

From Marsh to Mountain

SCANning South Carolina's Natural History III

SCAN: The Third Decade
January 1996 — December 2005



South Carolina Association of Naturalists
Columbia, South Carolina
2013

**©2013 South Carolina Association of
Naturalists (SCAN)**

All rights reserved. No part of this work may be reproduced or used in any form or by any means — graphic, electronic, or mechanical, including photocopying, recording, taping, or information storage and retrieval systems — without the express written permission of the South Carolina Association of Naturalists.

ISBN 0-9673974-1-3

Distributed by:

South Carolina Association of Naturalists
Post Office Box 5651
Columbia, South Carolina 29250-5651

Printed by:

Pine Press Printing
120 Ellis Avenue
Lexington, SC 29072
Phone: 803.359.9162

Book Committee and Contributors:

SCAN would like to thank Jerry Bright, Ken Boni, Janet Ciegler, Mary Garland Douglass, Kay Hollis, Tom Jones, Jim Knight, Kim McManus, Gordon Murphy, Gene Ott, Eva Pratt, Sam Pratt, Lynn Smith, and Virginia Winn for their assistance in the publication of this book.

Front Cover Photographs:

Egret Snowy, *Egretta thula*, by Kim McManus.

Back Cover Photographs:

Cinnamon Fern, *Osmunda cinnamomea*, by Virginia Winn.

Title Page Photograph:

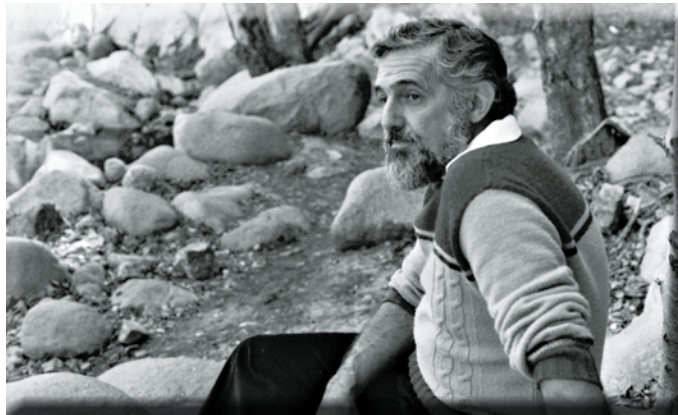
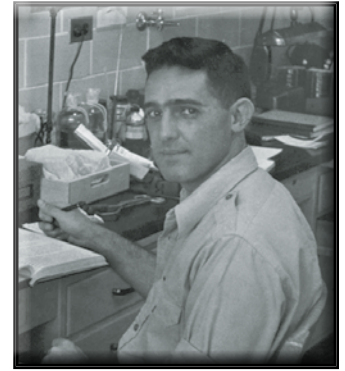
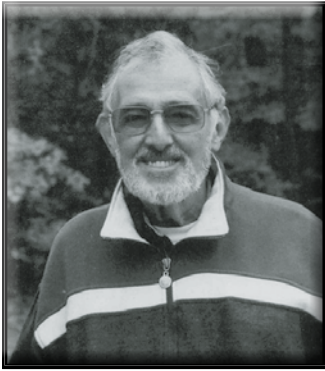
White Water Lily, *Acanthaceae odorata*, by Virginia Winn.

Dedication Photographs:

Given in memory of Alex by his wife, Janet Ciegler.

Layout and Design by:

Virginia Winn.



This Book is Dedicated to
Alex Ciegler
April 25, 1924 - January 31, 2003

Alex Ciegler was an enthusiastic member of SCAN for over 15 years, serving as Regional Director, Secretary, Treasurer, and President. He was an excellent photographer and ardent conservationist. During his last twelve years he became the primary lichenologist in South Carolina and identified most of the lichens listed in this book.

