



New Jersey
NATURAL LANDS TRUST

AGENDA

NATURAL LANDS TRUST MEETING

February 22, 2013

Location: Office of Natural Lands Management

501 E. State Street, 5 Station Plaza, 4th Floor

Trenton, NJ

12:00 PM

- I. Statement of Open Public Meetings Act**
- II. General Public Comment**
- III. Financial Report**
 - Third and Fourth Quarter 2012 Financial Reports, for decision
- IV. Minutes of September 21, 2012 meeting, for decision**
- V. Unfinished Business**
 - Petty's Island, Pennsauken Township, Camden County, status update (no enclosure)
- VI. New Business**
 - Hamilton Preserve, Hamilton Township, Atlantic County-D'Imperio Memorandum of Understanding (to be distributed at meeting), for decision
 - Transfer of Trust account from Merrill Lynch to Vanguard, Resolution Designating Authorized Representatives, for decision
 - Calendar Year 2013 Spending Authorization, for decision
 - Retreat-Roy/GA Land Management Assignment Offer, Southampton Township, Burlington County, for decision
 - Hirst Ponds-The Nature Conservancy Land Donation Offer, Galloway Township, Atlantic County, for decision
 - Moorestown-Approval of Moorestown-Acquisition Fund expenditure, for discussion
 - Draft 2012 Annual Report Text, for decision
 - Delaware Bay Migratory Shorebird Subcommittee Report and request for additional funding, for decision (no enclosure)
 - 2013 Meeting Dates, for discussion (no enclosure)
- VII. Adjourn**

THE NEW JERSEY NATURAL LANDS TRUST
STATEMENT OF FINANCIAL POSITION
SEPTEMBER 30, 2012

(See Accountant's Review Report)

	Fixed Asset Fund	General Fund	Polly's Island	Petty's Island Cultural	Shorebird	Wetlands Acquisition	Wetlands Mitigation	TOTAL
ASSETS								
Current Assets								
Cash and Cash Equivalents	-	30,284	5,165	15,868	12,493	15,544	19,710	\$ 99,064
Accrued Interest Receivable	-	15,622	1,912	1,326	-	-	82,858	81,718
Total Current Assets	-	<u>45,906</u>	<u>7,077</u>	<u>17,194</u>	<u>12,493</u>	<u>15,544</u>	<u>82,568</u>	<u>180,782</u>
Fixed Assets								
Land	38,079,629	-	-	-	-	-	-	38,079,629
Equipment	2,364	-	-	-	-	-	-	2,364
Vehicles	15,544	-	-	-	-	-	-	15,544
Accumulated Depreciation	(17,908)	-	-	-	-	-	-	(17,908)
Total Fixed Assets	<u>38,079,629</u>	-	-	-	-	-	-	<u>38,079,629</u>
Other Assets								
Investments-Long Term (FMV)	-	1,960,785	506,694	1,064,336	348,991	-	8,192,079	12,072,885
Total Other Assets	-	<u>1,960,785</u>	<u>506,694</u>	<u>1,064,336</u>	<u>348,991</u>	-	<u>8,192,079</u>	<u>12,072,885</u>
TOTAL ASSETS	<u>\$ 38,079,629</u>	<u>\$ 2,006,691</u>	<u>\$ 513,771</u>	<u>\$ 1,081,530</u>	<u>\$ 361,484</u>	<u>\$ 15,544</u>	<u>\$ 8,274,647</u>	<u>\$ 50,333,296</u>
LIABILITIES & NET ASSETS								
Liabilities								
Margin Loan	-	-	-	-	-	-	-	0
Security Deposits Payable	-	\$ 2,873	-	-	-	-	-	\$ 2,873
Total Liabilities	-	<u>2,873</u>	-	-	-	-	-	<u>2,873</u>
Net Assets								
Unrestricted	-	2,018,547	-	-	-	-	-	2,018,547
Permanently Restricted	38,079,629	-	-	-	-	-	-	38,079,629
Temporarily Restricted	-	-	519,375	1,112,318	326,593	15,544	8,131,180	10,105,010
Unrealized Gain/Loss	-	(14,729)	(5,804)	(30,788)	34,891	-	143,467	127,237
Total Net Assets	<u>38,079,629</u>	<u>2,003,818</u>	<u>513,771</u>	<u>1,081,530</u>	<u>361,484</u>	<u>15,544</u>	<u>8,274,647</u>	<u>50,330,423</u>
TOTAL LIABILITIES & NET ASSETS	<u>\$ 38,079,629</u>	<u>\$ 2,006,691</u>	<u>\$ 513,771</u>	<u>\$ 1,081,530</u>	<u>\$ 361,484</u>	<u>\$ 15,544</u>	<u>\$ 8,274,647</u>	<u>\$ 50,333,296</u>

The accompanying notes are an integral part of the financial statements.

