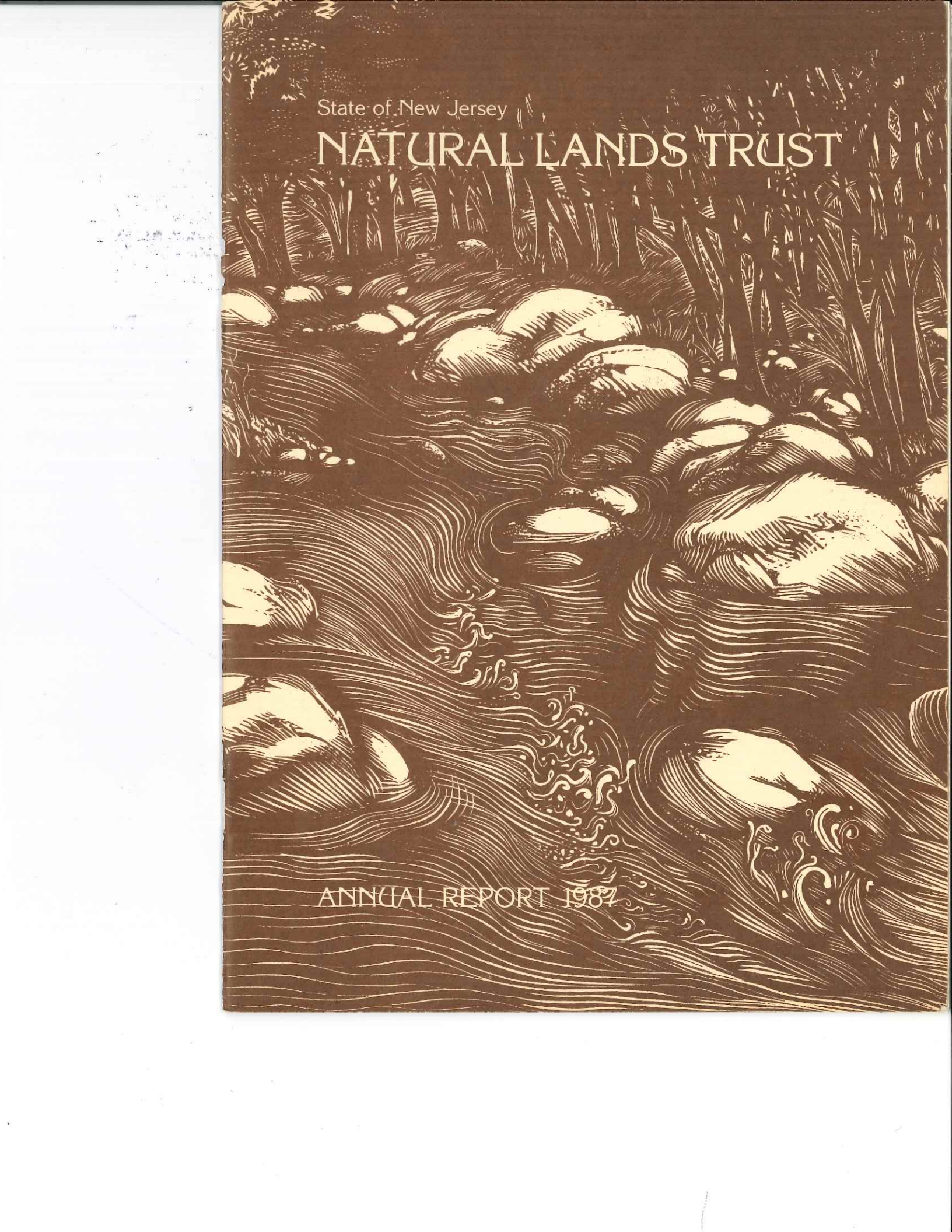




State of New Jersey

NATURAL LANDS TRUST

ANNUAL REPORT 1987

THE BOARD OF TRUSTEES

Edward F. Babbott, Ed.D. (1979) — Former Director of Guidance, Chatham; Consultant for Beaufort County School District, Borough High School; former President of the New Jersey Conservation Foundation, Morristown. Resides in Morristown, New Jersey.

Nicholas Conover English (1984) — Retired partner, McCarter & English, Newark; Honorary Trustee, Kent Place School; member, Board of Managers, American Bible Society. Resides in Summit, New Jersey.

Helen C. Fenske (1982) — Assistant Commissioner of the Department of Environmental Protection; former Director of New Jersey Conservation Foundation. Resides in Green Village, New Jersey.

Marfy Goodspeed (1983) — Hunterdon County Historian; part-time farmer; Chairwoman, Delaware Township Planning Board; member, Delaware Township Environmental Commission. Resides in Delaware Township, New Jersey.

Joseph F. Haggerty (1983) — Past director, Morris County Park Commission; former Secretary and member, Legislative Committee for New Jersey Recreation and Parks Association. Resided in Gladstone, New Jersey. Passed away in June 1987.

Thomas F. Hampton (1983) — Administrator, Office of Natural Lands Management; member, Natural Areas Association Board of Directors. Resides in Lakewood, New Jersey.

Frank Leary (1983) — Writer and Environmental Consultant; Vice President, Association of New Jersey Environmental Commissions; member, Environmental Collegium. Resides in Phillipsburg, New Jersey.

Hermia Lechner (1982) — Administrator, Green Acres Program; Mayor, Clinton Township; former Executive Vice President, South Branch Watershed Association. Resides in Clinton, New Jersey.

Newton LeVine (1979) — Planner/Urban Designer and practicing Architect; Associate Professor of Architecture and Design, Ramapo College. Resides in Ramsey, New Jersey.

Feather O'Connor (1986) — State Treasurer; former Executive Director, New Jersey Housing and Mortgage Finance Agency; former Senior Official, U.S. Department of Housing and Urban Development. Resides in Cranbury, New Jersey.

OFFICERS AND STAFF

Edward F. Babbott, Ed.D. — Chairman
Newton LeVine — Vice Chairman
David F. Moore — Secretary/Treasurer
Thomas F. Hampton — Executive Director
George P. Cook — Counsel
Maude M. Backes — Real Estate Coordinator
Leslie DiCola — Ecologist
Paulette Garron — Wildlife Biologist

Cover: *Morning Stream*, engraving by New Jersey artist Stefan Martin.

