



January 2021

Hello All!

Happy 2021! I hope one of your resolutions is to get outside more often.

December Trip Summary

In December, our primary and alternate locations were inaccessible due to poor road conditions. With the help of Dave Schuetrum, we were able to quickly pivot and organize a fantastic outing to Francis Beidler Forest. The weather was absolutely gorgeous, with temperatures starting in the mid 60ies and warming up to the low 70ies under partly sunny skies. Attendees:

Alison Smith	Gordon Murphy	Kevin Curtis	Paul Kalbach
Bill Wedding	Jean Prothro	Kim McManus	Ron Ahle
Carol Mabe	Jeff Kline	Lee Morris	Sharleen Johnson
Caroline Eastman	Jerry Bright	Lesiny Minard	Tim Campbell
Cathy Chandler	Jim Boylston	Lynda Curtis	Tim Evans
Dave Schuetrum	Kate Hartley	Marcie Wedding	Tom Austin
David Camper	Kathy Vause	Marcus Sizemore	



The morning kicked off with a quick history lesson about the Francis Beidler Forest, presented by Tim Evans, Forest Program Manager for Audubon South Carolina and our host for the day. In the 1890s and early 1900s, Chicagoan Francis Beidler took advantage of low timber land prices to purchase hundreds of thousands of acres in South Carolina. Some tracts were purchased for as little as \$2 an acre. Shortly thereafter, Beidler developed mental issues. The mill for the Congaree floodplain was closed in 1919. The family retained the property and in 1969 resumed operations. Pierre Manigault with the National Audubon Society noticed the logging trucks and approached the family about buying the property. Eventually a bargain was struck and one of the largest remaining stands of virgin old-growth bald cypress and tupelo gum was preserved.

A few interesting swamp tidbits Tim shared:

- Studies on the trees have been done as recently as 6 month ago. Teams from Arkansas and Alabama came to take core samples and trunk slices from downed trees for dendrological studies.
- Cypress trees don't need to live in water, but the water keeps competition down and gives them time to mature.
- Swamp trees need dry ground to germinate.
- The Lowcountry's cycle of hurricanes and droughts allows the trees to thrive.

Due to COVID-19 restrictions, we were unable to visit the boardwalk that was built in Four Holes Swamp. Instead, Tim led our caravan of cars a short distance down Mims Road to a private entrance that cut across private property before putting us back on Audubon's land. Some folks parked by the log cabin near the entrance and started exploring the area along the road. Others continued driving down to Mellard Lake where they utilized provided canoes and kayaks to explore the lake and Four Holes Swamp.



L to R: asters, Audubon cabin, Pine Woods Tree Frog



L to R: Dwarf Palmettos dotted the land around the swamp, Dave Schuetrum emerges from the trees, a pretty yellow flower brightens the landscape, exploring the edges of the swamp on foot.



L to R: Lee Morris paddles among the Cypress in Four Holes Swamp, a River Cooter sporting a Smooth Turtle Leech basks in the midday sun, Mellard Lake reflects the remaining fall colors of the trees.

After exploring the Mellard Lake area on foot and by water, a small group returned to the newly opened Grasslands and Woodland Trail. Tim provided a running commentary as we explored the trails, covering the recent history of the property and insights into how the longleaf pine restoration project is being managed. In 2012, Audubon purchased 80 acres of cotton fields adjacent to the entrance to the Audubon Center along Mims Road. It lay fallow for two years. In 2015, the University of Missouri planted Longleaf Pine on the property. The current regimen is to burn every two years and allow the property to renaturalize. In the fall of

2020, Audubon opened the area to the public, with approximately 2 miles of trails through grasslands and woodlands.

SCAN member Sharleen Johnson provided an excellent summary of Tim's considerations that go into planning a restoration project like this:

- The first thing Tim looks at when deciding where to plant longleaf pine is soil maps. There are two sandy soil types in particular that are a super good match for longleaf pine. Interestingly, if one of those soil types is present, longleaf grows well in quite a range of soil moisture conditions. After looking at the soil maps, Tim ground truths them by taking a few soil cores; in former agricultural fields, you have to go down at least 12" in order to see which soil type is "really" there since the top layer has often been substantially mixed and modified.
- Another challenge with restoring former agricultural fields is that often a hardpan layer builds up just below the tractor tilling depth, so the soil needs to be deep disced in order to break up that hardpan so that the roots of planted trees can penetrate into deeper soil layers. There's one small area in one of the fields where all of the planted longleaf struggled and died, and Tim suspects that the hardpan layer wasn't successfully broken up in that spot.
- Longleaf grows more slowly than most other pines (such as loblolly) but stays healthy through to a much greater age (hundreds of years as opposed to loblolly's just-a-few decades). As a trade-off to the slower growth rate, longleaf pine grows straighter and stronger and has less taper than other pine species, so the resulting lumber is more valuable.
- The bud at the tip of longleaf is sensitive to fire, and killing the bud will kill the tree, so when the longleaf is recently planted and young, burns need to happen in the winter season when the bud is not present. As the trees grow taller, burns can be moved to the growing season, since the buds are then high enough above the ground that they won't be in the active fire zone.



L to R: Atlantic Coast Slimy Salamander, freshly burned 5-year-old Longleaf Pine, grasslands with Longleaf Pine.

The group voted at the beginning of the day to take our time at the site and find dinner on our own, so we did not gather after exploring.

Annual Business Meeting and January Outing

Due to ongoing concerns regarding large indoor gatherings, our traditional January business meeting and seminar sessions will be replaced with a quick online business meeting and a regular outing.

Our annual business meeting will be held via Zoom at 7 pm on **Thursday, January 21st**. Please join us online:

If the direct link does not work, go to <https://www.zoom.us/join> and enter this information:

Meeting ID:

Passcode:

Meeting Agenda:

- Introductions
- Treasurer's Report
- Election of Officers
- Old Business

- New Business
- Adjourn

After the official meeting is adjourned, plan to stick around and share your favorite highlight from 2020. Have a photo or two queued up to share, if applicable!

Proposed slate of officers:

- President – Kim McManus
- Vice President – Dave Schuetrum
- Treasurer – Angela Valvasori
- Secretary – Mary Garland Douglass
- Historian – Gordon Murphy
- Northern Regional Director – Rita Zollinger
- Western Regional Director – Lee Morris
- Central Regional Directors – Dave and Marty Kastner
- Eastern Regional Directors – Jeff Kline and Jerry Bright
- Southern Regional Director – Marcus Sizemore

Membership renewals can be done by mail or by bringing the form and a check to the January outing. The form can be found attached to the email, under Files on our Facebook page or on our website:
<http://www.scnaturalists.org/wp-content/uploads/2021/01/2021-SCAN-membership-form.pdf>

Please submit your dues by the end of February.

If you're already suffering withdrawal from our educational sessions, here are a few resources for expanding your knowledge base!

- SC Partners in Amphibian and Reptile Conservation (SCPARC) recorded a series of presentations during their 2020 virtual meeting:
 - <http://scparc.org/2020-annual-meeting/>
- SC Native Plant Society (SCNPS) has several videos available on their website:
 - <https://scnps.org/education/videos>
- Avid Birdwatcher Jason Ward has produced a series of videos entitled Birds of North America with Jason Ward. There are currently 24 videos available on YouTube:
 - https://youtube.com/playlist?list=PLZVnnAt5_5lbqaQNNg-LEPwDRbj_nf5hU
- For the photographers in the group, did you know that 39 episodes of Wild Photo Adventures are now available online?
 - <https://youtube.com/playlist?list=PLLC1thxanbspTGiU0ZK-vV0fAxAzGlt>

On **Saturday, January 23rd** we're heading to Congaree Bluffs Heritage Preserve in Calhoun County, SC. SCAN last visited the property in September 2012. Jerry Bright and Dave Schuetrum worked together to obtain access to the Education Center. This provides us close parking for the trailhead and the pavilion, plus restroom facilities!

We hope to see you online on the 21st and in person on the 23rd!