THE NEW JERSEY NATURAL LANDS TRUST
STATEMENT OF ACTIVITIES AND NET ASSETS
FOR THE NINE MONTH PERIOD ENDED SEPTEMBER 30, 2012

Statement 2

(See Accountant's Review Report)

	Trust Funds						TOTAL	
	Fixed Asset Fund	General Fund	Petty's Island	Petty's Island Cultural	Shorebird	Wetlands Acquisition		Wetlands Mitigation
Revenue (Restricted)								
Contribution Income	\$ -	\$ -	\$ 125,001	\$ 302,077	\$ -	\$ -	\$ 48,616	\$ 475,694
Expense								
Materials and Supplies	\$ -	\$ 686	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 686
Services	-	19,809	-	150	180	50	300	20,489
Maintenance	-	16,020	-	-	-	-	-	16,020
Annual Report	-	197	-	-	-	-	-	197
Capital	-	5,973	-	-	-	-	-	5,973
Subaccount Project Expenses	-	-	-	-	-	-	-	-
Other Authorized Expenditures	-	-	10,610	-	98,192	-	1,545,453	1,654,245
Depreciation Expense	-	-	-	-	-	-	-	-
Total Expenses	\$ -	\$ 42,685	\$ 10,610	\$ 150	\$ 98,362	\$ 50	\$ 1,545,753	\$ 1,697,610
Other Income								
Rent Income	-	20,150	-	-	-	-	-	20,150
Interest/Dividend Income	-	38,992	9,534	15,056	10,980	11	186,451	261,024
Miscellaneous Income	-	12,205	-	-	-	-	-	12,205
Gain or Loss on Sale	-	-	-	-	-	-	47,009	47,009
Total Other Income	\$ -	\$ 71,347	\$ 9,534	\$ 15,056	\$ 10,980	\$ 11	\$ 233,460	\$ 340,388
Excess Revenues Over Expenses	\$ -	\$ 28,662	\$ 123,925	\$ 316,983	\$ (87,382)	\$ (39)	\$ (1,263,677)	\$ (981,528)
Net Asset Balance Dec 31 2011	\$ 38,079,629	\$ 1,977,898	\$ 387,903	\$ 766,530	\$ 451,005	\$ 15,583	\$ 9,588,744	\$ 51,267,292
Land Acquisition	-	-	-	-	-	-	-	-
Unrealized Loss/Gain	-	(2,742)	1,943	(1,963)	(2,139)	-	(50,420)	(55,341)
Adjustment for Prior Period	-	-	-	-	-	-	-	-
Net Asset Balance Sept 30, 2012	\$ 38,079,629	\$ 2,003,818	\$ 513,771	\$ 1,081,530	\$ 361,484	\$ 15,544	\$ 8,274,647	\$ 50,330,423

The accompanying notes are an integral part of the financial statements.

THE NEW JERSEY NATURAL LANDS TRUST
STATEMENT OF FINANCIAL POSITION
DECEMBER 31, 2012

Statement 1

(See Accountant's Review Report)

