

HERITAGE LAND TRUST FUND ACTIVITY IN 2000

A REPORT TO THE GENERAL ASSEMBLY

This report is submitted to fulfill requirements in legislation creating the Heritage Land Trust Fund (S.C. Code, Section 51-17-115). Included is a description of the 2000 expenditures made from the Heritage Land Trust Fund.

INTRODUCTION

The South Carolina Heritage Trust Program was created in 1976, the first such program in the nation, to help stem the tide of habitat loss by protecting critical endangered species sites through acquisition and other means. Enabling legislation directed the Department of Natural Resources, in concert with other State agencies, to set aside "a portion of the States' rich natural and cultural heritage" in a system of heritage preserves to be protected "for the benefit of present and future generations" (Sec. 51-17-20, 1976 S.C. Code of Laws). To meet this goal, Heritage Trust began protecting endangered species habitats in 1976 and started protecting our State's most significant archaeological sites in 1987.

The Heritage Trust Program conducts surveys for sites that may be worthy of protection and presents them to the Heritage Trust Advisory Board for approval. Once approved, staff work to protect those sites through acquisition, conservation easements, and registration. After properties have been acquired, they are dedicated under the terms of the Heritage Trust Act (Sec. 51-17-80). Properties can be afforded further protection by placing them into the corpus of the S.C. Heritage Trust (Sec. 51-17-90). These properties will be forever held in a trust for the citizens of South Carolina.

The program succeeded initially through a combination of property donations and federal grants. In subsequent years, federal funding decreased and then ceased entirely. State funding for acquiring heritage preserves was added to the act in 1986, using part of the real estate documentary stamp tax fee (Sec. 51-17-115) to create the Heritage Land Trust Fund. Revenue from this source has been used to acquire 55,482 acres of highly significant natural areas and archaeological sites in 27 counties.

SUMMARY

During the 2000 calendar year, the Heritage Trust Program was successful in providing permanent protection for 2,184 acres of land containing 60 rare elements. Substantial progress is being made toward the goal of protecting South Carolina's most significant natural and cultural resources before they disappear forever.

Revenues and interest accumulated to the Heritage Land Trust Fund totaled \$3,555,227 in 2000. Total expenditures were \$5,557,685, which included \$4,912,022 for land purchases and \$645,663 for land protection activities, public access facilities, and property management (Table 1). Ten different properties were acquired at an average cost of \$2,261 per acre. The value of property donations in 2000 was \$194,823 (Table II). Cash donations totaled \$24,092.

Land protection efforts resulted in the establishment of four new heritage preserves (HP) and the expansion of five existing preserves (Table III). Also, a conservation easement was signed protecting an 11-acre archaeological site in Berkeley County. New heritage preserves created in 2000 include: 1) Chestnut Ridge HP in Greenville County; 2) Clear Creek HP in Greenville County, 3) Belvue Springs HP in Greenville County and 4) Bald Rock in Greenville County (Table III). The following preserves were expanded: 1) Forty Acre Rock HP in Lancaster County; 2) Ashmore HP in Greenville County; 3) Chestnut Ridge HP in Greenville County, 4) Little Pee Dee (Tilghman) HP in Marion County, and 5) Henderson HP in Aiken County.

These property acquisitions served to protect 60 significant elements, which include 42 rare plant species, 7 rare plant communities, 5 rare animal species, 3 rare invertebrate species, 2 geological formations and one archaeological site (Table IV). Of the natural elements protected, 8 are classified as endangered, 5 are classified as threatened and 46 are classified as special concern. The archaeological site (Crowfield Plantation) is ranked number 45 on the List of 100 Most Important in South Carolina.

Besides property acquisitions, public presentations were given, press conferences were held and volunteer workdays were undertaken. Tours of preserves were given, partnerships were developed, and technical assistance was provided to individuals within and outside our department. Archaeological surveys were conducted, management plans were written, and information was distributed to the media and the public. Canoe guides and heritage preserve information sheets were produced and the Heritage Trust Program brochure was updated. Access facilities were upgraded, informational signs installed, and controlled burns were completed to restore and maintain rare habitats.