Kim McManus

Congaree Bluffs Heritage Preserve

Turkey Track Lane, St. Matthews, SC 29135

Calhoun County

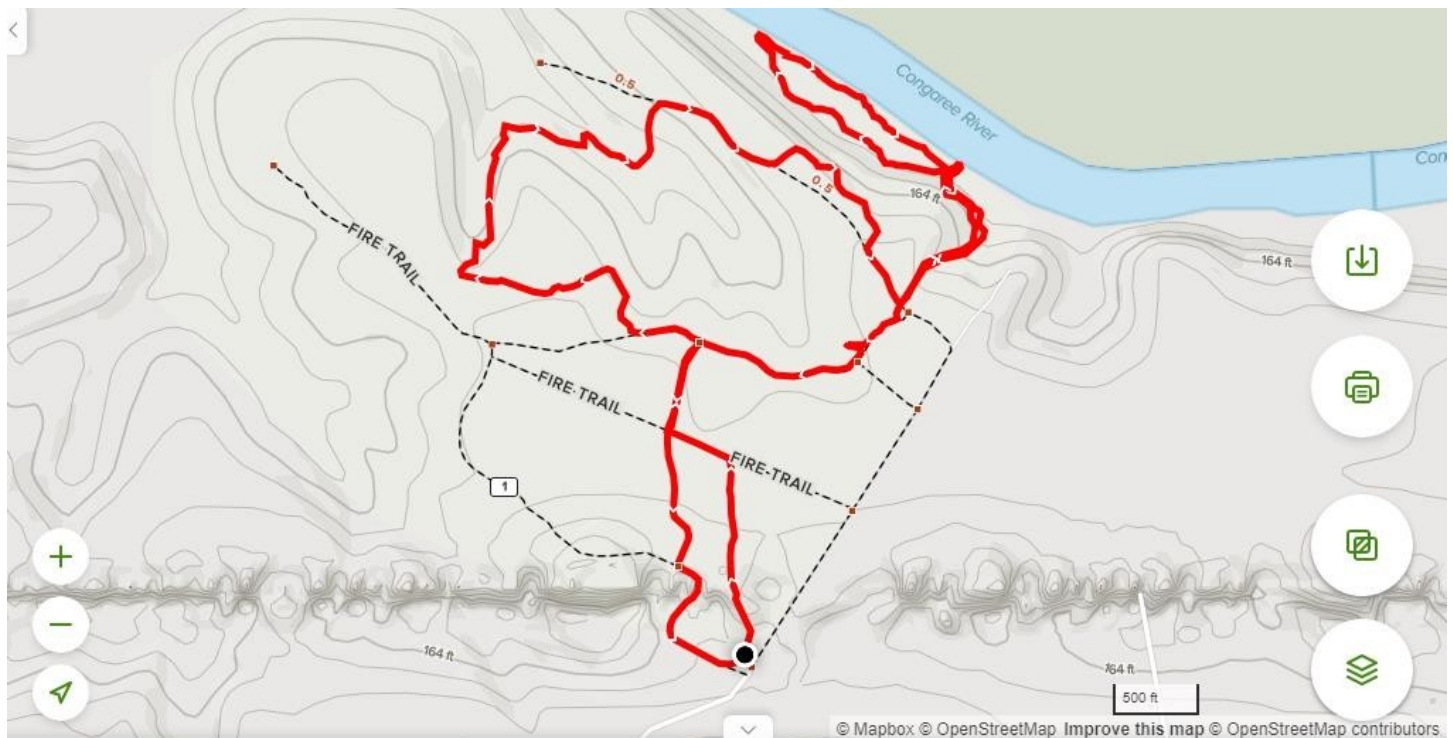
Saturday, January 23, 2021 10:30 AM to 4:30 PM

From the SCDNR Public Lands website

(<https://www2.dnr.sc.gov/ManagedLands/ManagedLand/ManagedLand/101>):

The Congaree Bluffs Heritage Preserve comprises 201 acres and contains steep, undisturbed bluffs bordering the Congaree River. Located in Calhoun County, the preserve harbors significant stands of American beech, oak-hickory and bottomland hardwood forest. The upland areas of the preserve are being restored to longleaf pine. No comparable sites exist in the coastal plain of South Carolina. There are several other sites nearby on private lands, but these areas, along with the preserve, are unique. Similar systems in and around the Florida Panhandle have been documented to have the greatest number of trees per unit area within the temperate forest of the eastern United States. More than 100 species of trees, shrubs and woody vines exist in the preserve from the ridge base to the crest of the bluffs. Woody plants may number 200 species.

There are 3 loop trails on the property, totaling 3 miles in length. They range from easy to strenuous. The elevation ranges from 90 feet along the river to over 250 feet in the higher sections. The Ravine Walk is 1.5 miles and passes through bottomland hardwoods. The Bluff-River Walk is 1.0 miles and takes you down along the Congaree River. The Observation Walk is 0.5 miles long. An observation deck provides an overlook of Congaree National Park.



