



January 2008

Hi all,

We had a fun day at the "rock" (Forty Acre in name but actually the exposed pluton is only 14) on our last trip in 2007. Kathy Broyle from SCDNR joined us and some of us helped her do some needed cleanup of the site by picking the ubiquitous litter. Unfortunately, Kathy was also trying to cover up some of the perennial graffiti that is on many rock faces. Many of us had other ideas about what we would do to the spray-paint wielding vandals, some not printable in this family oriented newsletter!

We spent the morning exploring this example of exfoliating intrusive igneous magma that had hardened and crystallized over millions of years, while under the earth, into what geologists have labeled as Pageland granite. Many also explored the waterfall area and cave, all very dry with the drought, and others like Jerry and Pat walked the trails back to the lower parking lot near the nearly dry, but still scenic and interesting beaver pond. We also saw some elf orpine/red moss still alive in a vernal pool depression back on the rock.

After lunch, we parked at the lower lot. Some visited the pond and others of us explored an area via old Hwy 601 (pre-1966), now partially grown over which is part of a massive, 1100 feet thick and now tree covered diabase dike which Hwy 601 cuts through near Flat Creek (and has water). This dike is the result of magma flowing through the underlying strata at the time, now eroded away, which is dated to 200 million years ago and theorized to be caused by the last continental collision that helped raise the Appalachians. This site has a basic soil composition and hosts different plants than the other parts of the site. We saw the beginnings of some spring ephemerals that are probably coming up due to our warmer winter.

A dinner at Gus's House of Pizza in Kershaw and the chance to do some great astronomy courtesy of Red Smith and the Charlotte Astronomy club in nearby Taxahaw made for a wonderful full-day that ended for the last few (Chris, Johnny and me) of us about 9:30 pm, before we left for home.

Jules Fraytet / SCAN President 2006 - 2007
(Thanks for letting me be your president for the past two years.)

PS. Membership renewals by mail save our secretary and treasurer a lot of work at the annual meeting, so, if you would, please renew by mail. Thank you.

SCAN ANNUAL MEETING
South Carolina State Museum, Vista Room, Columbia, SC
January 26, 2008; 9:30 AM – 4:00 PM

9:30 - 10:00 AM: Socializing & Membership Renewal. Refreshments must be purchased from the museum.*

10:00 - 10:15 AM: Introduction and Welcome.^^ Jules Fraytet, SCAN President.

10:15 - 11:05 AM: Gwen Daley, PhD, The geological and biological history of the Carolinas as recorded in the Blue Ridge. Assistant Professor (Invertebrate Paleontology), Department of Chemistry, Physics, and Geology, Winthrop University, Rock Hill, SC.

11:10 - 12:00 PM: Gordon Murphy, NEPA, the National Environmental Policy Act of 1969 regarding transportation projects and mitigation. SCAN 2008 Presidential Nominee and Senior Environmental Scientist with the LPA Group Inc., Columbia, SC.

12:00 - 2:00 PM: Lunch, on your own.

2:05 - 2:55 PM: Theresa Thom, PhD, Ivory-billed Woodpecker searches in Congaree National Park, South Carolina. Information on the search of the Ivory-billed Woodpecker and other projects on-going at the Congaree National Park. Ecologist and Director of the Old-Growth Bottomland Forest Research and Education Center. Congaree National Park, Hopkins, SC.

3:00 - 3:30 PM: 2007 in review; Jerry Bright and other SCAN photographers.

3:30 - 4:00 PM: Annual Business Meeting; SCAN's Third Book, election of 2008 officers, etc.

4:00 PM: Adjourn Potluck dinner at Jan Ceigler's home.

* Due to museum requirements, we can no longer serve refreshments in the meeting room.

^^ Bryn Harmer (Woods Bay State Park) will make a brief announcement of a new state park species inventory program.

Gwen Daley: I am an invertebrate paleontologist who works primarily on the ecology of past marine ecosystems. In recent years, I have worked on reconstructing paleoecology of Atlantic and Gulf coastal plain molluscan communities with an eye toward establishing baselines for undisturbed shallow water mollusk communities. I will discuss the geological and biological history of the Carolinas as recorded in material from 1.2 billion year-old metamorphic rocks of the Blue Ridge to the unconsolidated, still mobile sediments of the Atlantic coastal plain. I will discuss the turbulent geologic history of the region as well as how this history controls the modern landscape. I will also discuss the former residents of the region, from half-billion year old trilobites through the Great White Shark's big, bad, but sadly extinct, relative *Carcharodon megalodon*.

