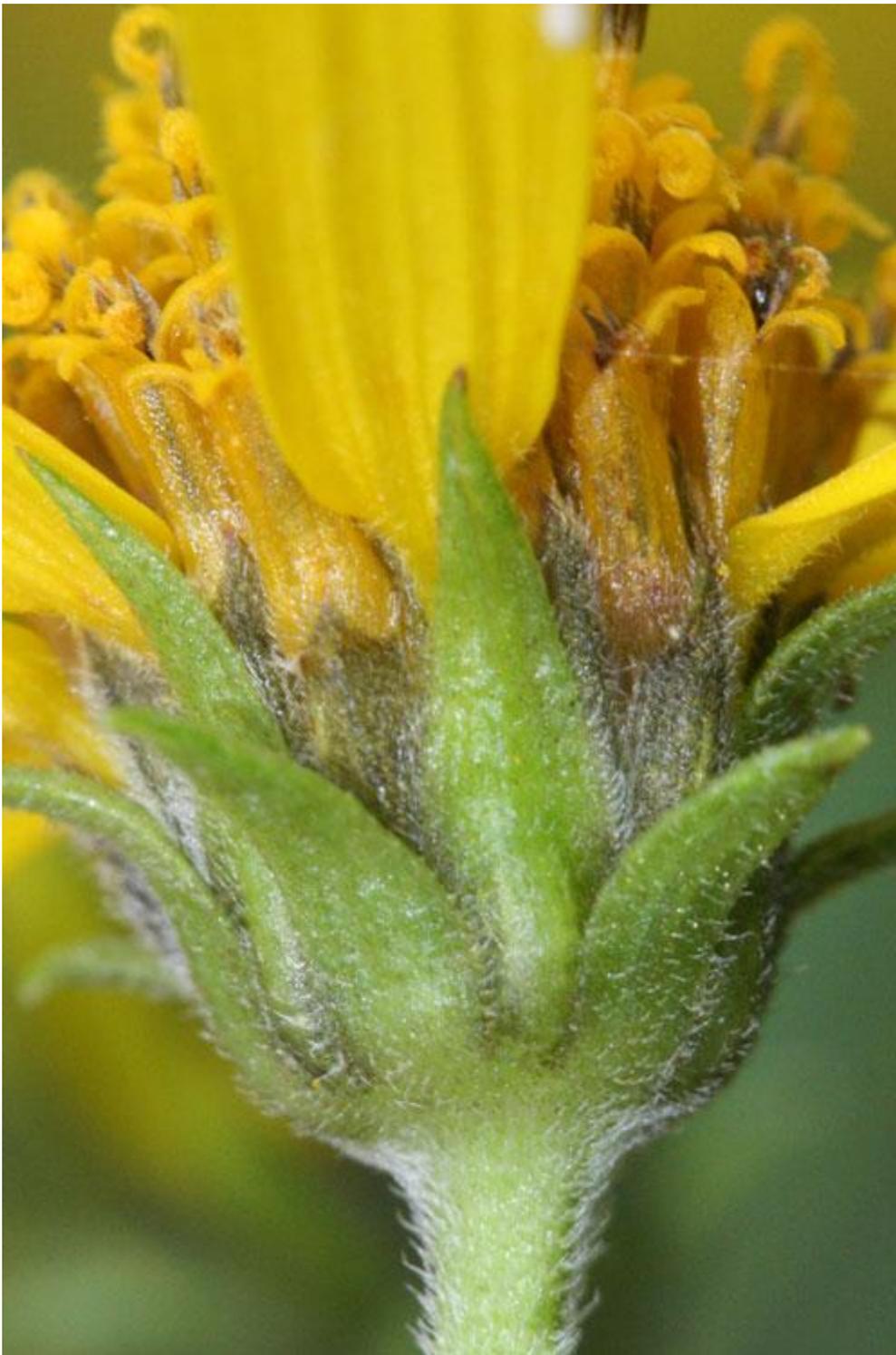






















 <p><b>HILTON POND CENTER</b> for Piedmont Natural History</p> <p>HOME: <a href="http://www.hiltonpond.org">www.hiltonpond.org</a></p>	<a href="#">GENERAL INFO</a>
	<a href="#">CONTENTS</a>
	<a href="#">RESEARCH</a>
	<a href="#">EDUCATION</a>
	<a href="#">PUBLICATIONS</a>
	<a href="#">MISCELLANY</a>