Alex was born to immigrant parents in Yonkers, New York, on April 25, 1924 and raised in the Bronx. He served as a tail-gunner in the Army Air Corps during World War II. Taking advantage of the G.I. Bill, he earned a B.S. from New York University, an M.S. from the University of Kentucky, and a Ph.D. in bacteriology from the University of Wisconsin, graduating in 1956. He worked in fermentations and fungal toxins with the U. S. Department of Agriculture in Peoria, Illinois and New Orleans, Louisiana. In 1971-72 he was an exchange scientist with the Bundesanstalt für Fleisforschung in Kulmbach, West Germany. He taught short courses in Costa Rica, Dominican Republic, Mexico, Istanbul, and Tbilisi, primarily on fungal toxins. His scientific publications include several chapters in books and numerous journal articles. A newly discovered fungus was named *Penicillium cieglerii* in his honor.

Alex always loved getting out and doing things, and participated in canoeing rivers in Illinois and Missouri and lakes in the Quetico-Superior area, backpacking in several western states, and bicycling. An active member of the Illinois Sierra Club, he fought for the creation of hiking/biking trails on former railroad rights-of-way.

After retiring in 1983 he worked as a consultant for CSC (Computer Science Corporation) in the area of protection against biological and chemical warfare. He moved to South Carolina in 1985 and joined SCAN and the Audubon Society, later taking up the study of lichens. He collected in every county in South Carolina, in nearly all the state parks, heritage preserves, and other natural areas, and amassed a fine collection now housed at Clemson University. Between his work and vacation travel, he visited 50 states and 55 foreign countries on all seven continents. He loved macrophotography and took fine photos of flora and fauna as well as slides of his travels.

Alex was the father of four children and grandfather of eight. He did gardening, cooking of many cuisines, and baking many varieties of bread. In his spare time he created original designs and made several window-sized panels of stained glass, winning "best in show" for his three-dimensional plant stand. An ardent reader, he devoured world history and enjoyed Charles Dickens; the public library marveled at the number of books checked out. His marriage of 47 years to Jan ended with his death in 2003. Alex is greatly missed by Jan and the other members of SCAN.

Acknowledgements

This volume could not have been created and published without the effort and time devoted by the Book Committee members and contributors: Kenneth A. Boni, Jerrold L. Bright, Janet C. Ciegler, Mary Garland Douglass, Kay G. Hollis, J. Thomas Jones, Jr., James Knight, Kim McManus, A. Gordon Murphy, Eva Pratt, Sam Pratt, Edwin E. Ott, Lynn B. Smith, and Virginia E. Winn.

This volume is truly a joint effort by the Book Committee. Each committee member worked on multiple parts of the volume, lending their special abilities to accomplishing the writing and assembly of the volume. A special note of thanks must be given to Jan and Virginia for their monumental efforts. Jan was the driving force behind the committee. She worked tirelessly to develop the site location maps, assemble many images, manage the field trip databases, and serve as location host for most committee meetings. Virginia accomplished the daunting task of volume layout and other preparation for printing.

Other SCAN members also provided substantial assistance toward this volume. John E. Cely and James L. Knight provided science and nature notes on birds and fossils, respectively. Many other members contributed photographs for the volume.

Edwin E. Ott
Book Committee Chairman

Why SCAN?

The South Carolina Association of Naturalists, or SCAN as we are most often called, was formed in 1976 and is still a viable organization over 36 years later. We are composed of a wide and diverse membership with many varied interests, but most of all we are people who have an amateur or professional interest in the natural history of South Carolina. SCAN publishes a monthly newsletter announcing the upcoming field trip with all pertinent information. Since one of our main objectives is to share factual natural history information, the newsletter contains a list of the plants (flora) and animals (fauna) we saw on the previous field trip. Other information of interest to naturalists is often included in these newsletters. SCAN maintains a web site where the public can obtain field trip and membership information. Please visit us at <http://www.scnaturalists.org>.