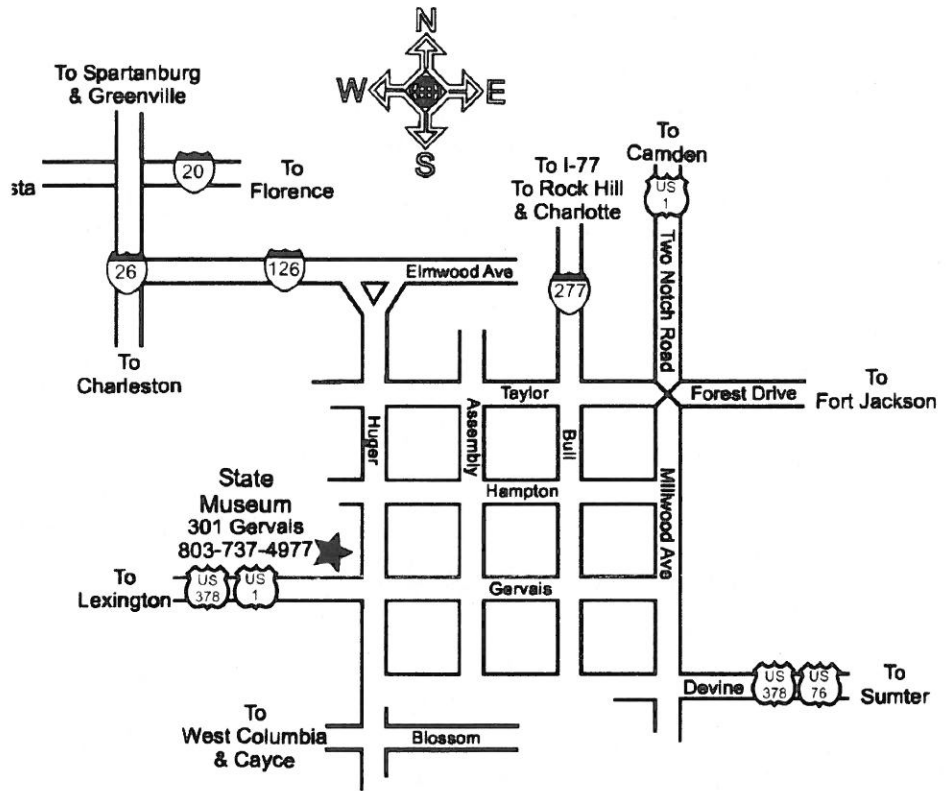
Gordon Murphy: I am responsible for environmental document writing and coordinating field studies, including wetland delineations and both threatened and endangered species surveys. I have been doing this kind of work for 16 years. Before that, I was in the zoo business for 18 years. The National Environmental Policy Act of 1969 (NEPA) requires that an analysis of potential environmental impacts be conducted prior to commencing a federal action. The resulting analysis is intended to be used as a decision making tool in the planning process. With proper mitigation, certain natural resources may be impacted by federal projects while others may not. The requirements of NEPA have evolved and become more complex since it was enacted, and the process is applied differently from one federal agency to the next. I will give us an overview of how NEPA is applied to transportation projects, specifically roadway and airport projects. The discussion will include laws that are applicable, which resource impacts are analyzed, and what level of documentation is required.

Theresa Thom: Theresa has been at the park for almost two years. She received her PhD from the University of Georgia in Ecology (don't worry; she won't cheer for the Bulldogs too loudly). Her background is primarily aquatic entomology, although in recent years she has studied species with backbones. Theresa feels very strongly about basing adaptive natural resource management on relevant science, including citizen scientists in data collection, and incorporating current data into educational programs. She has worked in North, South and Central America for various federal agencies including the Department of Defense, and is happy to be part of the National Park Service – especially Congaree NP.