## THIS WEEK at HILTON POND

**22-30 September 2004**

Installment # 240---Visitor #

(Back to [Preceding Week](#); on to [Next Week](#))

### SAVING SCHWEINITZ'S SUNFLOWER

One autumn a few years ago, Dr. Richard Houk--retired botany professor and long-time friend from Winthrop University--noticed a stand of tall, yellow sunflowers growing on a roadside in York County, not far from **Hilton Pond Center**. Finding sunflowers along a highway isn't usually that big a deal; after all, there are nearly a jillion native sunflower species, most of which grow in open places. These particular sunflowers, however, towered above all the neighboring plants, and even while driving down the highway Dick Houk knew in an instant they were Schweinitz's Sunflowers. The plants Dick noticed were special for two reasons: 1) Schweinitz's Sunflowers are an endangered species that grows **ONLY** in a few places within a small region of the Carolina Piedmont; and 2) the plants were smack in the way of road construction and development. All this led the good Dr. Houk--who's deeply involved in the Schweinitz's Sunflower Recovery Program--to rescue the plants by digging up their tuberous roots, with the intent of transplanting them to less-threatened locales.



*All text & photos © Hilton Pond Center*

Knowing our interest in all things natural, Dick offered us various sizes of the sunflower tubers (see large branched root below); these were to be transplanted at [Hilton Pond Center](#), where we hoped a population would become established and produce seeds we might collect and scatter elsewhere. The sunflowers were to be placed along a [Hilton Pond](#) trail where, in turn, we could lead

Guided Field Trips and discuss what this endangered sunflower can tell us about major changes in the Piedmont physiographic province. Odd as it may seem, Schweinitz's Sunflower--native to the Carolina Piedmont--is a PRAIRIE plant that indicates once upon a time there were bona fide "Piedmont prairies."



*All text & photos © Hilton Pond Center*

Although it's commonly believed the entire Carolina Piedmont was densely forested prior to the coming of Europeans, the region actually included large expanses of native Piedmont prairie, especially within 60 miles or so of present-day Charlotte NC. Such grassy savannas--open plains dotted with occasional trees and shrubs--contained many plants related to but quite distinct from flora found in tallgrass and shortgrass prairies of the Midwestern U.S.

One Piedmont prairie species, Schweinitz's Sunflower, is a perennial wildflower that persists today in a very few remnant Carolina prairies and along utility and highway rights-of-way. There are only about 90 known populations, many containing fewer than 40 plants each. Because of its scarcity, Schweinitz's Sunflower has been placed on the Endangered Species List and is

fully protected by state and federal laws. Folks like Dick Houk-concerned about saving Schweinitz's Sunflower from extinction-seek out and protect local populations of the plant, sometimes by relocating entire colonies to protected public and private land.



*All text & photos © Hilton Pond Center*

After Dick gave us the bag of Schweinitz's Sunflower roots for **Hilton Pond Center**, we dug shallow holes in early May 2002 and planted the tubers in a meadow-like area (above) that we keep open by mowing lightly in alternate winters. We anticipated the sunflowers would thrive in this "artificial prairie" and develop as a protected population with its own genetic diversity.

We watched the **Center's** tubers closely throughout the remainder of 2002. Despite our efforts to keep them watered, some shrivelled and died from drought conditions, and several



apparently were pawed up and eaten by White-tailed Deer. Although some minor vegetative growth did occur that year and in the one following, no blooms were produced. That is, not until this week when we were elated--and relieved--to finally find a seven-foot-tall stalk bearing more than 20 buds and flowers!