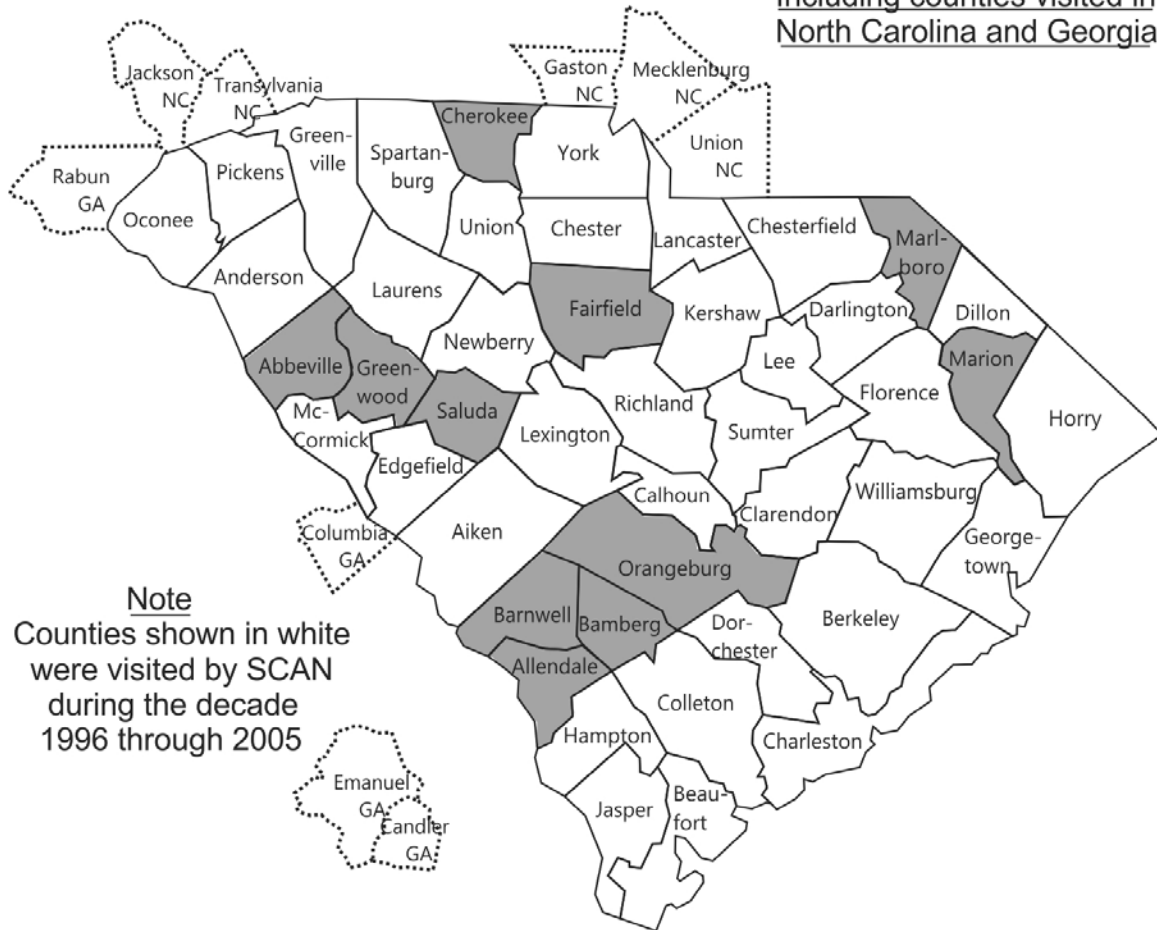
SCAN has at least one outdoor field trip per month between February and December. We always meet on the 4th Saturday of the month, except in November (3rd Saturday) and December (2nd Saturday). Members meet at the field trip site promptly at 10:30 am, unless otherwise stated in the newsletter, and then the fun begins. SCAN members must be 15 years of age or older. However, because we feel that it is important to get children involved in environmental stewardship, SCAN tries to organize two special trips a year on which the members may bring their children.