South Carolina Association of Naturalists: Jules Fraytet, President; Lynn Smith, Vice-president; Ben Gregory, Secretary; Greg Mancini, Treasurer; Tom Jones & Mary G. Douglass-Jones, Flora/Fauna Database Managers; Dee Hope, Historian, Regional Directors: Jan Ciegler (north), Johnny Hardaway & Wayne Grooms (south), Gordon Murphy (east), Eva & Sam Pratt (west), Jerry & Pat Bright (central). Newsletter published monthly; contact Ben Gregory, scan_editor_brg@bellsouth.net or 704-372-8532. Yearly membership is \$12. Send check to SCAN, c/o Greg Mancini, P.O. Box 5651, Columbia, SC 29250-5651. Fieldtrips open to visitors, and children must be over age 15. SCAN is a nonprofit 501(c)(3) in the state of South Carolina. (www.scnaturalists.org)

Directions and Map to the South Carolina State Museum, Virginia Winn

Directions: I-26 south (east), exit at US 1 and follow it into downtown over the Gervais Street Bridge. The museum will be on your left. Proceed to Huger Street, turn left at the traffic light, and watch for the brown museum sign at a small side street to your left. From I-26 north (west) or 1-20 west follow I-26 to 126. Turn right onto Huger Street immediately after you cross the Broad River and watch for the small brown sign on your right. From I-20 east and I-77 north follow SC 277 south to Elmwood, turn right, then bear right to Huger Street, then watch for the small brown sign on your right.



SCAN New Membership & Renewal Form
(Members are age 15 or older)

URGENT: Please, always notify SCAN of house and email address changes.

Today's Date: _____ New Member(s) #: _____ Renewing Member(s) #: _____

Dues: \$12.00 per calendar year due by the January annual meeting
 \$5.00 per calendar year for each additional member at the same address
 (Note: Persons joining in July or later pay 1/2 price.)

Name(s): 1. _____ 2. _____
 3. _____ 4. _____

Mailing Address: Street/PO Box _____
 City _____ State _____ Zip Code _____

Email Addresses: 1. _____
 2. _____

Phone #: (_____) _____

Mail Renewal form to: SCAN, PO Box 5651, Columbia, SC 29250-5651

EMAIL COMMUNICATION: Email has become a fast and reliable way for the SCAN Secretary to communicate with members; e.g., time sensitive info, early announcements, etc.

Little Pee Dee State Park Bay Heritage Preserve – Dillon County, SC – November 17, 2007

This list was produced by SCAN from sightings supplied 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. Please indicate exactly to which flora/fauna list you are referring. Thank you