Schweinitz's Sunflower, *Helianthus schweinitzii*, draws its scientific name from Greek words for "sun" and "flower"; and from Lewis David von Schweinitz (1780-1834), a Salem NC clergyman who discovered the species and is also known as the "father of North American mycology." The plant grows from a



tuber that in old specimens sometimes divides into finger-like branches. In late spring, each mature tuber sends up a stiff, slow-growing stem bearing leaves that are opposite and 4-8" long by about an inch wide (left). The leaves are noticeably fuzzy, with a rough upper surface bearing hairs that point toward the leaf tip; the underside has many soft, white hairs. The plant grows 3-6' tall, usually with a single stem that branches at 45-degree angles above its mid-point (below right); above that, leaves are smaller and alternate. Stems are bright purplish-red and contrast with the green of surrounding vegetation. Occasional plants tower above the landscape at heights of 15 feet, making them easily identifiable among other yellow asters and sunflowers.

Across the Carolina Piedmont, colonies of Schweinitz's Sunflower begin blooming as early as August and continue flowering to first frost. Like other members of the Composite Family

(Asteraceae), the plants have a florescence made up of two kinds of flowers (below right): fertile disc flowers are at the center, surrounded by sterile ray flowers that are incorrectly called "petals." The disc flowers are yellow to purplish red, forming a center a little less than an inch in diameter, while the yellow ray flowers extend out an inch or two. The flower heads produce smooth, round nutlets about 1.5" long--fruit quite different from the wind-borne feathery seeds of composites such as Dandelions.

Schweinitz's Sunflower is known today from small populations in southcentral North Carolina (Anson, Cabarrus, Davidson, Gaston, Mecklenburg, Montgomery, Randolph, Rowan, Stanly and Union Counties) and northcentral South Carolina (Lancaster and York Counties). Fewer than ten populations occur in protected sites, another ten survive along roadsides, and three more are within utility line rights-of-way; three others have been partially bulldozed in recent years. Since all populations are small they are highly vulnerable to roadside right-of-way "maintenance and improvement," especially when herbicides are used; some populations are likewise endangered by residential and commercial development. Invasive exotic plants such as Chinese Privet, *Ligustrum sinensis*, and Japanese



Honeysuckle, *Lonicera japonica*, frequently threaten the sunflowers by crowding them out of their native habitats.

One other thing working against Schweinitz's Sunflower is that it grows at a specific stage of vegetative succession--just prior to an influx of woody shrubs and tree saplings. In the Carolinas, this stage was maintained historically by wildfire and/or native grazing animals such as Elk, White-tailed Deer, and American Bison. These days, potential sunflower habitat is usually kept



open by a different kind of Deere--we mean John Deere, of course.

Unfortunately, when mowing is repeated in sunflower habitat during the flowering and fruiting season it further endangers the species--particularly those plants growing along highway shoulders.

Since the 20 blossoms on our solitary Schweinitz's Sunflower at [Hilton Pond](#)

[Center](#) were attracting pollinators such as beetles, small bees, and wasps (above left), we can only hope the flowers eventually will produce nutlets. You'd better believe we'll harvest those seeds carefully and guard them with our lives before planting them next spring--thus expanding the local population and doing our small part to save Schweinitz's Sunflower from extinction. If we just had a sizeable personal fortune, we would spend it on converting Piedmont farmland into expansive prairies. Maybe then even buffalo would be encouraged to return to South Carolina and graze among the Schweinitz's Sunflowers that Dick Houk is helping protect.



*All text & photos © Hilton Pond Center*

---

Comments or questions about this week's installment?  
Please send an E-mail message to [INFO](#).

**NOTE:** Be sure to scroll down for an account of all birds banded or recaptured during the week, as well as some other interesting nature notes.

---

"This Week at Hilton Pond" is written & photographed  
by Bill Hilton Jr., executive director of  
**Hilton Pond Center for Piedmont Natural History.**

You may wish to consult our [Index](#) of all nature topics covered since February 2000. You can also use the on-line Search Engine at the bottom of this page.