SCAN's membership runs on a calendar year from January to December, with yearly dues payable at our only indoor meeting of the year, the annual business meeting, which is always held in January. If you would like to learn more about membership, visit our web site or write us at:

South Carolina Association of Naturalists
Post Office Box 5651
Columbia, South Carolina 29250-5651

Counties of South Carolina

Including counties visited in
North Carolina and Georgia



Note
Counties shown in white
were visited by SCAN
during the decade
1996 through 2005

Table of Contents

Introduction	1
South Carolina Physiographic Regions	1
Paleontology in South Carolina	3
Bees in South Carolina	4
South Carolina Birds	6
South Carolina Reptiles and Amphibians	7
Sites Visited	8
Bibliography	238
Common Name Index	242
Scientific Name Index	275
Errata	348

Sites Visited in South Carolina by County

Aiken County, SC

Aiken Gopher Tortoise Heritage Preserve	8
Henderson Heritage Preserve	9
Hitchcock Woods (City of Aiken)	11
Savannah River Bluffs Heritage Preserve	14
Savannah River Site (Aiken/Barnwell Counties).....	15

Anderson County, SC

Aull Natural Area, Clemson Experimental Forest.	19
John and Suzanne Morse Property	20

Barnwell County, SC

Savannah River Site (see Aiken County)	15
--	----

Beaufort County, SC

Beaufort and Coosaw River (ACE Basin National Wildlife Refuge)	22
Combahee Unit (ACE Basin National Wildlife Refuge)	23
Hunting Island State Park	25
Sea Pines Forest Preserve	26
Victoria Bluffs Heritage Preserve	27

Berkeley County, SC

Honey Hill Campground, Little Hellhole Bay and Huger Loop (Frances Marion National Forest)	30
Martin-Marietta Quarry, Cross, SC	32

Calhoun County, SC

Congaree Bluffs Heritage Preserve	34
Wannamaker Nature Preserve	36

Charleston County, SC

Caw Caw Interpretive Center	38
Deweese Island	40
Dungannon Plantation Heritage Preserve	42
Edisto Beach State Park (see Colleton County)	67
Grove Plantation (ACE Basin National Wildlife Refuge) ...	43
Santee Coastal Reserve Wildlife Management Area	45
Sewee Indian Midden Trail	47
Sewee Visitor Center and I'on Swamp	49

Tibwin Plantation (Frances Marion National Forest)	51
--	----

Chester County, SC

Great Falls Railroad Trail along the Catawba River	54
Woods Ferry Recreational Area (Sumter National Forest) ..	55

Chesterfield County, SC

Sandhills State Forest and Sugarloaf Mountain	58
---	----

Clarendon County, SC

Santee National Wildlife Refuge	61
---------------------------------------	----

Colleton County, SC

Bear Island Wildlife Management Area	64
Bennett's Point Area and Hutchinson Island	66
Edisto Beach State Park (Colleton/Charleston Counties) ...	67
Edisto River, Canadys, SC	69

Darlington County, SC

Great Pee Dee River Heritage Preserve	71
Kalmia Gardens and Segars-McKinnon Heritage Preserve	72

Dillon County, SC

Little Pee Dee River State Park	75
---------------------------------------	----

Dorchester County, SC

Francis Beidler Forest Audubon Preserve	77
Givhans Ferry State Park	78

Edgefield County, SC

Lick Fork Recreation Area (Sumter National Forest)	81
--	----

Florence County, SC

Eagle Point Pit, Stokes Sand & Gravel, Inc., Florence, SC.....	84
Kirby Pond and Quarry, Timmons ville, SC	84

Georgetown County, SC

Hobcaw Barony and Pawley's Island	86
Huntington Beach State Park	89
Samworth Wildlife Management Area	90
Sandy Island	92

Greenville County, SC

Ashmore Heritage Preserve	94
Blue Wall Heritage Preserve	96
Eva Russel Chandler Heritage Preserve	99
Jones Gap State Park	100

Hampton County, SC

Webb Wildlife Center	102
----------------------------	-----

Horry County, SC

Cartwheel Bay Heritage Preserve	105
Grand Strand Water and Sewer Authority	107
Lewis Ocean Bay Heritage Preserve	108
Myrtle Beach State Park	111
Waccamaw River Heritage Preserve	112