During the 2000 calendar year, four new heritage preserves were established in the Upstate. Five existing preserves in three different counties were expanded and a conservation easement in another county was signed. A total of 2,184 acres was protected. The most critical measure of success is the number of significant elements protected. For the purposes of this report, an element may be a rare plant or animal species, a rare plant community, a geological formation, or an archaeological site. Over the last 10 years, the number of elements protected (Table V) has increased dramatically. These elements represent significant parts of the natural and cultural heritage of every South Carolinian. The Heritage Trust Program will preserve them so

future generations can see, experience, and learn from them. This heritage is what makes South Carolina unique.

2000 ACQUISITIONS

Eleven protection projects were completed during the 2000 calendar year. They are detailed in the following paragraphs and in Table I. Numbers in the left margin correspond to numbers in Table I showing property acquisitions, and Table IV listing elements protected at each site.

1. Forty Acre Rock HP Addition (Lancaster County) - Known for its granite outcrops and adjoining bluffs, this preserve comprises 1,587 acres and protects 17 rare plant species. An additional 141 acres was acquired from The Nature Conservancy to protect a portion of Flat Creek that harbors the federally endangered invertebrate species, Carolina heelsplitter, and two other invertebrate species of concern. Mature hardwoods, prairie remnants and rich bottomlands also characterize the preserve. It is north of Kershaw beside US 601.
2. Ashmore HP Addition (Greenville County) - Consisting of 30 acres, this property connects Ashmore to Chandler Heritage Preserve and protects two populations of the federally endangered plant species, mountain sweet pitcher plant. These plants exist only in North and South Carolina and one of the best examples is found at Ashmore. The preserve, six miles south of Caesar's Head, is available for hunting under the WMA Program. It contains 821 acres.
- 3/7. Chestnut Ridge HP and Addition (Greenville County) - Found 30 miles north of Greenville, this 1,069-acre tract contains seven rare plant species and two mammal species of concern. It is composed of a mixture of mature hardwood forests that support the only state occurrence of the federally endangered plant species, reflexed blue-eyed grass. An additional 600 acres was later purchased on the south side of the preserve. Chestnut Ridge is part of a project involving lands protected by The Nature Conservancy and Naturaland Trust that are referred to as the Blue Wall Preserve. Acquisition of these two properties complete the protection of more than 23,000 acres of significant habitat in this area.
4. Clear Creek HP (Greenville County) - Protection of South Carolina's second most important population of the federally endangered plant species, bunched arrowhead, was accomplished by the acquisition of this 19-acre tract. Located five miles west of Greer, the preserve also contains the federally threatened plant species, dwarf heartleaf, and two plant species of state concern: green adders's mouth and kidney leaf-twayblade. Native oaks, hickories and pines will

- be planted around seepage areas on the preserve to enhance the rare elements found there.
5. Belvue Springs HP (Greenville County) - Composed of an upland seepage forest, Belvue Springs protects the state's third most important population of the rare plant species, bunched arrowhead. Known to occur in less than a dozen populations worldwide, bunched arrowhead is listed as "endangered" under the U.S. Endangered Species Act. The site also contains a federally threatened plant species and one of regional concern. The preserve is five miles northwest of Traveler's Rest and totals 28 acres.
 6. Bald Rock HP (Greenville County) - Located four miles south of Caesar's Head, this 35-acre preserve has long been a popular overlook and recreation site. Composed of granite outcrops, seeps and water slides, the area provides an important water source for several groups of federally endangered species near the property. A state threatened plant species and one that is nationally threatened is also found on the preserve. Funds from the State Park Service and a federal Land and Water grant were used to help purchase the property.
 8. Little Pee Dee (Tilghman) HP Addition (Marion County) - Acquired as a donation from the U.S. Customs Service, this 201-acre tract is part of the 10,026-acre Little Pee Dee Heritage Preserve system that protects more than 17 miles of river frontage in Marion and Horry County. The property is composed of a bottomland hardwood forest and will be utilized as a Wildlife Management Area. It is four miles south of Mullins beside the Tilghman tract that we acquired in 1988.
 - 9/10. Henderson HP Additions (Aiken County) - First, a 47-acre tract was added to the preserve that contains the state endangered plant species, bog spicebush, and the rare plant species, nestronia. A unique sandhill scrub plant community is also found on the tract that only occurs in vauclose soils in the higher series of the Aiken County sandhills. It is found in two different areas of the property. Next, a 3-acre parcel was donated to Heritage Trust with the reservation of a life estate. It contains a longleaf pine forest and will facilitate management activities in the future. The preserve is located three miles northwest of Aiken and comprises 417 acres.
 11. Crowfield Plantation Conservation Easement (Berkeley County) - As the former home of William Middleton, the plantation house and gardens that comprise this area are excellent examples of 18th Century plantation features. Although the main house, flankers and other structures are in ruins, they retain high archeological integrity. The gardens are very easily interpreted as earthen embankments and the garden mount is extant. The house reveals that it was constructed with a combination of Flemish bond on the front and rear and

