Natural History Interpretation for Sovereign Oaks Community

FOR BLUE RIDGE NATURALIST CERTIFICATION AUGUST 18, 2018

About Sovereign Oaks



- Located 6 miles east of downtown Asheville
- On an historic former family farm of 177 acres
- 99 home sites, with guidelines promoting green building and landscaping with native plants
- ~2 miles of trails connected to the Warren Wilson College trail system

Project Objectives

- Build a strong sense of place and appreciation for the natural environment for Sovereign Oaks homeowners and their families.
- Encourage homeowners to apply sound ecological principles in managing their own properties
 - Utilizing native plant species
 - Preserving the watersheds
 - Removing invasive species
 - Protecting and encouraging pollinators
- Educate and entertain homeowners and visitors

What I Found

- The site proved to be unusually rich and diverse
 - Over 200 wildflower species
 - Over 40 species of trees
 - Bears, coyotes, turkeys and more
 - A wide variety of ferns and mushrooms
- Why is that?
 - A south-facing cove between two creeks
 - Deep, rich soils
 - A mixture of pastures and undisturbed woodlands

Vildflower Latin Name		BCW	BCE
Agrimony - Small-flowered	Agrimonia parviflora	х	
Alexanders, Golden	Zizia aurea	х	х
Anemone, Rue	Thalictrum thalictroides		
Anemone, Wood	Anemone quinquefolia	х	Х
Anise Root	Osmorhiza longistylis	х	Х
Aster - Bushy	Symphyotrichum dumosum	Х	
Aster - Calico	Symphyotrichum lateriflorum	Х	х
Aster - Cornel-leaved	Doellingeria infirma		
Aster - Hairy	Eurybia spectabilis	Х	Х
Aster - Heart-leaved	Symphyotrichum cordifolium	Х	
Aster - Maryland Golden	Chrysopsis mariana		
Aster - New England	Symphyotrichum novae-angliae	Х	
Aster - Panicled	Symphyotrichum lanceolatum		х
Aster - Late Purple	Symphyotrichum patens		
Aster - Rough-leaved	Eurybia radulina		х
Avens - White	Geum Canadense	Х	Х
Baneberry, Red	Actaea rubra		
Beardtongue, Gray	Penstemon canescens		
Beardtongue, Hairy	Penstemon hirsutus		
Beauty, Carolina Spring	Claytonia caroliniana	Х	
Beauty, Virginia Spring	Claytonia virginica		х

Guided Walks



- Conducted 11 guided
 walks with more than
 140 participants thus far
 - Wildflowers
 - Trees
 - History
- Building a sense of community

TRAIL NAME	DISTANCE	ELEVATION CHANGE
 Bull Creek West Side	0.45 mi	35'
 Bull Creek East Side (to dam ruins)	0.45 mi	55'
 Bamboo Grove Spur	0.1 mi	20'
 Cemetery Connector	0.2 mi	105'
 Rock Hop Connector	0.15 mi	50'
 Dam South Side (Future)	0.2 mi	155'
 Greenhouse Connector	0.1 mi	40'
 Upper Musterfield Creek	0.45 mi	230'
 Lower Musterfield Creek	0.6 mi	130'



Trail System





Wildflower Guides



Bellwort, Mountain – A delicate nodding wildflower that serves as an important nectar source for queen bumblebees that appear in early spring before other bumblebees. The leaves emerge coiled around the stem tip and unfold like an umbrella. A few of these can be found in April along the Musterfield Creek trail where it transitions from meadow to woods.



Bloadroot - Name from the red/orange juice in roots, used by Native Americans for face paint and dyes. It is now used as an anti-plaque agent and additive to cattle feed. Sends up a single leaf and a flower stalk, but as this is not a true spring ephemeral the leaf keeps growing after the canopy leafs out. Can be found in April along both Bull Creek and Musterfield Creek, with another notable patch near the Bamboo Grove treehouse.



Blue-eyed Grass – Despite the name and grasslike leaves, this plant is actually related to irises. It can be found blooming in April & May in landscapes around the community and along the Bull Creek and Musterfield Creek trails.



Bluets, Summer – distinguished by its fourpetalled flowers. The common name comes from close relatives that are blue in color, but these are white and pink. Often called by their latin name Houstonia, named for William Houston, who collected plants in Mexico and Central America. Can be found throughout the community in May.



Sorrel, Violet Wood Sorrel – Larger and prettier cousin to the yellow wood sorrel that invades our lawns and gardens, the violet variant is rarer and the species is listed as threatened in a number of northeast states. Sorrels are distinguished by their shamrock shaped leaves. Also called sourgrass, as they are edible and have a pleasant sour taste when chewed. Look for it along the Bull Creek East trail in May.



Speedwell, Persian – A European native that is one of the first wildflowers to appear in spring, often even in February. Reliably found along the Musterfield Creek trail opposite the Community Greenhouse.



Spiderwort – A tall wildflower with grass-like stalks that gets its name because a root poultice was historically used to treat spider bites. Spiderwort can be used to detect air pollution as the anthers will change color when exposed to pollutants. Can be found along the upper part of Musterfield Creek.



Spring Beauty – Another spring ephemeral. Pink lines on the flower petals guide pollinators to the nectar. Seeds have a fatty coating to attract ants, which disperse the seeds away from the parent plant. Look for these in April along Bull Creek.

Tree Guide



Hornbeam

Carpinus caroliniana

Identification - A small understory tree usually found along streams with smooth bark with a "muscular" appearance. The leaves appear corrugated.

Mature Height - 35 ft.

Where to find - Along the Bull Creek East trail. Notes: Also known as Musclewood because of its flexed bicep appearance. The wood is heavy and hard, and is used for tool handles, longbows, and walking sticks.