**For a free, non-fattening, on-line subscription to "This Week at Hilton Pond," just send us an [E-mail](#) with SUBSCRIBE in the Subject line. Please be sure to configure your spam filter to accept E-mails from [hiltonpond.org](http://hiltonpond.org).**



Catch the video version of "This Week" each Friday during the

**Sugar Loaf Mtn., Sandhills State Forest  
Chesterfield Co., SC  
September 27, 2014**

This list was produced by SCAN from sightings produced by SCAN members and is subject to revision as needed. An asterisk (\*) indicates a new sighting for SCAN. Send any changes or corrections to Jan Ciegler at [jciegler@sc.rr.com](mailto:jciegler@sc.rr.com). Please indicate exactly to which flora/fauna list you are referring. Thank you.

**FLORA**

**Cinnamon Fern**  
*Osmunda cinnamomea*

**Royal Fern**  
*Osmunda regalis spectabilis*

**Japanese Climbing Fern**  
*Lygodium japonicum*

**Bracken**  
*Pteridium aquilinum*

**Netted Chain Fern**  
*Woodwardia areolata*

**Southern Lady Fern**  
*Athyrium asplenoides*

**Shortleaf Pine**  
*Pinus echinata*

**Longleaf Pine**  
*Pinus palustris*

**Loblolly Pine**  
*Pinus taeda*

**Atlantic White-cedar**  
*Chamaecyparis thyoides*

**Yellow-eyed Grass**  
*Xyris* sp.

**Bogmoss**  
*Mayaca fluviatilis*

**Hairy Umbrella-sedge**  
*Fuirena squarrosa*

**Carolina Wiregrass**  
*Aristida stricta*

**Slender Spikegrass**  
*Chasmanthium laxum*

**Warty Panic Grass**  
*Panicum verrucosum*

**Blue-eyed-grass**  
*Sisyrinchium* sp.

**Whiteleaf Greenbrier**  
*Smilax glauca*

**Common Greenbrier**  
*Smilax rotundifolia*

**Tulip-tree**  
*Liriodendron tulipifera*

**Swamp Bay**  
*Persea palustris*

**Sassafras**  
*Sassafras albidum*

**White Water-lily**  
*Nymphaea odorata odorata*

**Water-shield**  
*Brasenia schreberi*

**Sweet Gum**  
*Liquidambar styraciflua*

**Sand Hickory**  
*Carya pallida*

**Mockernut Hickory**  
*Carya tomentosa*

**Southern Red Oak**  
*Quercus falcata*

**Turkey Oak**  
*Quercus laevis*

**Blackjack Oak**  
*Quercus marilandica marilandica*

**Post Oak**  
*Quercus stellata*

**Common Pokeweed**  
*Phytolacca americana*

**Florida Cottonweed**  
*Froelichia floridana*

**Jointweed**  
*Polygonella* sp.

**Pineweed**  
*Hypericum gentianoides*

**St. Andrew's Cross**  
*Hypericum hypericoides*

**Lloyd's St.-John's-wort**  
*Hypericum lloydii*

**Dwarf St.-John's-wort**  
*Hypericum mutilum*

**St.-John's-wort**  
*Hypericum stragulum*

**Passionflower**  
*Passiflora incarnata*

**Spotted Wintergreen**  
*Chimaphila maculata*

**Mountain Laurel**  
*Kalmia latifolia*

**Shining Fetterbush**  
*Lyonia lucida*

**Sourwood**  
*Oxydendrum arboreum*

**Sparkleberry**  
*Vaccinium arboreum*

**Creeping Blueberry**  
*Vaccinium crassifolium*

**Swamp Blueberry**  
*Vaccinium virgatum*

**Common Pyxie-moss**  
*Pyxidantha barbulatea*

**American Persimmon**  
*Diospyros virginiana*

**Horsesugar**  
*Symplocos tinctoria*

**Five-fingers**  
*Potentilla canadensis*

**Black Cherry**  
*Prunus serotina serotina*

**Tall Indigo-bush**  
*Amorpha fruticosa*

**Common Sensitive-plant**  
*Chamaecrista nictitans nictitans*

**Smooth Trailing Lespedeza**  
*Lespedeza repens*

**Black Locust**  
*Robinia pseudoacacia*

**Virginia Goat's-rue**  
*Tephrosia virginiana*