FLORA

Spiny Spikemoss

Selaginella acanthonota

Bracken

Pteridium aquilinum

Netted Chain Fern

Woodwardia areolata

Sensitive Fern

Onoclea sensibilis sensibilis

Longleaf Pine

Pinus palustris

Pond Pine

Pinus serotina

Loblolly Pine

Pinus taeda

Eastern Red Cedar

Juniperus virginiana virginiana

Bald-cypress

Taxodium distichum

Green Arrow-arum

Peltandra virginica

Greater Duckweed

Spirodela polyrrhiza

Mud-midgets

Wolffiella gladiata

Southern Bogbutton

Lachnocaulon beyrichianum

Threeway Sedge

Dulichium arundinaceum arundinaceum

Sandhill Beaksedge

Rhynchospora megalocarpa

Woolgrass Bulrush

Scirpus cyperinus

Switch Cane

Arundinaria tecta

Swamp Phanopyrum

Phanopyrum gymnocarpon

Giant Plume Grass

Saccharum giganteum

Common Cattail

Typha latifolia

Spanish-moss

Tillandsia usneoides

Whiteleaf Greenbrier

Smilax glauca

Bamboo-vine

Smilax laurifolia

Common Greenbrier

Smilax rotundifolia

Water-spider Orchid

Habenaria repens

Nodding Ladies'-tresses

Spiranthes cernua

Crane-fly Orchid

Tipularia discolor

Sweetbay

Magnolia virginiana

Small-flowered PawPaw

Asimina parviflora

Swamp Bay

Persea palustris

Sassafras

Sassafras albidum

Little Brown Jug

Hexastylis arifolia

White Water-lily

Nymphaea odorata odorata

Sweet Gum

Liquidambar styraciflua

False-nettle

Boehmeria cylindrica

Mockernut Hickory

Carya alba

Sand Hickory

Carya pallida

Pocasin Bayberry

Morella caroliniensis

Common Wax-myrtle

Morella cerifera

Dwarf Wax-myrtle

Morella pumila

Running Oak

Quercus elliotii

Southern Red Oak

Quercus falcata

Bluejack Oak

Quercus incana

Turkey Oak

Quercus laevis

Laurel Oak

Quercus laurifolia

Sand Post Oak

Quercus margaretta

Blackjack Oak

Quercus marilandica marilandica

Water Oak

Quercus nigra

Cherrybark Oak

Quercus pagoda

Post Oak

Quercus stellata

Tag Alder

Alnus serrulata

Eastern Prickly-pear

Opuntia humifusa humifusa

Wire-plant

Stipulicida setacea setacea

Common October-flower

Polygonella polygama

Loblolly Bay

Gordonia lasianthus

St. Andrew's Cross

Hypericum hypericoides

Marsh St.-John's-wort

Triadenum virginicum

Marsh St.-John's-wort

Triadenum walteri

Ti-ti

Cyrilla racemiflora

Coastal Sweet Pepperbush

Clethra alnifolia

Spotted Wintergreen

Chimaphila maculata

Dwarf Huckleberry

Gaylussacia dumosa

Dangleberry

Gaylussacia frondosa

Coastal Doghobble

Leucothoe axillaris

Shining Fetterbush

Lyonia lucida

Staggerbush

Lyonia mariana

Azalea

Rhododendron sp.

Sparkleberry

Vaccinium arboreum

Creeping Blueberry

Vaccinium crassifolium

Southern Highbush Blueberry

Vaccinium formosum

Black Highbush Blueberry

Vaccinium fuscatum

Southern Blueberry

Vaccinium tenellum

Horsesugar; Sweetleaf

Symplocos tinctoria

Climbing Hydrangea

Decumaria barbara

Virginia-willow

Itea virginica

Red Chokeberry

Aronia arbutifolia

Water-willow

Decodon verticillatus

Flowering Dogwood

Cornus florida

Swamp Tupelo

Nyssa biflora

American Mistletoe

Phoradendron serotinum serotinum

Big Gallberry

Ilex coriacea

Little Gallberry; Inkberry

Ilex glabra

American Holly

Ilex opaca opaca

Winterberry

Ilex verticillata

Muscadine; Scuppernong

Vitis rotundifolia rotundifolia

Red Maple

Acer rubrum

Poison Oak

Toxicodendron pubescens

Eastern Poison Ivy

Toxicodendron radicans radicans

Swamp Water-pennywort

Hydrocotyle ranunculoides

Carolina Jessamine

Gelsemium sempervirens

Senna Seymeria

Seymeria cassioides

Partridge-berry

Mitchella repens

Coastal Dog-fennel

Eupatorium compositifolium

Rosinweed

Silphium compositum

FAUNA

Sand Grasshopper

Spharagemon cristatum

American Bird Grasshopper

Schistocerca americana

Red-headed Pine Sawfly (larva)

Neodiprion lecontei

Eastern Yellowjacket

Vespula maculifrons

Minute Ground Beetle

Tachyta nana inornata

Minute Ground Beetle

Elaphropus granarius

Minute Ground Beetle

Paratachys pumilus

Woodland Ground Beetle

Pterostichus commutabilis

Minute Ground Beetle

Micratopus aenescens

Colorful Foliage Ground Beetle

Cymindis limbata

Predacious Diving Beetle

Copelatus glyphicus

Water Scavenger Beetle

Tropisternus blatchleyi blatchleyi

Water Scavenger Beetle

Enochrus interruptus

Clown Beetle

Aeletes politus

Minute Moss Beetle

Hydraena atlantica

Minute Moss Beetle

Hydraena spangleri

Ant-like Stone Beetle

Euconnus sp.

Antlike Stone Beetle

Chelonoidum sp.