SC DNR Region 3 Heritage Preserve Biologist Hunter Young will be onsite to let us into the education center, provide more detailed descriptions of the property and answer any questions we might have.

General Directions:

- Take I-77 South
- Take Exit 9B
- Turn right onto Leesburg Road
- Take a Left turn onto Garners Ferry Road (Hwy. 378)
- Continue on Hwy 378 for 16.6 miles
- Take a right turn onto McCords Ferry Road (Hwy. 601)
- Continue on Hwy 601 for 17.2 miles
- Turn right onto Fort Motte Road (SC-419)
- Continue on Fort Motte Road for 3.6 miles
- Turn right onto Turkey Track Lane and go about 0.3 miles
- Congaree Bluffs Heritage Preserve will be on your left.

From Columbia

I-26 East (toward Charleston) take exit 125

Turn right onto SSR31 known as Old Sandy Run Road

Drive 2 miles on Old Sandy Run Road until you come to a stop sign at Highway 176

Turn right onto Highway 176 and then you will travel 7.6 miles

Turn left just past West Bethel Church on SSR24 known as Old Bellville Road

Travel 7 miles on Old Bellville Road

Turn left on to Purple Martin Road just past Mount Carmel Baptist Church

Travel on Purple Martin Road until you come to a stop sign at SSR25 known as Fort Motte Road

Turn left on Fort Motte Road and travel for 2.8 miles. Heritage Preserve Sign is on the right

Turn left on Turkey Track Lane (dirt road)

From Charleston

Take I-26 W to Exit 145 (US 601)

Travel north on US 601 approximately 15 miles

Turn left on SC 419; follow SC 419 for 2.5 miles to the railroad tracks in Fort Motte

Cross tracks and continue straight for approximately 1 mile

Turn right on Turkey Track Lane (dirt road)

Follow Turkey Track Lane for approximately 1 mile.

There are two parking lots. We will meet in the second one, closest to the pavilion.

See you there!

Trip Coordinators:

Jerry Bright

Dave Schuetrum

Kim McManus

**Francis Beidler Forest
Dorchester Co., SC
December 12, 2020**

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 Tom Jones. _____

Please indicate exactly to which flora/fauna list you are referring. Thank you.

ALGAE

Green Alga

Trentepohlia aurea

LICHENS

Bushy Beard Lichen

Usnea strigosa

FLORA

Common Ground-pine

Dendrolycopodium obscurum

Bracken

Pteridium aquilinum

Ebony Spleenwort

Asplenium platyneuron

Christmas Fern

Polystichum acrostichoides

Resurrection Fern

Pleopeltis michauxiana

Spruce Pine

Pinus glabra

Longleaf Pine

Pinus palustris

Loblolly Pine

Pinus taeda

Eastern Red Cedar

Juniperus virginiana

Bald-cypress

Taxodium distichum

Little Brown Jug

Hexastylis arifolia

Southern Magnolia

Magnolia grandiflora

Swamp Bay

Persea palustris

Sassafras

Sassafras albidum

Green-fly Orchid

Epidendrum conopseum

Cranefly Orchid

Tipularia discolor

Dwarf Palmetto

Sabal minor

Sweet Gum

Liquidambar styraciflua

Virginia-willow

Itea virginica

Peppervine

Ampelopsis arborea

Muscadine

*Muscadinia rotundifolia
rotundifolia*

Black Cherry

Prunus serotina serotina

Blackberry

Rubus sp.

Supplejack

Berchemia scandens

White Oak

Quercus alba

Water Oak

Quercus nigra

Willow Oak

Quercus phellos

Post Oak

Quercus stellata

Common Wax-myrtle

Morella cerifera

American Hornbeam

Carpinus caroliniana

American Hop-hornbeam

Ostrya virginiana

Eastern Poison Ivy

Toxicodendron radicans radicans

Eastern Red Maple

Acer rubrum rubrum

Blackgum

Nyssa sylvatica

Climbing Hydrangea

Decumaria barbara

Flowering Dogwood

Cornus florida

Spotted Wintergreen

Chimaphila maculata

Blueberry

Vaccinium sp.

Partridge-berry

Mitchella repens

Carolina Jessamine

Gelsemium sempervirens

Chinese Privet

Ligustrum sinense

Cross-vine

Bignonia capreolata

Beautyberry

Callicarpa americana

American Holly

Ilex opaca opaca

Grass-leaved Golden-aster

Pityopsis sp.