**Alternate-leaf Seedbox**  
*Ludwigia alternifolia*

**Virginia Meadow-beauty**  
*Rhexia virginica*

**Flowering Dogwood**  
*Cornus florida*

**Big Gallberry**  
*Ilex coriacea*

**Little Gallberry**  
*Ilex glabra*

**American Holly**  
*Ilex opaca opaca*

**Rhombic Copperleaf**  
*Acalypha rhomboidea*

**Virginia-creeper**  
*Parthenocissus quinquefolia*

**Muscadine**  
*Vitis rotundifolia rotundifolia*

**Orange Milkwort**  
*Polygala lutea*

**Red Maple**  
*Acer rubrum*

**Winged Sumac**  
*Rhus copallinum*

**Eastern Poison Ivy**  
*Toxicodendron radicans radicans*

**Sanicle**  
*Sanicula canadensis*

**Carolina Jessamine**  
*Gelsemium sempervirens*

**Indian-hemp**  
*Apocynum cannabinum*

**Carolina Ponyfoot**  
*Dichondra carolinensis*

**Dawnflower**  
*Stylisma patens*

**Beautyberry**  
*Callicarpa americana*

**Polypremum**  
*Polypremum procumbens*

**Senna Seymeria**  
*Seymeria cassioides*

**Lobelia**  
*Lobelia puberula*

**Wahlenbergia**  
*Wahlenbergia marginata*

**Poorjoe**  
*Diodia teres*

**Bluet**  
*Houstonia longifolia*

**Richardia**  
*Richardia scabra*

**Sandhill Chaffhead**  
*Carphephorus bellidifolius*

**Horseweed**  
*Conyza canadensis*

**Threadleaf Coreopsis**  
*Coreopsis verticillata*

**Leafy Elephant's-foot**  
*Elephantopus carolinianus*

**Elephant's-foot**  
*Elephantopus tomentosus*

**Fireweed**  
*Erechtites hieraciifolius*

**Inland Roundleaf**  
**Eupatorium**  
*Eupatorium pubescens*

**Grass-leaved Golden-aster**  
*Pityopsis aspera adenolepis*

**Camphorweed**  
*Pluchea camphorata*

**Fragrant Rabbit-tobacco**  
*Pseudognaphalium obtusifolium*

**Licorice Goldenrod**  
*Solidago odora odora*

**Rough-leaved Goldenrod**  
*Solidago rugosa*

**Long-stalked Aster**  
*Symphotrichum dumosum*

**Common Clasping Aster**  
*Symphotrichum patens patens*

**Ironweed**  
*Vernonia acaulis*

**Parasol**  
*Macrolepiota procera*

**Yellow-patches**  
*Amanita flavoconia*

**Indigo Milky**  
*Lactarius indigo*

#### FAUNA

**Forest Snail (shell)**  
*Triodopsis* sp.

**Black Widow**  
*Latrodectus mactans*

**Spiny-backed Spider**  
*Micrathena gracilis*

**Writing Spider**  
*Argiope aurantia*

**Spotted Orbweaver**  
*Neoscona domiciliorum*

**Six-spotted Fishing Spider**  
*Dolomedes triton*

**Rabid Wolf Spider**  
*Rabidosa rabida*

**Yellow Crab Spider**  
*Misumenoides formosipes*

**Bush Katydid**  
*Scudderia* sp.

**Florida Predatory Stink Bug**  
*Euthyrhynchus floridanus*

**Brown Water-scorpion**  
*Ranatra fusca*

**Toad Bug**  
*Gelastocoris* sp.

**Frogopper**  
*Prosapia bicincta*

**Green Lacewing**  
*Chrysopa* sp.

**Blackjack Oak Apple (gall wasp)**  
*Disholcaspis lapiei*

**Amanda's Pennant (dragonfly)**  
*Celithemis amanda*

**Eastern Pondhawk**  
*Erythemis simplicicollis*

**Blue-faced Meadowfly**  
*Sympetrum ambiguum*

**Swamp Spreadwing (damselfly)**  
*Lestes vigilax*

**Whirligig Beetle**  
*Gyrinus* sp.

**Predacious Diving Beetles**  
*Laccophilus maculosus maculosus*  
*Ilybius oblitus*  
*Coptotomus venustus*

**Water Scavenger Beetles**  
*Tropisternus collaris*  
*Tropisternus natator*  
 \* *Berosus striatus*

**Crab-like Rove Beetle**  
 \* *Lordithon cinctus*

**Dung Beetles**  
*Melanocanthon bispinatus*  
*Canthon vigilans*  
*Onthophagus hecate hecate*  
*Onthophagus striolatus striolatus*