Waites Island	114
Jasper County, SC	
Savannah National Wildlife Refuge	116
Tillman Sand Ridge Heritage Preserve	117
Kershaw County, SC	
Goodale State Park	120
Lancaster County, SC	
Forty-acre Rock (Flat Creek Heritage Preserve)	122
Landsford Canal State Park, Eastern Section	125
Laurens County, SC	
Musgrove Mill State Historic Site	127
Lee County, SC	
Lake Ashwood	129
Lee State Natural Area	130
Longleaf Pine Heritage Preserve	132
Lynchburg Savanna Heritage Preserve	132
Mount Pleasant Church Bay	133
Lexington County, SC	
Congaree Creek Heritage Preserve	136
Peachtree Rock Heritage Preserve	138
Saluda Shoals Regional Park	139
Taylor Nature Preserve	141
McCormick County, SC	
Stevens Creek Heritage Preserve	142
Newberry County	
Lynch's Woods	145
Oconee County, SC	
Brasstown Creek Heritage Preserve	147
Buzzards Roost Heritage Preserve	149
King's Creek Falls	150
Station Cove and Falls	151
Walhalla Fish Hatchery, East Fork Trail	153
Pickens County, SC	
Cane Creek Drainage Area	156
Eastatoe Gorge Heritage Preserve	158
Glassy Mountain Heritage Preserve	159
Keowee-Toxaway State Park	161
Laurel Fork Creek Heritage Preserve	162
Peach Orchard Branch	163
South Carolina Botanical Garden,	164
Table Rock State Park, Carrick Creek Trail	165
Todd Creek (Clemson University)	167
Wadakoe Mountain (Jocassee Gorge)	169
Wildcat Creek (Issaqueena Forest)	171
Richland County, SC	
Congaree National Park	173
Fort Jackson	174
Harbison State Forest	176
Sandhill Research and Education Center	177
Spartanburg County, SC	

Eva & Sam Pratt's Farm, Inman	180
Pacolet River Heritage Preserve	181
Sumter County, SC	
Manchester State Forest & Poinsett State Park	184
Wenee Woods	186
Woods Bay State Park	187
Union County, SC	
Tyger River (Sumter National Forest)	189
Williamsburg County, SC	
Scotswood Plantation	192
Wee Tee State Forest	194
York County, SC	
Anne Springs Close Greenway	196
Draper Wildlife Management Area	198
Kings Mountain National Military Park	200
Rock Hill Blackjacks Heritage Preserve	202
Worth Mountain Wildlife Management Area	204

Sites in Georgia by County

Candler County, GA	
Charles Harrod Preserve	206
Giddons Tract	208
Rosemary Church Site	209
Columbia County, GA	
Augusta Canal	210
Emanuel County, GA	
George Smith II State Park	212
Rabun County	
Warwoman Dell, (Part of the Bartram Trail)	213

Sites in North Carolina by County

Gaston County, NC	
Crowders Mountain State Park	215
Magnolia macrophylla Site	217
Paysour Mountain	219
Jackson County, NC	
Panthertown Valley, Nantahala National Forest	221
Mecklenburg County	
Whitehall Nature Preserve	223
Transylvania County, NC	
Blue Ridge Parkway	225
Dupont State Forest	226
Gorges State Park	228
Horsepasture River	229
MGD's Place	231
Pink Beds Trail, Pisgah National Forest	232
Silver Run Preserve (Willis Tract)	233
Union County, NC	
Mineral Springs Preserve	236

Alphabetically by Site

ACE Basin National Wildlife Refuge (SC) ...see the following sites:

Beaufort/Coosaw River	22
Combahee Unit	23
Grove Plantation	43
Aiken Gopher Tortoise Heritage Preserve (SC)	8
Anne Springs Close Greenway (SC)	196
Ashmore Heritage Preserve (SC)	94
Augusta Canal (GA)	210
Aull Natural Area, Clemson Experimental Forest (SC)	19

Bear Island Wildlife Management Area (SC)	64
Beaufort and Coosaw River (SC)	22
Bennett's Point Area (Colleton County, SC)	65
Blue Ridge Parkway (NC)	225
Blue Wall Heritage Preserve (SC)	96
Brasstown Creek Heritage Preserve (SC)	147
Buzzards Roost Heritage Preserve (SC)	149