English bond on the sides. The home and gardens are reminiscent of British homes and gardens of that period. The gardens were built to define a cultural space in an otherwise natural world. The 11-acre tract is just outside Goose Creek.

OTHER EXPENDITURES

12. Land Protection - Heritage Land Trust Funds were used to employ two assistants to the Land Protection Coordinator. Their duties include: contacting landowners, negotiating protection agreements, preparing budget proposals and reports, arranging and conducting meetings and public hearings, contracting for appraisals, environmental assessments, surveys, legal work and public access facilities, managing preserves, forming stewardship committees, writing management plans, and completing protection projects. One assistant works on natural areas projects and the other is an archaeologist, who focuses on protecting the 100 most significant archaeological sites in the state.
13. Capital Improvements - After the Heritage Trust Program acquires properties, they are open for public educational and recreational usage. The Heritage Land Trust Fund is used to pay for improvements such as signs, gates, parking areas, boardwalks and road work. These facilities make the preserves more accessible to the public. During the calendar year, gates were installed at Lynchburg Savanna, Bear Branch, Ashmore and Aiken Gopher Tortoise Heritage Preserves. A parking area was improved and new kiosks were constructed at Pacolet River HP. A new water control structure was installed at Caper's Island HP and a fence was erected at Ft. Lamar HP. Access roads were improved at Watson HP and an old house was demolished and removed at Henderson HP. Several foot bridges were constructed at Congaree Creek HP and a new section of boardwalk accessible to the handicapped was installed at Dungannon HP.
14. Preserve Management - Funds from this account were used to conduct prescribed burns, restore and monitor endangered habitats, create and maintain trails, paint and sign boundary lines, purchase equipment and pay for management personnel. More specifically, prescribed burns were conducted on nine different preserves to restore and maintain critical habitats. Burning covered 3,381 acres, which was more than any previous year. Approximately 220,000 longleaf pine seedlings were planted on five preserves. Invasive exotics were controlled on three preserves and 12 blue bird boxes were installed on three preserves. A gopher tortoise recovery plan was initiated on Aiken Gopher Tortoise HP and staff worked with Army Corps of Engineers to deposit spoil on Bird Key Stono HP. Additional work was completed on water control structures at Dungannon HP and a one-mile section of trail was added there. Staff continued efforts to obtain FEMA monies to repair road damage from Hurricane Floyd. Twenty seven preserves were monitored and surveyed for rare

and invasive elements that could threaten rare elements. New management plans were developed and approved for 10 heritage preserves. Staff led approximately 55 field trips on various preserves. Twenty-six presentations were made to various groups around the state and more than 800 requests for information were answered by staff. Volunteers logged at least approximately 438 man-days (8-hour days) of work at preserves. Numerous partnerships with other agencies and groups were developed to benefit the program. Such partnerships will help in leading tours, completing trail work, constructing visitor facilities, assisting with red-cockaded woodpecker management and creating a black bear corridor to prevent mortality from new highways.