LETTER FROM THE CHAIRMAN

December 1987

It is with great pleasure that I look back on the accomplishments of the Natural Lands Trust for 1987. For yet another year, our organization has met the challenge of preserving and managing land for public use and protecting natural diversity.

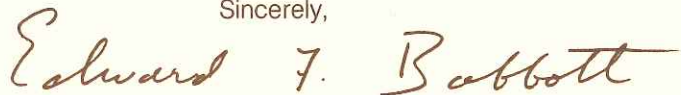
Working with others, government as well as private conservation organizations and individuals, has resulted in an increase in the quantity of land protected as well as the quality of that protection. Through the cooperative efforts of many, the Trust was able to continue its successful acquisition initiatives which began in 1968. This year we acquired an additional 851 acres, bringing the total acreage to 2,300. We have expanded the types of land acquired through the adoption of the Land Preservation Bank. Through coordination with regulatory agencies, we have taken the first steps toward the acquisition of mitigation lands in future years and ensuring the preservation of open space.

Important for the quality of that protection, is legislation passed by the State Senate and Assembly and signed by Governor Kean which provides insurance coverage for independent organizations like the Trust. The Trust's volunteer-based preserve management program came to a temporary stop in 1986 when the Trust was unable to obtain liability coverage for volunteers working on the preserves. The passage of P.L. 1987, Chapter 278, provides the necessary insurance coverage and enables the Trust to increase its work with volunteers and develop the Preservation Cooperatives in 1988.

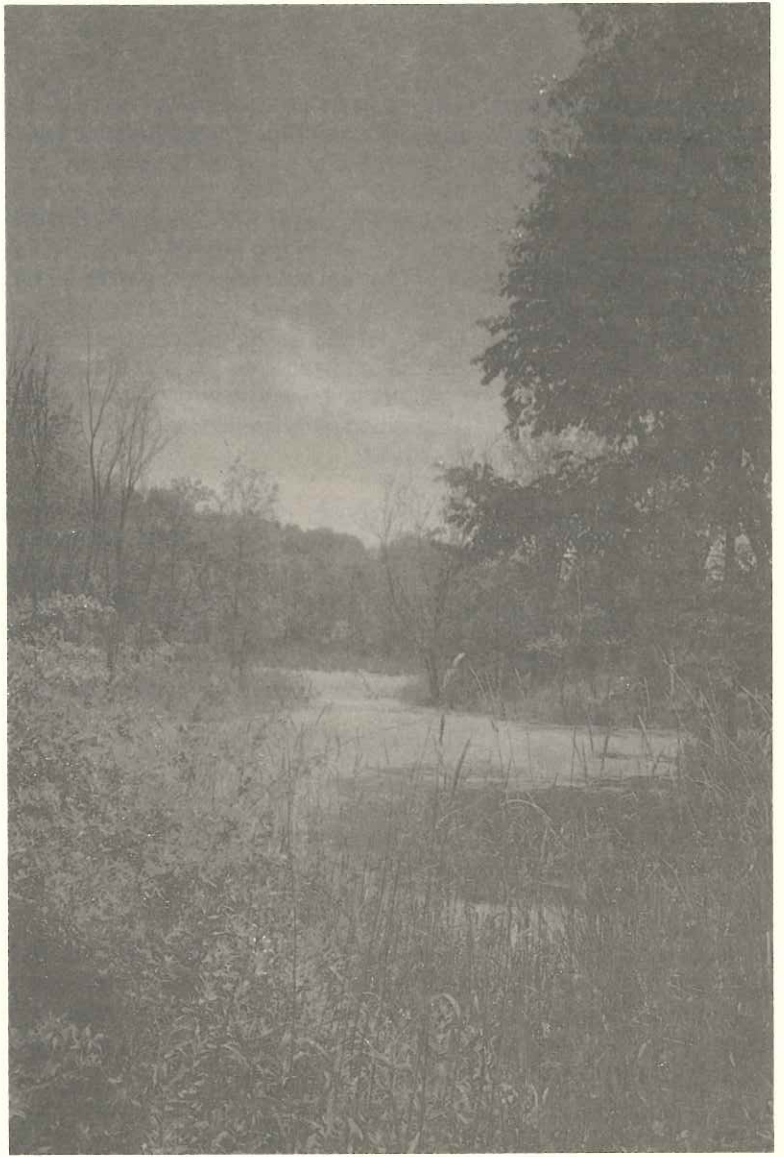
This past year saw the loss of one of the Board's most esteemed members. Joseph Haggerty, a member of the Board since 1983, was dedicated to the preservation of open space. He combined a concern for the environment with the common sense necessary for public enjoyment of land. As our colleague and friend, Joe will be sorely missed by all of us.

The success of the Trust has been due to the combined efforts of the Board of Trustees, the staff, and volunteers. Each of these components are like links in a chain — without one, the others cannot do their job. We look forward in 1988 to continued efforts in land management, the strengthening and expansion of our Preservation Cooperatives, and increased land acquisition.

Sincerely,

A handwritten signature in dark ink, reading "Edward F. Babbott". The signature is written in a cursive style with a large, stylized "E" and "B".

Edward F. Babbott
Chairman



BACKGROUND AND HISTORY

Opportunities to acquire natural land for preservation are declining as open space in New Jersey rapidly disappears. Construction of housing developments, shopping malls, corporate offices, and roads and highways is unceasing. As forests, uplands, wetlands, and other natural areas are transformed into densely populated areas, the need to protect undeveloped acreage becomes more immediate.

While development increases, private conservation organizations and government agencies are working to acquire and preserve natural land throughout the state. Since the inauguration of the Green Acres Program in 1961, the state has been able to purchase land at fair market value for recreation, wildlife management, parks, forests, and open-space preservation using funds approved by voters through five bond issues. However, such state funding is limited and is not sufficient to purchase all the land needed to maintain a healthful balance between nature and people. In 1968, the New Jersey Natural Lands Trust was created by legislative mandate to develop new avenues of acquisition.