Cane Creek Drainage Area (SC)	156
Cartwheel Bay Heritage Preserve (SC)	105
Caw Caw Interpretive Center (SC)	38
Charles Harrold Preserve (GA)	206
Combahee Unit (SC)	23
Congaree Bluffs Heritage Preserve (SC)	34
Congaree Creek Heritage Preserve (SC)	136
Congaree National Park (SC)	173
Crowders Mountain State Park (NC)	215

Dewees Island (SC)	40
Draper Wildlife Management Area (SC)	198
Dungannon Plantation Heritage (SC)	42
Dupont State Forest (NC)	226

Eagle Point Pit, Stokes Sand and Gravel, Inc., Florence, SC	84
Eastatoe Gorge Heritage Preserve (SC)	158
Edisto Beach State Park (Colleton/Charleston Counties) (SC)	67
Edisto River, Canadys, SC	69
Eva & Sam Pratt's Farm, Inman (SC)	180
Eva Russell Chandler Heritage Preserve (SC)	99

Flat Creek Heritage Preserve (SC)	122
Fort Jackson (SC)	174
Forty-acre Rock (SC)	122

Frances Marion National Forest (SC) ...see the following sites:

Honey Hill Campground	30
I'on Swamp	49
Little Hellhole Bay and Huger Loop	30
Sewee Visitor Center	49
Tibwin Plantation	51
Frances Beidler Forest Audubon Preserve (SC)	77

George Smith II State Park (GA)	212
Giddons Tract (GA)	208
Givhans Ferry State Park (SC)	78
Glassy Mountain Heritage Preserve (SC)	159
Goodale State Park (SC)	120
Gorges State Park (NC)	228
Grand Strand Water & Sewer Authority (SC)	107
Great Falls Railroad Trail, Catawba River (SC)	54

Great Pee Dee River Heritage Preserve (SC)	71
Grove Plantation (SC)	43

Harbison State Forest (SC)	176
Henderson Heritage Preserve (SC)	9
Hitchcock Woods, City of Aiken (SC)	11
Hobcaw Barony (SC)	86
Honey Hill Campground (SC)	30
Horsepasture River (NC)	229
Hunting Island State Park (SC)	25
Huntington Beach State Park (SC)	89
Hutchinson Island (SC)	65

Jocassee Gorge (SC) ...see the following sites:

Laurel Fork Creek Heritage Preserve	162
Wadakoe Mountain	169
John and Suzanne Morse Property (SC)	20
Jones Gap State Park (SC)	100

Kalmia Gardens (SC)	72
Keowee-Toxaway State Park (SC)	161
King's Creek Falls (SC)	150
Kings Mountain National Military Park (SC)	200
Kirby Pond and Quarry, Timmonsville, SC	84

Lake Ashwood (SC)	129
Landsford Canal State Park, Eastern section (SC)	125
Laurel Fork Creek HP (SC)	162
Lee State Natural Area (SC)	130
Lewis Ocean Bay Heritage Preserve (SC)	108
Lick Fork Recreation Area (SC)	81
Little Hellhole Bay and Huger Loop (SC)	30
Little Pee Dee River State Park (SC)	75
Longleaf Pine Heritage Preserve (SC)	132
Lynch's Woods (SC)	145
Lynchburg Savanna Heritage Preserve (SC)	132

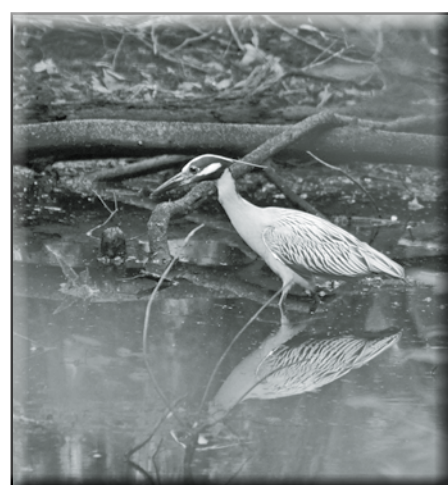
Magnolia macrophylla Site (NC)	217
Manchester State Forest & Poinsett State Park (SC)	184
Martin-Marietta Quarry, Cross (SC)	32
MGD's Place (NC)	231
Mineral Springs Preserve (NC)	236
Mount Pleasant Church Bay (SC)	133
Musgrove Mill State Historic Site (SC)	127
Myrtle Beach State Park (SC)	111