A donation of \$23,500 was used to fund a two-week archaeological survey and excavation project at Great Pee Dee HP in Darlington County. The project is an ongoing effort to locate the early-to-mid 18th century home of Johannes Kolb and to document numerous Native American sites on the preserve. Hundreds of people toured the property and participated in the dig and excavation. Approximately 148 man-days of volunteer effort was contributed to this project. Several presentations were made at local schools promoting this annual event. Many community members donated room and board for project participants.

Regarding other archaeological projects, one property with 33 archaeological sites, one property with four archaeological sites and two properties with one site each were examined for their significance. Two additional sites were ranked by state archaeologists and added to the priority acquisitions list. Registration agreements were completed on Comingtee Plantation House and Calais Mile Markers.

FUTURE PLANS AND NEEDS

The Heritage Trust Program was successful in protecting 11 different sites totaling 2,184 acres in 2000. Over the last ten years, an average of eight sites comprising approximately 4,000 acres, have been protected each year. The average amount of acreage protected each year has recently declined. This appears to be the result of rapidly increasing property values, which seem to be escalating at a greater rate than revenues to the Heritage Land Trust Fund. Nevertheless, staff have been successful in protecting several areas that have been important, ongoing projects for a number of years. These projects have become more expensive due to the rapidly growing economy. For example, mountain property at Chestnut Ridge now appraises for \$3,000 per acre, floodplain on the Little Pee Dee River appraises for \$650 per acre, and property in the area of Traveler's Rest may draw \$10,000 per acre. These values are much higher than just a few years ago. If this trend continues, the total acreage protected each year will decrease.

Currently, two projects are underway in northern Greenville County to protect rare plant species and rare plant communities. Another in Calhoun County will protect an undisturbed bluff bordering the Congaree River. A shell ring in Beaufort County will be protected as will two natural areas in Marion County. Other conservation opportunities are also possible in Aiken, Jasper, Charleston and Dorchester Counties. Expansion of existing preserves will be carried out when appropriate and possible. Heritage Trust staff are developing preserve designs (ideal ecological and cultural boundaries) for all heritage preserves. This boundary encompasses adjacent properties that are necessary to permanently protect the biological or cultural elements on each preserve. When these ecological designs are completed, efforts will be made to establish long term, sustainable preserves.

The Heritage Trust Advisory Board has approved more than 122 natural areas projects and approximately 106 archaeological sites. Currently, 13 of the 100 most significant archaeological sites in the state have been protected. Approximately 34 percent of the rare plant species that occur in South Carolina have been protected. At this point, less than one-half of the Board's protection objectives have been met. Presently, the Heritage Trust Program has 63 heritage preserves covering 77,843 acres. The Heritage Trust Act limits fee simple ownership to 150,000 acres (§51-17-140). Although the acreage cap was increased in 2000, our overall protection goals will not be met under this limit. Also, the potential for protecting other DNR owned properties through dedication is hindered due to this cap.

As additional heritage preserve properties are acquired, more funds will be spent on management. In the past, no more than 10 percent of the Heritage Land Trust Fund could be used for management. Fortunately, that limit was removed in 1999 and management expenditures are expected to increase in the future, particularly when rare habitats are no longer intact and must be restored. The most critical monetary problem is obtaining funds for operating costs and survey work. Funds for these activities, derived primarily from contributions to the Endangered Wildlife Fund, have been steadily declining over the past five years. Survey work is time consuming and expensive, but necessary to identify significant areas that warrant protection. If Heritage Trust is to continue to identify, rank, and protect the state's most significant resources, funding for operations and surveys must be addressed. A recurring appropriation of \$300,000 for program operations was secured in the FY 2001 budget. It will not be included in the FY 2002 budget.

SUMMARY

In 2000, expenditures from the Heritage Land Trust Fund totaled \$5,557,685. Revenues totaled \$3,555,227. A sum of 2,184 acres was protected at an average cost of \$2,261 per acre. These acquisitions helped to protect 42 rare plant species, 7 rare plant communities, 3 invertebrate species, 5 rare animal species, 2 geological

formations and one archaeological site. Staff view these accomplishments with pride and believe they have been successful and efficient in achieving the objectives of the Heritage Trust Program. However, program funding for operations needs to be improved to assure a continued record of success.