The Natural Lands Trust holds a special place among conservation organizations. As part of the Division of Parks and Forestry in the Department of Environmental Protection, the Trust is able to insure immunity from condemnation procedures and permanent

protection of the land it manages. The land may not be appropriated by municipal, county, state, or federal government without a special legislative act. At the same time, the Trust operates as an autonomous corporation and is able to act quickly and independently to respond to preservation needs as they arise. Free from excessive bureaucratic responsibilities and regulations, the Trust can negotiate with a landowner, just like any trust, to take advantage of preservation opportunities.

The Trust's activities are guided by an eleven-member Board of Trustees. Six members are appointed by the Governor from the recommendations of a nominating caucus of conservation organizations. The remaining five members are state officials. Through Board representation of private citizens and state government, the Trust gains new ideas, essential contacts, and valuable information creating an atmosphere of cooperation rather than competition between public and private interests.

Policy approved by the Board is implemented by the staff. An appropriation from the state allows for a small operating budget and salaries for three staff members. A fourth staff member manages the Delaware Bay Shorebird Program through an endowment from PSE&G. The Executive Director of the Trust is provided by the Department of Environmental Protection.

COOPERATIVE EFFORTS

Because of its unique status, the Trust is free to work with local and national environmental groups as well as with other state agencies. When different groups work together, the land as well as the organizations benefits and new opportunities for land acquisition open up. At times, the Trust accepts mitigation properties from agencies that must fulfill obligations to compensate for the loss of altered natural land. Other times, the Trust will accept an easement from an agency or private organization and will preserve and manage the land. When a preserve borders a state park or forest, the Trust works with the

managing agency in a cooperative atmosphere of stewardship.

Cooperation between the Trust and its volunteers enables the Trust to acquire, protect, and manage more land than it could without volunteers. Volunteers, individually or as part of local groups, help to oversee and manage Trust Preserves. Often, they are able to further land acquisition in their community. Their knowledge and ability are vital contributions to land preservation. As the Trust's management responsibilities continue to increase and expand, such cooperation is becoming an essential tool for effective protection and preservation of natural lands.



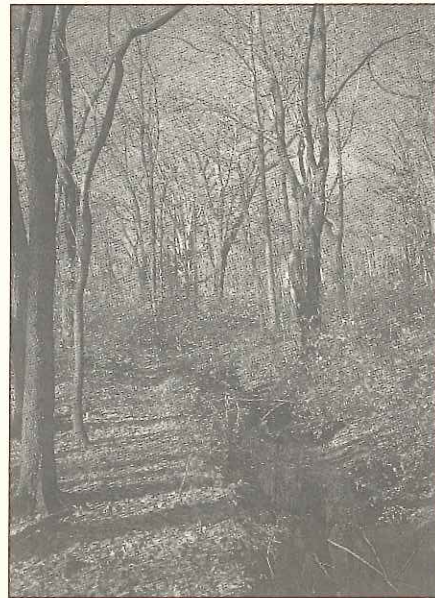
One of the more important cooperative efforts used this year is the non-binding agreement with a private property owner who, with the help of the Trust, becomes the knowledgeable steward of a critical area. Initiated by the Trust in 1985, the agreement is used as a temporary measure to ensure protection until more formal plans are made. The agreements gain the understanding and participation of the landowner and provide time to negotiate a more permanent form of protection if warranted. The agreement has been used most significantly for the protection of shorebird habitat. Approximately 180 acres of land was protected by private property owners through agreements with the Trust during 1987.

LAND PRESERVATION BANK

In 1987, the concept of a Land Preservation Bank was adopted by the Board as an additional category for land acquisition. Land accepted for the bank may not have immediate environmental significance, but is viewed as having future importance. The property may have been altered in some manner or may be relatively small, thereby setting it apart from the traditional Trust Preserves. The land may be offered to the Trust through private land donors or as a result of a mitigation project. Mitigation properties are created or restored habitat, dedicated as permanent open space, that have resulted from a ruling or action of a regulatory agency. Usually the habitat that is the subject of the mitigation is similar to the habitat already altered or proposed to be altered.

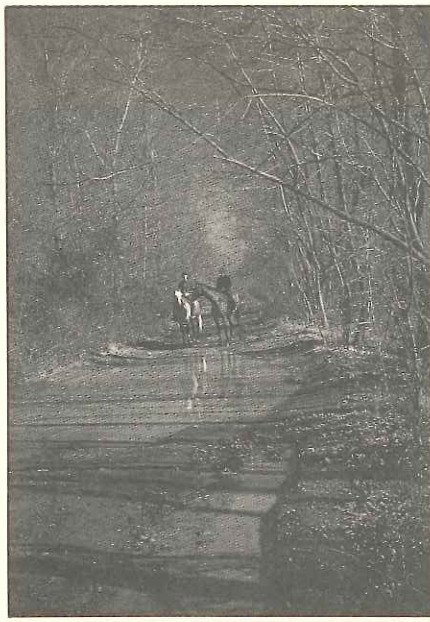
The Board of Trustees retains the right to refuse any contributions proposed for inclusion in the Land Preservation Bank, with due cause, even though it may not be excluded by the established guidelines. The Board takes into consideration whether the property is a valued habitat and the ease or difficulty of obtaining the remaining land within the project area.

An example of a mitigation project accepted by the Board is the agreement entered into by the Natural Lands Trust with the New Jersey Department of Transportation (DOT) in December, 1987. The Trust agreed to accept 75 acres of land which will replace future losses to existing wetlands brought about by the completion of Route 18 by DOT in



Monmouth County. The property includes a 20-acre stand of Atlantic White Cedar, 27 acres of upland buffer zone, and 28 acres of created wetlands. Since DOT does not have a mandate to manage open space, the property will become the responsibility of the Trust after the proposed mitigation work is done. Such a cooperative effort benefits both government agencies and the preservation of wetlands.

Another ongoing acquisition project in the Land Preservation Bank category, the Moorestown Project Area, continues to be an outstanding example of cooperation between a local group and the Trust. Several more properties were donated to the Trust this year, thus helping to protect one of the few green areas of wetlands



Along the river, the vegetation is made up of various sedges and grasses, and emergent wetlands vegetation. Within the area is a small, open pond with watercress, spagnum moss, and various ferns. The donors have offered their assistance in contacting neighbors who own land bordering the Walkill River to see if they are interested in donating land to help preserve a larger area of the Walkill Valley. The donors have also offered to keep watch over the land. Efforts by the Trust to acquire more land along the river will continue.