Goldenrod

Solidago sp.

Japanese Honeysuckle

Lonicera japonica

Mossy-maze Polypore

Cerrena unicolor

Crowded Parchment

Stereum complicatum

Hairy Parchment

* *Stereum hirsutum*

Mycena (mushroom)

Mycena sp.

FAUNA

Dusky Ancyliid

* *Laevapex fuscus*

Bugle Sprite

* *Dilatata dilatata*

Rotund Mystery Snail

* *Callinina intertexta*

Squat Dusksnail

Lyogyrus granum

Fingernail Clam

* *Sphaerium sp.*

Smooth Turtle Leech

* *Placobdella parasitica*

Scud

Asellus sp.

Grass Shrimp

Palaemonetes paludosus

Mabel Orchard Orbweaver

Leucauge argyrobapta

Brownish-gray Fishing Spider

Dolomedes tenebrosus

American Bird Grasshopper

Schistocerca americana

Eastern Subterranean Termite

Reticulitermes flavipes

Water Measurer

* *Hydrometra sp.*

Water-scorpion

Ranatra sp.

Spotted-winged Antlion

Dendroleon obsoletus

Red Imported Fire Ant

Solenopsis invicta

Phantom Cranefly

Bittacomorpha clavipes

Cloudless Sulphur

Phoebis sennae eubule

Barred Yellow

Eurema दौरa

Common Buckeye (butterfly)

Junonia coenia

Eastern Mosquitofish

Gambusia holbrooki

Banded Pygmy Sunfish

Elassoma zonatum

Swamp Darter (fish)
Etheostoma fusiforme

Atl. Coast Slimy Salamander
Plethodon chlorobryonis

Southern Toad
Anaxyrus terrestris

Pine Woods Treefrog
Hyla femoralis

River Cooter
Pseudemys concinna

Yellow-bellied Slider
Trachemys scripta scripta

Green Anole
Anolis carolinensis

Ground Skink
Scincella lateralis

Eastern Ratsnake
Pantherophis alleghaniensis

Turkey Vulture
Cathartes aura

Black Vulture
Coragyps atratus

Red-shouldered Hawk
Buteo lineatus

Red-bellied Woodpecker
Melanerpes carolinus

Downy Woodpecker
Picoides pubescens

Yellow-bellied Sapsucker
Sphyrapicus varius

Pileated Woodpecker
Dryocopus pileatus

Eastern Phoebe
Sayornis phoebe

American Crow
Corvus brachyrhynchos

Fish Crow
Corvus ossifragus

Carolina Chickadee
Parus carolinensis

Tufted Titmouse
Baeolophus bicolor

Brown Creeper
Certhia americana

Brown-headed Nuthatch
Sitta pusilla

Golden-crowned Kinglet
Regulus satrapa

Ruby-crowned Kinglet
Regulus calendula

Northern Mockingbird
Mimus polyglottos

Blue-headed Vireo
Vireo solitarius

Black-and-white Warbler
Mniotilta varia

Yellow-rumped Warbler
Dendroica coronata

Pine Warbler
Dendroica pinus

Northern Cardinal
Cardinalis cardinalis

Chipping Sparrow
Spizella passerina

Common Grackle
Quiscalus quiscula

FOSSILS

Boring Sponge
Cliona sp.

Sand Dollar
* *Protoscutella conradi*

Sea Biscuit
* *Rhyncholampas carolinensis*

Turret Shell
* *Turritella rina*

Horse Conch
Clavilithes sp.

Volute
* *Voluticorbis cormacki*

Miter
Fusimitra polita

Cone Shell
* *Conus sauridens*

Ark Clam
* *Barbatia* sp. nov.

Kitten's-paw
Plicatula filamentosa

Saddle Oyster
Cubitostrea sellaeformis

Smooth Scallop
Eburneopecten calvatus

Scallop
* *Chlamys wahtubbeana*

Thorny Oyster
Spondylus lamellacea

Jewel Box
* *Chama monroensis*

Cardita
Glyptoactis alticostata

Cardita
Rotundocardia rotunda

Cockle
Agnocardium claibornense

Crassatella Clam
Crassatella eutawcolens

Crassatella Clam
Crassatella sp.

Foam Oyster
Pycnodonte ludoviciana