Pacolet River Heritage Preserve (SC)	181
Panthertown Valley, Nantahala National Forest (NC)	221
Pawley's Island (SC)	86
Paysour Mountain (NC)	219
Peach Orchard Branch (SC)	163
Peachtree Rock Heritage Preserve (SC)	138
Pink Beds Trail, Pisgah National Forest (NC)	232

Rock Hill Blackjacks Heritage Preserve (SC)	202
Rosemary Church Site (GA)	209

Saluda Shoals Regional Park (SC)	139
Samworth Wildlife Management Area (SC)	90
Sandhill Research and Education Center (SC)	177
Sandhills State Forest (SC)	58
Sandy Island (SC)	92
Santee Coastal Reserve Wildlife Management Area (SC)	45

Santee National Wildlife Refuge (SC)	61	Tyger River (SC)	189
Savannah National Wildlife Refuge (SC)	116	Victoria Bluffs Heritage Preserve (SC)	27
Savannah River Bluffs Heritage Preserve (SC)	14	Waccamaw River Heritage Preserve (SC)	112
Savannah River Site (Aiken/Barnwell Counties, SC)	15	Wadakoe Mountain (SC)	169
Scotswood Plantation (SC)	192	Waites Island (SC)	114
Sea Pines Forest Preserve (SC)	26	Walhalla Fish Hatchery, East Fork Trail (SC)	153
Segars-McKinnon Heritage Preserve (SC)	72	Wannamaker Nature Preserve (SC)	36
Sewee Indian Midden Trail (SC)	47	Warwoman Dell (part of the Bartram Trail) (GA)	213
Sewee Visitor Center & I'on Swamp (SC)	49	Webb Wildlife Center (SC)	102
Silver Run Preserve (Willis Tract) (NC)	234	Wee Tee State Forest (SC)	194
South Carolina Botanical Garden (SC)	164	Wenee Woods (SC)	186
Station Cove and Falls (SC)	151	Whitehall Nature Preserve (NC)	223
Stevens Creek Heritage Preserve (SC)	142	Wildcat Creek, Issaqueena Forest (SC)	171
Stokes Sand & Gravel, Inc., Florence, SC	84	<i>Wildlife Management Areas...see the following sites:</i>	
Sugarloaf Mountain (SC)	58	<i>Bear Island Wildlife Management Area</i>	64
<i>Sumter National Forest...see the following sites:</i>		<i>Draper Tracts Wildlife Management Area</i>	198
<i>Lick Fork Recreational Area</i>	81	<i>Samworth Wildlife Management Area</i>	90
<i>Tyger River</i>	189	<i>Webb Wildlife Center</i>	102
<i>Woods Ferry Recreational Area</i>	54	<i>Worth Mountain Wildlife Management Area</i>	204
Table Rock State Park, Carrick Creek Trail (SC)	165	Willis Tract (NC)	234
Taylor Nature Preserve (SC)	141	Woods Bay State Park (SC)	187
Tibwin Plantation (SC)	51	Woods Ferry Recreational Area (SC)	54
Tillman Sand Ridge Heritage Preserve (SC)	117	Worth Mountain Wildlife Management Area (SC)	204
Todd Creek (owned by Clemson University) (SC)	167		



(Clockwise starting bottom left.)

Eastern Cottonmouth, *Agkistrodon piscivorus*, by Gene Ott.

Spring Peeper, *Pseudacris crucifer*, by Gene Ott.

Eastern Glass Lizard, *Ophisaurus ventralis*, by Gene Ott.

Yellow-crowned Night Heron, *Nyctanassa violacea*, by Gene Ott.