PRESERVE MANAGEMENT

and uplands left in that region. The site is composed of approximately 170 acres of forested, freshwater, and perched wetlands, and a mixed hardwood forest. Once subdivided into small lots and now in individual ownership, the tract is a valuable natural area surrounded by dense development. In an effort to save the land, a Moorestown citizen group, Citizens Advocating Responsible and Equitable Zoning (CAREZ), asked the Trust to serve as a recipient organization of individual land donations. Due to the determination and cooperation of CAREZ, fifteen individuals have donated their land interests and additional acquisitions are underway.

The Walkill River Project Area has the potential to be another significant cooperative addition to the Land Preservation Bank category. The Project Area consists of 10 acres of wetlands with 2,027 feet of frontage along the Walkill River in Sparta, Sussex County, donated this past year.

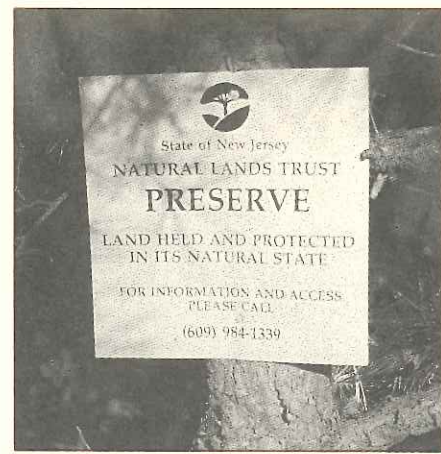
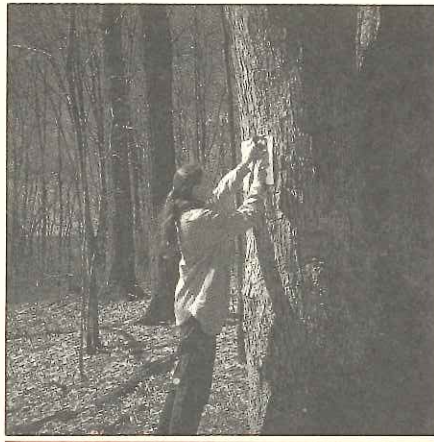
The goal of the Trust's management program is to promote natural diversity through the preservation of varied habitats and to allow for public use and enjoyment of these areas, provided that public use does not degrade the natural qualities of the site. Preserve Management Guidelines were adopted by the Trustees in 1986 to direct staff and volunteer efforts toward achieving these goals. Management plans are drawn for each of the major preserves and, once approved by the Board of Trustees, serve as policy guides for staff and future preservation cooperatives.

During 1987, the Trust became quite active in the management of its preserves. The staff continues to address those routine tasks such as posting, mapping, and compiling photo and resource inventories at all land holdings. More significantly, the Trust has coordinated management initiatives at several preserves in coopera-

tion with government and private agencies. These cooperative efforts have proven to be essential for successful land management.

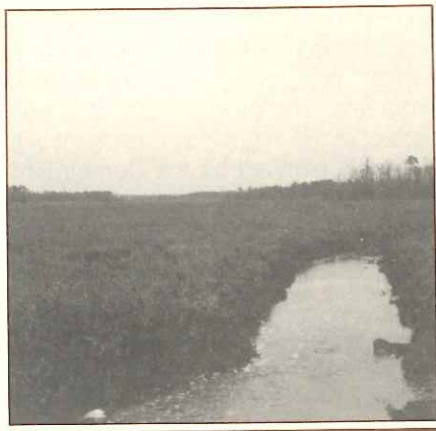
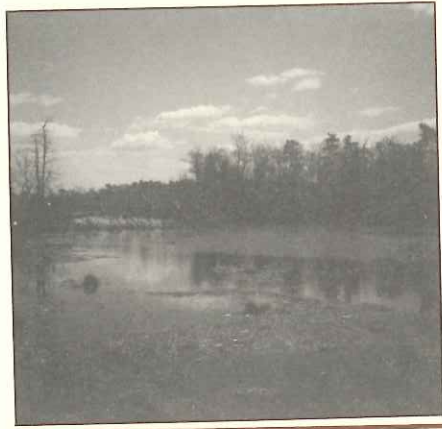
The Division of Parks and Forestry has been a major contributor to Trust management efforts. In cooperation with the Bureau of Forest Management, the staff was able to arrange for the mechanical clearing of trails at the Crossley Preserve. The Trust, along with the staff of Round Valley Recreation Area, conducted a major trash removal and coordinates an ongoing field maintenance program at the Readington Preserve. Posting and periodic site surveillance have been coordinated with High Point State Park at the Reinhardt Preserve and Bass River State Park at the Kislow Preserve.

Both government and private agencies have contributed to the management of Trust land, particularly the Crossley Preserve. Significant projects such as control of access and litter removal, have been initiated in coordination with Jersey Central Power and Light Company Inc., Ocean County Utilities Authority, and the Berkeley Township police. In addition,



management tasks such as these will be addressed at adjacent DEP lands recently assigned to the Trust for management. Future initiatives by the Trust, the Preservation Cooperatives, and these agencies will insure the protection and preservation of the Crossley area.

The success of these projects has enabled the Trust to focus its future efforts toward active management. Trust held easements and agreements will require mutual management techniques between cooperative agencies. At the Audubon's Hovnanian Sanctuary, the New Jersey Audubon Society and the Trust will coordinate efforts on projects such as wildlife management, habitat protection, and educational programs. The development of a trail project at the Highfields Easement will be jointly planned by the Department of Corrections and the Trust, with participation by the resident juveniles. Future management and land-use planning at the Taylor easement will be directly coordinated with the donors who reside there. An agreement exists between the Trust and the township of Franklin for the development and management of the Flemer Preserve as a passive recreational site.