Respectfully submitted:

Tom Kohlsaas, Chief
Stuart Greeter, Land Protection Coordinator
Ken Prosser, Asst. Coordinator
Chris Judge, Heritage Trust Archaeologist
Johnny Stowe, Heritage Preserve Manager

March 14, 2001

Reviewed and approved by:

Thomas S. Kohlsaas, Chief
Wildlife Diversity Section

William S. McTeer, Deputy Director
Wildlife and Freshwater Fisheries Division

Paul A. Sandifer, Director
Department of Natural Resources

Table 1
2000 Heritage Land Trust Fund Expenditures

Property Acquisitions

Name	Acres	Date Acquired	Total Cost
1. Forty Acre Rock HP Addn.	141	1-28-00	\$ 162,715
2. Ashmore HP Addn.	30	4-28-00	98,238
3. Chestnut Ridge HP	1,069	5-11-00	2,397,517
4. Clear Creek HP	19	5-16-00	163,832
5. Belvue Springs HP	28	5-23-00	107,355
6. Bald Rock HP	35	9-26-00	94,248
7. Chestnut Ridge HP Addn.	600	10-18-00	1,808,316
8. LPD Tilghman HP Addn.	201	11-06-00	11,920
9. Henderson HP Addn.	47	12-21-00	65,939
10. Henderson HP Addn.	3	12-27-00	1,942
SUBTOTAL	2,173		\$ 4,912,022

Conservation Easement

11. Crowfield Plantation	11	12-11-00	\$ 0
TOTAL	2,184		\$4,912,022

*Average Total Cost of \$2,261 Per Acre

*Donated Value of \$194,823

Other

12. Land Protection		\$ 107,947
13. Capital Improvements		114,468
14. Preserve Management		<u>423,248</u>
	TOTAL	\$ 645,663
	GRAND TOTAL	\$5,557,685

Table II
Donated Value - 2000

<u>Donor</u>	<u>Value</u>
U.S. Customs Service	\$ 60,276
Morningside Baptist Church	28,245
The Nature Conservancy	69,790
Sue Ann and Hugh Hanlin	20,512
Betty Ann Hutchins	16,000
Westvaco Corporation	Conservation Easement
TOTAL	\$194,823

Table III

New Preserves

<u>Name</u>	<u>Acres</u>	<u>County</u>
Chestnut Ridge	1,069	Greenville
Clear Creek	19	Greenville
Belvue Springs	28	Greenville
Bald Rock	35	Greenville

Additions to Preserves

Forty Acre Rock	141	Lancaster
Ashmore	30	Greenville
Chestnut Ridge	600	Greenville
Little Pee Dee	201	Marion
Henderson	47	Aiken
Henderson	3	Aiken

Conservation Easement

Crowfield Plantation	11	Berkeley
----------------------	----	----------

TOTAL	2,184	
-------	-------	--

Table IV

Rare Elements Protected in 2000

1. Forty Acre Rock HP

Carolina heelsplitter (*Lasmigona decorata* - federally endangered)
Eastern creekshell (*Villosa delumbis* - state concern)
Squawfoot (*Striphitus undulatus* - state concern)
Poolsprite (*Amphianthus puscillus* - federally threatened)
Blackspored quillwort (*Isoetes melanospora* - federally endangered)
Georgia rush (*Juncus georgianus* - state concern)
Small's purslane (*Portulaca samlli* - state concern)
Wing-podded purslane (*Portulaca umbraticola* - state concern)
One-flower stitchwort (*Minuartia uniflora* - state concern)
Southern lepuropetalon (*Lepuropetalon spathulatum* - state concern)
Piedmont quillwort (*Isoetes piedmontana* - state concern)
Open-ground whitlow-grass (*Draba aprica* - national concern)
Missouri rock-cress (*Arabis missouriensis* - state concern)
American ginseng (*Panax quinquefolius* - regional concern)
Blue cohosh (*Caulophyllum thalictroides* - state concern)
Wahoo (*Euonymus atropurpureus* - state concern)
Granite outcrop (*Sedum pusillum* - national concern)
Montmorillonite forest - state concern