	Fixed Asset Fund	General Fund	Petty's Island	Petty's Island Cultural	Shorebird	Wetlands Acquisition	Wetlands Mitigation	TOTAL
ASSETS								
Current Assets								
Cash and Cash Equivalents		50,897	3,423	16,266	406	15,547	99,023	\$ 185,582
Tenants Escrow		2,143						2,143
Accrued Interest Receivable	-	9,757	2,783	5,289	-	-	40,210	58,039
Total Current Assets	-	62,797	6,206	21,575	406	15,547	138,233	245,764
Fixed Assets								
Land	38,079,629	-	-	-	-	-	-	38,079,629
Equipment	2,364	-	-	-	-	-	-	2,364
Vehicles	15,544	-	-	-	-	-	-	15,544
Accumulated Depreciation	(17,908)	-	-	-	-	-	-	(17,908)
Total Fixed Assets	38,079,629	-	-	-	-	-	-	38,079,629
Other Assets								
Investments-Long Term (FMV)	-	1,960,877	484,865	1,064,469	345,150	-	8,196,247	12,051,608
Total Other Assets	-	1,960,877	484,865	1,064,469	345,150	-	8,196,247	12,051,608
TOTAL ASSETS	\$38,079,629	\$ 2,023,674	\$ 491,071	\$ 1,086,044	\$ 345,556	\$ 15,547	\$ 8,335,480	\$ 50,377,001
LIABILITIES & NET ASSETS								
Liabilities								
Margin Loan								0
Security Deposits Payable	\$ -	\$ 2,792	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,792
Total Liabilities	-	2,792	-	-	-	-	-	2,792
Net Assets								
Unrestricted	-	2,035,656	-	-	-	-	-	2,035,656
Permanently Restricted	38,079,629	-	-	-	-	-	-	38,079,629
Temporarily Restricted	-	-	503,240	1,114,719	319,375	15,547	8,260,949	10,213,830
Unrealized Gain/Loss	-	(14,774)	(12,189)	(28,675)	26,181	-	74,531	45,094
Total Net Assets	38,079,629	2,020,882	491,071	1,086,044	345,555	15,547	8,335,480	50,374,239
TOTAL LIABILITIES & NET ASSETS	\$38,079,629	\$ 2,023,674	\$ 491,071	\$ 1,086,044	\$ 345,556	\$ 15,547	\$ 8,335,480	\$ 50,377,001

The accompanying notes are an integral part of the financial statements.

THE NEW JERSEY NATURAL LANDS TRUST
STATEMENT OF ACTIVITIES AND NET ASSETS
FOR THE TWELVE MONTH PERIOD ENDED DECEMBER 31, 2012

Statement 2

(See Accountant's Review Report)

	Trust Funds						TOTAL	
	Fixed Asset Fund	General Fund	Petty's Island	Petty's Island Cultural	Shorebird	Wetlands Acquisition		Wetlands Mitigation
Revenue (Restricted)								
Contribution Income	\$ -	\$ -	\$ 125,001	\$ 302,077	\$ -	\$ -	\$ 49,076	\$ 475,154
Expense								
Materials and Supplies	\$ -	\$ 685	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 685
Services	-	20,675	150	150	180	50	300	\$ 21,506
Maintenance	-	16,072	-	-	-	-	-	\$ 16,072
Annual Report	-	197	-	-	-	-	-	\$ 197
Capital	-	5,973	-	-	-	-	-	\$ 5,973
Subaccount Project Expenses	-	-	-	-	-	-	-	\$ -
Other Authorized Expenditures	-	9,327	26,653	-	110,768	-	1,545,453	\$ 1,692,201
Depreciation Expense	-	-	-	-	-	-	-	\$ -
Total Expenses	\$ -	\$ 52,931	\$ 26,803	\$ 150	\$ 110,948	\$ 50	\$ 1,545,753	\$ 1,736,835
Other Income								
Rent Income	-	25,150	-	-	-	-	-	\$ 25,150
Interest/Dividend Income	-	58,605	11,500	15,474	14,209	14	265,340	\$ 385,142
Miscellaneous Income	-	12,205	-	-	-	-	-	\$ 12,205
Gain or Loss on Sale	-	-	35	-	-	-	47,009	\$ 47,044
Total Other Income	\$ -	\$ 95,960	\$ 11,535	\$ 15,474	\$ 14,209	\$ 14	\$ 312,349	\$ 449,541
Excess Revenues Over Expenses	\$ -	\$ 43,029	\$ 109,733	\$ 317,401	\$ (96,739)	\$ (35)	\$ (1,184,328)	\$ (810,940)
Net Asset Balance Dec 31 2011	\$ 38,079,629	\$ 1,977,898	\$ 387,903	\$ 766,530	\$ 451,005	\$ 15,583	\$ 9,588,744	\$ 51,257,292
Land Acquisition	-	-	-	-	-	-	-	-
Unrealized Loss/Gain	-	(45)	(5,965)	2,113	(8,710)	-	(68,936)	(82,143)
Adjustment for Prior Period	-	-	-	-	-	-	-	-
Net Asset Balance Dec 31, 2012	\$ 38,079,629	\$ 2,020,882	\$ 481,071	\$ 1,086,044	\$ 345,556	\$ 15,547	\$ 8,335,480	\$ 50,374,209

The accompanying notes are an integral part of the financial statements.