TRUST PRESERVES

Since its founding in 1968, the Natural Lands Trust has acquired over 2,300 acres of land. In 1987 alone, a total of 16 parcels valued in excess of \$914,000 were acquired, extending the Trust's responsibilities over acreage in Atlantic, Burlington, Cape May, Cumberland, Essex, Gloucester, Middlesex, Ocean, Somerset, and Sussex counties. The Trust has acquired much of its property in fee simple and, during the last year, more than doubled the number of conservation easements held.

Primarily through its cooperative relationships with state agencies, the Trust has acquired a number of tracts for the Land Preservation Bank, including several project areas. In addition to land banking as a form of protection, the Trust pursued the traditional avenue of preserve acquisition. A preserve is a distinct area of land that is owned in fee or easement, protected from development, and managed in perpetuity for its natural resources. The types of land acquired as Natural Lands Trust Preserves fall into several ecological categories. These categories include:

Threatened Species Habitat

Confirmed habitat for state or globally recognized threatened plant or wildlife species, or suitable but unconfirmed habitat for such species.

Unusual Ecosystems

Habitats, communities, geological features, or ecosystems represented by less than five similar occurrences in the state.

Representative Ecosystems

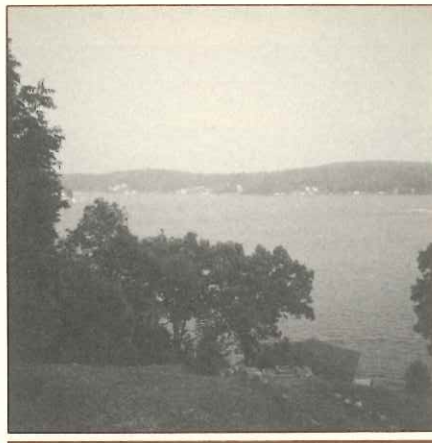
Aquifer recharge areas, headwater areas, floodplains, or wetlands along rivers, streams, lakes or ponds; areas of distinct community types that once typified the state's natural environment and whose numbers are now diminishing; or areas that support a high diversity of plant, wildlife, or natural communities.

Audubon Easement

The New Jersey Audubon Society granted a conservation easement to the Trust in 1987 for the 465-acre Hovnanian Sanctuary located in Berkeley Township, Ocean County. The easement is an extensive land holding which offers a classic example of an upland pine forest habitat found in the New Jersey Pine Barrens. The easement was acquired to insure perpetual preservation as a wildlife and botanical preserve and to assist in education and land management programs. It is located less than 5 miles from the Crossley Preserve.

Barnegat Preserve

The Gerken property and the Board of Proprietors of the Eastern Division of New Jersey property were donated in fee simple to the Trust in 1984. These two adjacent parcels, totaling approximately 88 acres and located in Barnegat Township, Ocean County, border land owned by the Division of Fish, Game and Wildlife. Located



within the Pinelands Forest Zone, approximately half of the property is upland forest dominated by pine species; the remaining portion contains pine and shrub lowlands and wetlands. The site is a confirmed threatened species habitat and includes the headwaters of the east branch of the Wading River.

Big Timber Creek Preserve

This 12.08-acre preserve was donated in fee to the Trust in 1986 by 41 Associates Inc. Located in Deptford Township, Gloucester County, along Route 41, the property is composed mostly of freshwater marsh, bordered in part by mixed hardwood forest uplands. The north and east borders of the tract run along Big Timber Creek. The donation resulted from a commercial development project and provides an oasis for wildlife within a highly developed area.

Costa Preserve

In 1986, Marie Costa donated two parcels of land located in Hamilton Township, Atlantic County. Each

consists of five acres of pitch-pine/oak upland forest and a small portion of freshwater wetlands lying within the Pinelands Protection Area. Both sites provide excellent woodlands surrounding the properties.

Crooked Swamp Caves Preserve

The Crooked Swamp Caves Preserve consists of 18 acres in Lafayette Township, Sussex County, and was donated in fee simple to the Trust in 1978. The Preserve, characterized by rolling farmland and wooded hills, overlooks a protected great blue heron rookery owned and protected by the township. The subterranean limestone ridge formation contains eight caves, creating a cave network of 1,250 feet, the longest in the state. The New Jersey Cave Management Committee manages the caves and controls access to the two entrances.

Crossley Preserve

In 1984 the Trust received a fee simple donation from Amoco Minerals Company of 251 acres of land in Berkeley and Manchester townships, Ocean County. The donation is valued for its Pine Barrens landscape and endangered species habitats. Special features include pine/oak forest, abandoned cranberry bogs, clay pits, spoil mounds, and sand trails. A power line right-of-way which transects the property supports populations of the northern pine snake, corn snake, and timber rattler. Threatened plant species identified on the property include Barratt's sedge, New Jersey rush, Pickering's morning glory, Torrey's muhly, Pine Barren reed grass, and Knieskern's beaked-rush.

Danenhauer Preserve

South of Lake Lenape and along the Great Egg Harbor River in Weymouth and Hamilton townships lies the Danenhauer Preserve, donated in fee simple to the Trust in 1986. The 10.88-acre property consists of an undisturbed freshwater swamp surrounded by a swamp hardwood forest and drier areas of pitch-pine forest. The Danenhauer Preserve provides a significant wildlife habitat for a variety of animal species found in the swamps of southern New Jersey.

Flemer Preserve

A lowland strip, with associated floodplains, marshes, and steep rocky banks bordering the Delaware and Raritan Canal, was donated to the Trust by Mrs. John M. Flemer in 1987. Located in Franklin Township, Somerset County, this nine-acre preserve is identified within the D&R Canal long-range management plan as a passive recreation site. Future management of the site will be a cooperative effort between the Trust and the township of Franklin.

Frye Preserve

Five parcels totaling 195 acres in Middle Township, Cape May County, make up the Frye Preserve. Donations in fee simple to the Trust began in 1975, and additional acreage has been acquired as recently as 1986. The Preserve is approximately half tidal wetlands, crossed by the south branch of Wills Creek, and half pine/oak forest with intermittent freshwater wetlands. Though the majority of this significant habitat falls within the Frye Preserve, there are still very important tidal wetland areas and creek frontage

adjacent to the Preserve, for which the Trust will pursue protection.