2. Ashmore HP

Mountain sweet pitcher plant (*Sarracenia jonesii* - federally endangered)
Large-leaved grass-of-parnassus (*Parnassia grandifolia* - regional concern)
Eastern turkey beard (*Xerophyllum asphodeloides* - state concern)
Green salamander (*Aneides aeneus* - state concern)
Scarlet Indian-paintbrush (*Castilleja coccinea* - regional concern)
Southeastern tickseed (*Coreopsis gladiata* - state concern)
Rafinesque's big-eared bat (*Corynorhinus rafinesquii* - state endangered)
Piedmont ragwort (*Senecio millefolium* - regional concern)
Northern myotis (*Myotis septentrionalis* - state concern)
Twisted yellow-eyed grass (*Xyris torta* - state concern)
Milk snake (*Lampropeltis triangulum* - state concern)
High elevation seep (state concern)

3/7. Chestnut Ridge HP

Reflexed blue-eyed grass (*Sisyrinchium dichotomum* - federally endangered)
Broad-leaved tickseed (*Coreopsis latifolia* - federal concern)
Butternut (*Juglans cinerea* - federal concern)
False dandelion (*Krigia cinerea* - state concern)

Southern thimbleweed (*Anemone berlandieri* - state concern)
American ginseng (*Panax quinquefolius* - state concern)
Single-haired mountain mint (*Pycnanthemum montanum* - state concern)
New England cotton tail (*Sylvilagus obscurus* - state concern)
Eastern woodrat (*Neotoma floridana* - federal concern)

4. Clear Creek HP

Bunched arrowhead (*Sagittaria fasciculata* - federally endangered)
Dwarf heartleaf (*Hexastylis naniflora* - federally threatened)
Green adder's mouth (*Malaxis unifolia* - state concern)
Kidney-leaf twayblade (*Listera smallii* - state concern)

5. Belvue Springs HP

Bunched arrowhead (*Sagittaria fasciculata* - federally endangered)
Dwarf heartleaf (*Hexastylis naniflora* - federally threatened)
Shortleaf sneezeweed (*Helenium brevifolium* - regional concern)

6. Bald Rock HP

Piedmont ragwort (*Senecio millefolium* - nationally threatened)
Grass-of-parnassus (*Parnassia grandifolia* - state threatened)
Granite outcrop (*Sedum pusillum* - national concern)

8. Little Pee Dee (Tilghman) HP

Sarvis holly (*Ilex amelanchier* - state concern)
River bank quillwort (*Isoetes repara* - state concern)
Bottomland hardwoods plant community (state concern)

9/10. Henderson HP

Bog spicebush (*Lindera subcoriacea* - state endangered)
Nestronia (*Nestronia umbellula* - state concern)
Piedmont three-awned grass (*Aristida condensata* - state concern)
Stream head pocosin plant community (state concern)
Pine scrub-oak sandhill plant community (state concern)
Seepage pocosin plant community (state concern)
Vaucluse udorthent plant community (state concern)

11. Crowfield Plantation Conservation Easement

18th Century Plantation house and adjoining gardens that were the home of William Middleton. It is ranked number 45 on the List of 100 Most Important Archeological Sites in South Carolina.

Table V
Heritage Land Trust Fund "Track Record"

Year	Acres Acquired	Elements Protected	Dollars Spent	Avg Cost Per Acre	Donated Value
1991	9,385	22	2,189,000	233	1,756,000
1992	6,190	24	1,522,000	246	811,000
1993	4,787	49	2,063,000	431	610,000
1994	4,709	38	2,690,596	571	250,000
1995	4,554	75	1,472,303	323	2,357,093
1996	4,829	68	3,390,144	702	2,379,627
1997	3,514	108	1,374,725	391	1,270,965
1998	414	39	207,783	502	230,265
1999	723	78	1,143,680	1,582	273,500
2000	2,173	60	4,912,022	2,261	194,823
Total	41,278	561	\$20,965,253		\$10,133,273
(Average)	(4,128)	(56)	(\$2,096,525)	(\$508)	(\$1,013,327)