Little Pee Dee State Park Bay Heritage Preserve – Dillon County, SC – November 17, 2007

Paederine Rove Beetle <i>Palaminus larvalis</i>	Sap Beetle <i>Stelidota geminata</i>	Great Blue Heron <i>Ardea herodias</i>	American Robin <i>Turdus migratorius</i>
Paederine Rove Beetle <i>Palaminus sp.</i>	Sap Beetle <i>Cryptolestes punctatus</i>	Canada Goose <i>Branta canadensis</i>	Cedar Waxwing <i>Bombycilla cedrorum</i>
Spiny-legged Rove Beetle <i>Carpelimus sp.</i>	Darkling Beetle <i>Uloma imberbis</i>	Turkey Vulture <i>Cathartes aura</i>	Eastern Towhee <i>Pipilo erythrophthalmus</i>
Water Skater (Rove Beetle) <i>Stenus sp.</i>	Darkling Beetle <i>Uloma punctulata</i>	Wild Turkey (tracks) <i>Meleagris gallopavo</i>	Red-winged Blackbird <i>Agelaius phoeniceus</i>
Short-winged Mold Beetle <i>Trimiomelba dubia</i>	Oval Leaf Beetle <i>Myochrous floridanus</i>	Red-bellied Woodpecker <i>Melanerpes carolinus</i>	Beaver <i>Castor canadensis</i>
Short-winged Mold Beetle <i>Custotychus minor</i>	Sleepy Orange (butterfly) <i>Eurema nicippe</i>	Northern Flicker <i>Colaptes auratus</i>	White-tailed Deer (tracks) <i>Odocoileus virginianus</i>
Short-winged Mold Beetle <i>Custotychus sp.</i>	Gulf Fritillary <i>Agraulis vanillae</i>	Tufted Titmouse <i>Parus bicolor</i>	
Aphodiine Dung Beetle <i>Ataenius platensis</i>	Southern Cricket Frog <i>Acris gryllus</i>	Brown-headed Nuthatch <i>Sitta pusilla</i>	
Sap Beetle <i>Carpophilus sp.</i>			

Carolina Sandhills NWR – Addendum – Chesterfield County, SC – October 27, 2007

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FAUNA

Minute Ground Beetle
Mioptachys flavicauda

Minute Ground Beetle
Elaphropus granarius
Minute Ground Beetle
Paratachys oblitus

Broad-nosed Weevil
Cercopeus sp.
Grain Weevil
Dryophthorus americanus

Little Mountain – Newberry County, SC – November 10, 2007

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FLORA

Bracken
Pteridium aquilinum
Shortleaf Pine
Pinus echinata
Longleaf Pine
Pinus palustris
Loblolly Pine
Pinus taeda
Eastern Red Cedar
Juniperus virginiana virginiana
Curlyleaf Yucca
Yucca filamentosa
Catbrier
Smilax bona-nox
Jackson-brier
Smilax smallii
Coralbeads
Cocculus carolinus
Sweet Gum
Liquidambar styraciflua
Red Mulberry
Morus rubra
Mockernut Hickory
Carya alba
Pignut Hickory
Carya glabra
Sand Hickory
Carya pallida

White Oak
Quercus alba
Scarlet Oak
Quercus coccinea
Southern Red Oak
Quercus falcata
Blackjack Oak
Quercus marilandica marilandica
Willow Oak
Quercus phellos
Red Oak
Quercus rubra
Post Oak
Quercus stellata
Black Oak
Quercus velutina
Pineweed
Hypericum gentianoides
St. Andrew's Cross
Hypericum hypericoides
Sourwood
Oxydendrum arboreum
Sparkleberry
Vaccinium arboreum
Hillside Blueberry
Vaccinium pallidum
American Persimmon
Diospyros virginiana
Black Cherry
Prunus serotina serotina
Black Locust
Robinia pseudoacacia
Flowering Dogwood
Cornus florida
Blackgum
Nyssa sylvatica

Muscadine; Scuppernong
Vitis rotundifolia rotundifolia
Red Maple
Acer rubrum
Winged Sumac
Rhus copallinum
Carolina Jessamine
Gelsemium sempervirens
Soapwort Gentian
Gentiana saponaria
Fringe-tree; Old Man's Beard
Chionanthus virginicus
Chinese Privet
Ligustrum sinense
Trumpet-creeper
Campsis radicans
Sweet Goldenrod
Solidago odora

FAUNA

American Bird Grasshopper
Schistocerca americana
Hickory Girdler Beetle
Oncideres cingulata
Red Admiral
Vanessa atalanta
Carolina Anole; Green Anole
Anolis carolinensis
Turkey Vulture
Cathartes aura
Red-tailed Hawk
Buteo jamaicensis