Hamilton Preserve

Donated in fee in 1985, the 300-acre Hamilton Preserve in Hamilton Township, Atlantic County, consists of pine-oak uplands and low wet areas. A mature cedar stand borders the northern extent of the property along a tributary of Gravelly Run, and a number of trails meander through the preserve. Prior to donation to the Trust, the land was slated for a major subdivision of 25' x 100' lots.

Heathercroft Preserve

A 68.7-acre donation located in Egg Harbor Township, Atlantic County, was accepted by the Trust in 1987. The donation was a direct result of CAFRA regulations of the Heathercroft Housing Development, thus insuring everlasting preservation and protection of the integrity of the site's freshwater wetlands. The preserve consists of a large open field undergoing natural succession with a small wooded fringe which is bound by Maple Run Creek on its southern portion.

Highfields Easement

In 1986, a 180-acre conservation easement was granted by the New Jersey Department of Corrections to the Natural Lands Trust over the Hopewell Township, Mercer County, portion of the Charles A. Lindbergh estate. Known as Highfields, the 320-acre property located in two townships and two counties was donated to the state for the benefit of children.

In keeping with Lindbergh's wish to benefit children, the easement states that the Trust will include resident youths in a program to build and maintain trails. Not only is the property historically significant, it is a fine representative of habitats found in the piedmont section of the state: hardwood forest, old fields, and thickets along intermittent streams.

Holly Ford Ice Preserve

An 8.5-acre freshwater wetland site associated with the North Branch of the Rancocas Creek in Mt. Holly Township, Burlington County, was donated in fee in 1987. The property was once the site of the Holly Ford Ice Co., a commercial manufacturer of ice, which operated during the late 1800's until 1912. The site consists of 60% open water, 30% open soil, and 10% upland dike.

Isenburger Preserve

The Isenburger tract is a 32-acre parcel in Lebanon Township, Hunterdon County, donated to the Trust in 1975 with certain deed restrictions. From its summit in the southeastern corner of the property, the land slopes moderately to steeply. Approximately 18 acres are covered with native hardwoods, with steep and rocky sections showing white, scarlet, chestnut, and swamp oak. Black birch and red maple grow on lower, more level ground. The remaining 14 acres are reforested with various conifers.

Katz and Esposito Preserves

Twenty acres in Folsom Borough, Atlantic County, and 49 acres in Monroe Township, Gloucester County, were donated in fee by Harry Katz and

Joseph Esposito in 1986. The Folsom site consists of an upland pine/oak forest with a network of sand roads and small trails. The Monroe site contains upland pine/oak forests with freshwater wetlands associated with the Hancock Branch and Hospitality Branch stream systems. Recent inspections of the site have confirmed the occurrence of a globally rare plant species, the Swamp Pink.

Kislow Preserve

The Kislow property, consisting of two acres in Stafford Township, Ocean County, was donated to the Trust in 1984. The southwest border of the tract runs along the mean high-water line of Cedar Run, a tributary extending to Manahawkin Bay. It is composed primarily of wetlands vegetation and borders the Edwin B. Forsythe National Wildlife Refuge.

Lazarus Preserve

Thirty acres of pinelands mixed habitat in Stafford Township, Ocean County, was donated in fee by John D. Lazarus in 1985. The property contains both uplands and wetlands. The acreage is traversed by two streams, Cedar Run and Stocum's Branch, and is bordered by two sand roads.

Limestone Ridge Marsh Preserve

This two parcel property of 21 acres in Blairstown Township, Warren County, was donated to the Trust in 1974 with a title restricted by a life estate. This past year, the life estate was released and the small cottage is currently undergoing renovation. Much of the area has been flooded by a beaver dam and is now marsh habitat.

A steep sloped limestone ridge encircles most of the marsh. This marsh, upland, and ridge vegetation are quite different and provide habitat for a corresponding diversity of wildlife: deer, muskrat, turtles, hawks, wood black and mallard ducks, mute swans, and herons among many other species.

Lin-Lee Preserve

Located just west of the town center of Barnegat in rapidly developing Barnegat Township, Ocean County, are 60 acres of mixed pinelands habitat donated in fee in 1985 by Lin-Lee Associates, a business partnership. The site is mostly wooded uplands and is bisected by a creek with pockets of wetlands along its course. Preservation of this land provides one of the few preserved open spaces in what the community land-use plan shows as a densely developed area.

McCarthy Preserve

The McCarthy Preserve is approximately four acres and borders Lake Hopatcong in the Borough of Hopatcong, Sussex County. Donated to the Trust in 1975, it is known locally as Pilcher's Point Preserve and abuts Eagles Nest, a locally historic site.

The topography of this preserve provides a scenic vista of Lake Hopatcong and of the property's 220-foot frontage along the lake's rocky shoreline. A hardwood forest prevails on the steep rock slopes with species that include chestnut, scarlet, and white oak. While providing facilities for fishing and a small number of other passive forms of recreation, it is a small oasis for wildlife whose



habitat was destroyed by high-density and medium-density residential development nearby.

Readington Preserve

The Trust now preserves and protects this 36-acre site in Readington Township, Hunterdon County. Received in 1969, it encompasses a diversity of habitats including 600 feet of frontage along Rockaway Creek, floodplain, open fields, and dense woods of eastern white pine, red maple, red cedar, oak, black walnut, and black gum.

Reinhardt Preserve

The Reinhardt Preserve is a 240-acre property in Montague Township, Sussex County, adjoining High Point State Park. Acquired by the Nearpass family in the early 1800s, this property was a major limestone quarry for many years, and two limestone kilns can still be found here. The property was inherited by Goyn Reinhardt, the sole heir, who donated the property to the Trust in 1973 in fee for the perpetual preservation of the forest, waters, and wildlife. The Reinhardt Preserve is comprised of ridge, marsh, wooded swamp, old

field, hemlock glen, and northern hardwood forest, providing habitats for a diversity of wildlife.

Stevens Easement

In 1987, the Trust received a conservation easement for the 57-acre Stevens property located in Edison Township, Middlesex County. The New Jersey Conservation Foundation acquired the easement from Edith M. Stevens and transferred it to the Trust for the purpose of preserving the property in perpetuity for wildlife and protecting the floodplains of the area. The property's diverse habitats which include forested wetlands, marshes, and open fields, are rich in wildlife, particularly bird life.