**Dermestid Beetle**  
*Cryptorhopalum triste*

**Hickory Girdler Beetle**  
*Oncideres cingulata*

**12-spotted Cucumber Beetle**  
*Diabrotica undecimpunctata howardi*

**Large Chestnut Weevil**  
*Curculio proboscideus*

**Fruit Weevil**  
*Anthonomus tectus*

**Twig & Stem Weevil**  
*Lechriops oculata*

**Cloudless Sulphur**  
*Phoebis sennae eubule*

**Little Yellow (butterfly)**  
*Eurema lisa*

**Sleepy Orange**  
*Abaeis nicippe*

**Gray Hairstreak**  
*Strymon melinus*

**Eastern Tailed-blue**  
*Cupito comyntas*

**Gulf Fritillary**  
*Agraulis vanillae*

**Variiegated Fritillary**  
*Euptoieta claudia*

**Pearl Crescent (butterfly)**  
*Phyciodes tharos*

**American Lady (butterfly)**  
*Vanessa virginiensis*

**Common Buckeye**  
*Junonia coenia*

**Red-spotted Purple (butterfly)**  
*Limenitis arthemis astyanax*

**Carolina Satyr (butterfly)**  
*Hermeuptychia sosybius*

**Monarch (butterfly)**  
*Danaus plexippus*

**Clouded Skipper**  
*Lerema accius*

**Dun Skipper**  
*Euphys vestris*

**Spiny Oakworm (larva)**  
 \* *Anisota stigma*

**Tersa Sphinx Moth (larva)**  
*Xylophanes tersa*

**Southern Cricket Frog**  
*Acris gryllus*

**Box Turtle**  
*Terrapene carolina*

**Yellow-bellied Slider**  
*Trachemys scripta scripta*

**Green Anole**  
*Anolis carolinensis*

**Eastern Fence Lizard**  
*Sceloporus undulatus*

**Six-lined Racerunner**  
*Aspidoscelis sexlineata*

**Turkey Vulture**  
*Cathartes aura*

**Black Vulture**  
*Coragyps atratus*

**Red-tailed Hawk**  
*Buteo jamaicensis*

**Mourning Dove**  
*Zenaida macroura*

**Chimney Swift**  
*Chaetura pelagica*

**Red-bellied Woodpecker**  
*Melanerpes carolinus*

**Northern Flicker**  
*Colaptes auratus*

**Hairy Woodpecker**  
*Picoides villosus*

**Red-cockaded Woodpecker**  
*Picoides borealis*

**Pileated Woodpecker**  
*Dryocopus pileatus*

**Eastern Phoebe**  
*Sayornis phoebe*

**Blue Jay**  
*Cyanocitta cristata*

**American Crow**  
*Corvus brachyrhynchos*

**Carolina Chickadee**  
*Parus carolinensis*

**Tufted Titmouse**  
*Baeolophus bicolor*

**White-breasted Nuthatch**  
*Sitta carolinensis*

**Brown-headed Nuthatch**  
*Sitta pusilla*

**Blue-gray Gnatcatcher**  
*Poliophtila caerulea*

**Gray Catbird**  
*Dumetella carolinensis*

**White-eyed Vireo**  
*Vireo griseus*

**Pine Warbler**  
*Dendroica pinus*

**Northern Cardinal**  
*Cardinalis cardinalis*

**Eastern Towhee**  
*Pipilo erythrophthalmus*

**Chipping Sparrow**  
*Spizella passerina*

**White-tailed Deer (tracks, scrapes)**  
*Odocoileus virginianus*