Locust, Black

Robinia pseudoacacia

Identification - The large compound leaves have many oval leaflets and typically have a pair of spines where they meet the branch.

Mature Height - 100 ft.

Where to find - Common throughout Sovereign Oaks. Small saplings appear quickly in disturbed

Notes: Native to the Appalachians but has been introduced widely to other areas where it is often considered an invasive pest. The wood is highly rot resistant and is therefore popular for split rail fences, decks, and raised beds.



Nyssa sylvatica

Identification - Has shiny dark green leaves with smooth edges shaped like an oval spear tip. Branches tend to protrude at a right angle from the trunk.

Mature Height - 80 ft.

Where to find - A number of specimens can be found along the trail connection between Towering Oaks Lane and the Musterfield Creek

Notes: Also known as Black Gum, this tree is an important producer of nectar for bees, and thereby gives its name to our Asheville-based Tupelo Honey restaurant chain. An excellent landscape tree with brilliant fall color.



Walnut, Black

Juglans nigra

Identification - Large compound leaves with 13-23 sharp-toothed and pointed leaflets. The bark is dark brown or silver-black. Is usually the last tree to leaf out in spring and one of the first to lose its leaves in the fall.

Mature Height - 90 ft.

Where to find - A number of specimens can be found along the Bull Creek West road below the gate. Some Tree of Heaven with similar leaves are in the same area but the bark is much different.

Notes: Important ecologically for its nut production to sustain wildlife. Note that the dropped nuts are messy and can stain concrete; so this tree works best planted away from the house. The wood is highly valued for woodworking. Black walnut trees are allelopathic; the roots excrete the compound Juglone which is toxic to most other plants.

History Guide

The Founding of Craigsfield Farm

Sovereign Oaks occupies the former Craigsfield Farm, established in 1789 by John and Hannah Davis Craig who had moved here from Augusta County, Virginia. They cleared the land, built a corn mill on Bull Creek, and a distillery, all while raising eight children. John Craig was one of the founders of Buncombe County in 1791, serving as Trustee, a position comparable to the present County Treasurer. Buncombe County was formed from parts of Burke and Rutherford Counties, which in those days had technically extended west as far as the Mississippi since no settlers lived on those lands.

As a founder, John Craig is mentioned in Forster Sondley's 1922 "A History of Buncombe County" where he is described as follows:

"He was a most eccentric character of much intelligence and considerable property...
... prided himself on being discourteous in manner and brutal in disposition".

The Murder of John Craig

Perhaps his personality played a role in his famous murder a few years later. As reported in the Raleigh Minerva newspaper:

"On Tuesday, March 15, 1808, as Mr. Craig worked alone at his Bull Creek mill his dogs began to bark as if they had tracked a deer. Curious, Craig walked towards the mountain laurel thicket the dogs had disappeared into on the opposite bank of Bull Creek. Before he could cover the approximately 60 foot distance to find his dogs, a man crouching behind the laurel pointed a rifle at Craig and fired."

It was reported that the musket ball entered above Craig's stomach and went through so it could be seen poking out of the skin on his back. Despite this, he lived for 3 hours and told those attending that his assailant was Henry West, his daughter's fiancé. Based on this and circumstantial evidence West was sentenced to death at a trial held on April 8th & 9th with his execution scheduled May 6th. (Justice moved fast in those days as there was no penitentiary in the area)

However, after the trial another man, Thomas Rogers, became a suspect. An original juror, Thomas Patton, felt so strongly that he petitioned the governor to pardon West. As reported in the Raleigh Register:

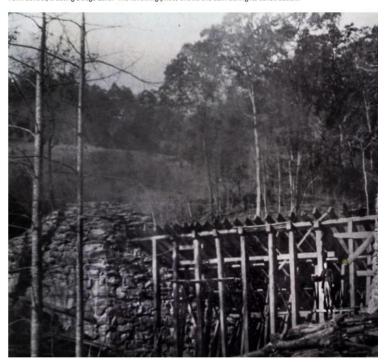
"West is stated to be a poor man who was never possessed of a rifle. The man now suspected has a rifle which carries a ball the exact size of that which shot the deceased. No enmity is said to have subsisted betwixt West and Craig; on the contrary, West lived in the family, and was engaged to be married to one of Mr. Craig's daughters. "There was a quarrel and a long impending law suit betwixt the man now suspected and the deceased."

On May 6th as Henry West was preparing to hang, rider arrived from Raleigh with a pardon from the Governor. The case was publicized widely as an example – per a Raleigh Register editorial in 1808:

"The narrow escape of this innocent man will serve as a caution to jurors against too lightly convicting persons of murder on circumstantial evidence."

Dodge Lake Dam

A popular destination on our trails along Bull Creek is the old dam ruin just north on Sovereign Oaks on Warren Wilson College property. The dam was built in 1910 to supply power and light to the Asheville Farm School, creating Dodge Lake. The following photo shows the dam during its construction.



The dam served for only six years before it was destroyed in the famous floods of 1916. Per a contemporary account in the Presbyterian newsletter, the Continent:

"Dodge Lake, which supplies the farm school with power and light, broke through one end of the dam, tore out two lengths of the great steel supply pipe, tossing them aside as though they were straws"

Project Benefits

For Me

- Practical experience applying the learning from our classes
- Getting to know dozens of future neighbors
- Helping shape the development of the community

For the Community

- Learning about the ecology of the Blue Ridge
- Guides to help them impress their visitors
- Opportunities to meet future neighbors

Going Forward

- There's more to come...
 - More guided walks
 - Summer & Fall Wildflower Guides
 - Guides for ferns, mushrooms, and more
- A role with the Blue Ridge Naturalist Network
- Giving back as an Arboretum trail guide