Taylor Easement

A conservation easement, donated to the Trust in 1975 for 89 acres of the Taylor property known as Riverside Homestead Farm, is located in the Township of Cinnaminson, Burlington County. The property borders the Delaware River and is nearly level, ranging in elevation from ten to twenty feet. Characterized by wetlands, swamp, river, floodplain and meadow habitats, it supports a wide variety of plant and animal life, which includes typical wetlands vegetation as well as sweet gum, red maple, pine, oak, tulip tree, sycamore, and willow oak.

General agriculture, including livestock raising, is practiced on the adjoining lands, while the easement is used for education, passive recreation, and habitat protection. The Taylor easement has created an important wildlife refuge and an enclave of nature adjoining the only operating farm fronting on the Delaware between Trenton and Camden.

NATURAL LANDS TRUST LANDHOLDINGS

Sussex County

1. Reinhardt Preserve
2. Crooked Swamp Caves Preserve
3. Walkill River Project Area
4. McCarthy Preserve

Warren County

5. Limestone Ridge Marsh Preserve

Hunterdon County

6. Isenburger Preserve
7. Readington Preserve

Middlesex County

8. Stevens Easement

Somerset County

9. Flemer Preserve

Mercer County

10. Highfields Easement

Burlington County

11. Taylor Easement
12. Moorestown Project Area
13. Holly Ford Ice Company Preserve

Ocean County

14. Crossley Preserve
15. Audubon Easement
16. Barnegat Preserve
17. Lin-Lee Preserve
18. Lazarus Preserve
19. Kislow Preserve

Gloucester County

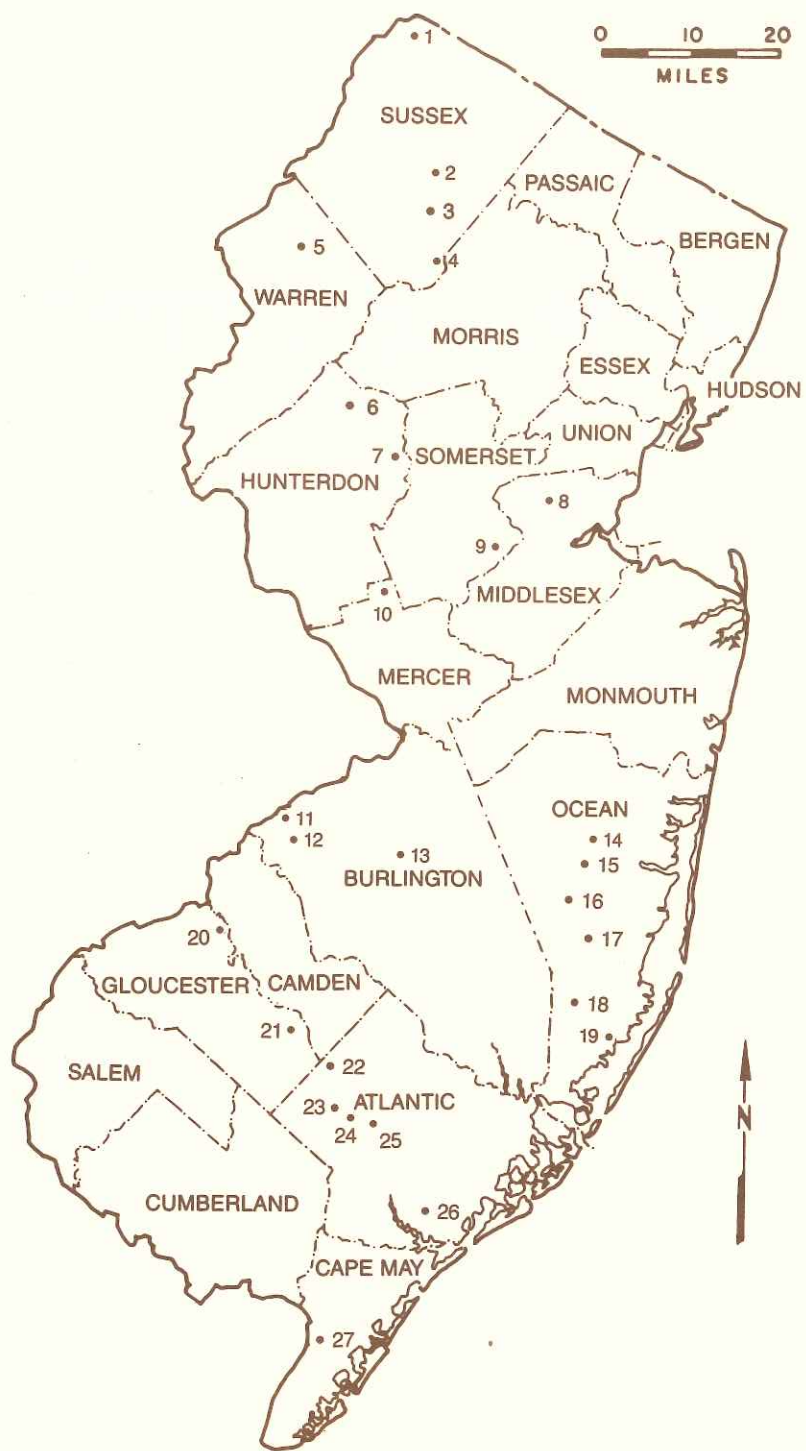
20. Big Timber Creek Preserve
21. Katz and Esposito — Monroe Preserve

Atlantic County

22. Katz and Esposito — Folsom Preserve
23. Costa Preserve
24. Danenhauer Preserve
25. Hamilton Preserve
26. Heathercroft Preserve

Cape May County

27. Frye Preserve



DELAWARE BAY SHOREBIRD PROGRAM

The goal of the New Jersey Delaware Bay Shorebird program is to protect and manage habitat for more than one-million shorebirds of four major species (Ruddy Turnstone, Semipalmated Sandpiper, Red Knot, Sanderling) using the Delaware Bay littoral zone from April to June as a strategically located feeding and resting area on their northern migration to the arctic nesting grounds. The lower Delaware Bay supports the second largest spring concentration of shorebirds in the Western Hemisphere. These birds depend upon a single food source, eggs of the horseshoe crab, to rebuild their essential energy reserves after the long flight from their Central and South American winter quarters, so that they can reach their Canadian arctic nesting grounds.

In November of 1985, Governor Tom Kean of New Jersey and Governor Michael Castle of Delaware declared the Delaware River estuary as a shorebird reserve. It was the first reserve in the Western Hemisphere Shorebird Reserve Network.

Protection includes the planned acquisition of about eight miles of Delaware Bay shoreline through donation, purchase or easement. Additionally, some properties will be protected through the use of voluntary agreements with the landowners. In 1987, acquisition proposals were made by letter to all of the landowners of undeveloped beaches along the Delaware Bay from the Cohansey River to the Cape May Canal. Of the 60 landowners contacted, discussions

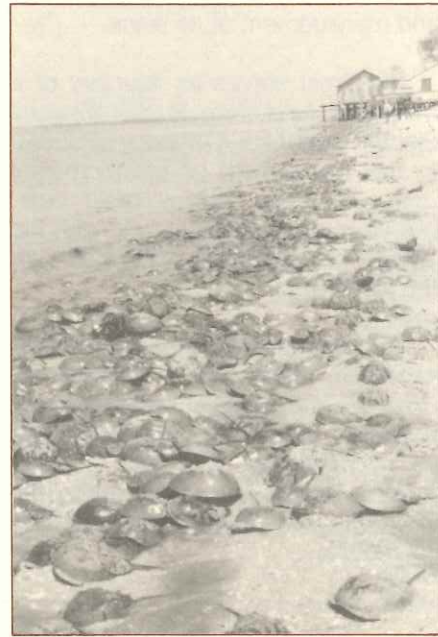


are continuing with over 35. A total of 43 acres with 800 feet of bay front was purchased in Maurice River Township during the past year. A 12.5-acre easement in Middle Township was donated to the Trust late in 1987. An additional 781 acres with 11,600 feet of shorebird habitat were donated to the Department of Environmental Protection. Voluntary agreements with property owners to protect shorebird habitat has become a viable alternative to land purchase. During the year, agreements protecting about 3,000 feet of shorebird habitat were negotiated.

During the last several years, various surveys have been conducted along the Delaware Bayshore to gather data and evaluate use by horseshoe crabs, shorebirds, and humans. Horseshoe crab studies currently being undertaken by the Marine Sciences Consortium, include computing nest density and depth of eggs by beach in an effort to determine migration patterns. The Endangered and Nongame Species Program in the Division of Fish, Game and Wildlife in cooperation with the Delaware Division of Fish and Wildlife, conduct weekly aerial surveys of bird use on both sides of the Delaware Bay. This information will be used to estimate total numbers of birds by species and to determine trends in beach usage by the birds. Last year saw the first survey of human use of various beaches which was examined by Natural Lands Trust staff. This first year of study showed that the use of beaches by people varies from one location to another. Reeds Beach is used mainly for birdwatching, while

people gather at Fortescue for fishing. These surveys will be repeated for a minimum of three years in order to gather data for future decision making.

Acquisition of the sandy beaches does little to protect the birds' uninterrupted use of this habitat. Ownership, or agreements, are merely vehicles to accomplish protection through habitat management. Issues of management are currently being assessed in coordination with the Division of Fish, Game and Wildlife, and private organizations such as the New Jersey Conservation Foundation. A management plan will be prepared during the coming year, using the survey information gathered thus far, together with a general knowledge of bird-feeding habits.



FINANCES

The Trust receives in-kind services for personnel, counsel, office space and equipment. This cooperative relationship is not included in the financial sheet as no funds change hands. However, the benefit to the Trust is real and comes from the Department of Environmental Protection with the exception of counsel, which comes from the Department of Law and Public Safety.

The Trust is supported by state appropriations and not by membership dues or fees. The Trust thus spends only a minimal amount of time and energy on advertising and fund-raising activities. Its entire appropriation is devoted to staff salaries and the costs of acquisition and management of its lands.

The Trust serves as fiduciary of a mitigation fund from Public Services Electric and Gas Company (PSE&G) to the Department of Environmental Protection. The monies have been placed in an investment fund with the interest earned being reinvested with the same fund.

As a state agency, the Trust's fiscal year runs from July 1 to June 30. However, the financial statement is of calendar year 1987, with balances as of December 31, 1987. "Cash" reflects fiscal year 1988 appropriations, but expenditures for only the first six months.

1987 FINANCIAL STATEMENT

Revenues

State Appropriations FY 88	\$90,000
Miscellaneous Income	1,000
Investment Fund Interest and Dividends	1,907
Shorebird Fund Dividends	63,921
Land Donations	914,980
TOTAL INCOME	\$1,071,808

Expenses

General Operating	\$75,052
Land Acquisition	5,258
Land Management	7,658
Shorebird Disbursements	67,260
TOTAL EXPENSES	\$155,228

BALANCE SHEET, DECEMBER 31, 1987

Assets

Cash (General Operating Funds)	\$92,301
General Investment Fund	27,877
Shorebird Accounts Receivable	67,260
Unencumbered Shorebird Fund	599,065
Land	4,135,680
TOTAL ASSETS	\$4,922,183

Liabilities

Dedicated Funds	\$599,065
Non-Dedicated Funds	137,006
Shorebird Accounts Payable	50,432
Land Fund	4,135,680
TOTAL LIABILITIES	\$4,922,183

DONORS

The Natural Lands Trust gratefully extends its thanks to those who have generously donated land to or signed an agreement with the Trust to help preserve and protect New Jersey's natural heritage.

Judith Alles
Rebecca and Timothy Alles
William E. Backus, Jr.
Helen A. and George Beach
Jean Louise Brookwell
Kathy and Fred Bufanio
Edith and Robert Buzzell
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New Jersey Conservation Foundation
New Jersey State Department of
Corrections
Public Service Electric and Gas

PHOTOGRAPHS

Leslie DiCola (Pages 2, 4, 5, 6, 8, 10, 13)
Steve Brush (Page 8)
Pete McLain (Pages 16 & 17)



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