**MINUTES OF THE
NATURAL LANDS TRUST MEETING
September 21, 2012
12:00 PM**

Office of Natural Lands Management, Trenton, New Jersey

Chairman Catania called the meeting to order at 12:01 PM and roll was taken. A quorum of trustees was present. At least one of the trustees was a state governmental representative.

The Open Public Meetings Act notice was read as follows: Notice of the date, time, location and agenda, to the extent known, was forwarded to three newspapers of general circulation, and provided to the Secretary of State in accordance with the Open Public Meetings Act.

In attendance were:

Michael Catania, Chairperson
James Hall, Vice Chairperson
Theresa Lettman, Trustee/Secretary-
Treasurer
Steve Eisenhauer, Trustee
Emile DeVito, Trustee

Larry Torok, DEP Trustee
Judeth Yeany, DEP Trustee
Maurice Griffin, DAG, Trust Counsel
Robert J. Cartica, Executive Director
Martin Rapp, Trust Staff
Cari Wild, Trust Staff

Absent were:

Thomas Gilmore, Trustee
Adrienne Kreipke for the State Treasurer, Trustee
Ed Mulvan, alternate for Rich Boornazian
State House Commission representative (not appointed)

Guests

Dale Rosselet, Vice President for Education, New Jersey Audubon Society
Amanda Dey, DEP Endangered and Nongame Species Program
Paul Anzano, Esq., Glen Gardner Borough Attorney
Bill Kibler, Raritan Headwaters Association
Nancy Lawler, Lebanon Township Environmental Commission
Joe Delasey, Glen Gardner
Donald Skorets, Glen Gardner
Richard Henderson, Glen Gardner
Erica Van Auken, NJ Highlands Coalition

General Public Comment: None

Financial Report: Mr. Cartica outlined the Financial Statements for the quarter ending June 30, 2012. Mr. Hall motioned to approve the Financial Statements. Mr. Torok seconded the motion and, by a vote of 7 to 0, the Financial Statements were approved.

The **June 29, 2012 minutes** were reviewed. Ms. Yeany motioned to approve the minutes. Mr. Hall seconded the motion and, by a vote of 7 to 0, the minutes were approved.

Unfinished Business:

Mr. Catania advised that the Committee, consisting of Mr. Catania, Mr. DeVito, Mr. Gilmore and Mr. Eisenhauer, established at the last meeting to review the **US Concrete Conceptual Proposal for Land Conveyance, Hagedorn Preserve, Lebanon Township, Hunterdon County**, met in August to inspect US Concrete's existing quarry in Glen Gardner Borough, the Trust's adjacent Hagedorn Preserve (Lebanon Township and Glen Gardner Borough, Hunterdon County) and the proposed replacement land in Hardyston Township, Sussex County. Mr. Catania explained that the Trust has not received an application from US Concrete, so there is no need for Board action, or for the Committee to make recommendations, at this time. Based on its inspections and review, however, the Committee made the preliminary finding that US Concrete failed to demonstrate that there are no reasonable alternatives to its proposal and, thus, the Committee discouraged US Concrete from submitting an application to the Trust.

Notwithstanding that no application has been submitted to the Trust, it was noted that the Trust had received letters from Lebanon Township and Glen Gardner Borough requesting that the application be denied. The Trust has responded that no application has been received and, if an application is received, that the Trust's stringent *Guidelines for Conveyance of Land* will be followed.

Eight members of the General Public attended the meeting and expressed the following concerns regarding the US Concrete Conceptual Proposal:

Mr. Anzano indicated that he had recently met with representatives of US Concrete and they were non-committal regarding the submission of the application to the Trust. He expressed concern that an extension of the quarry's life will have adverse impacts on water table levels and local wells, and no public water is available in this area.

Mr. Kibler suggested that the Trust website should include additional information about the Trust's public meetings. He specifically requested that any public meeting held by the Trust regarding US Concrete's application, if received, be held during evening hours in either Glen Gardner Borough or Lebanon Township. He also suggested that public access be increased at the Hagedorn Preserve now that the Hagedorn Psychiatric Hospital has been closed.

Ms. Lawler requested a copy of the power point presentation made by US Concrete at the June 29, 2012 meeting if it was included as part of the minutes.

Mr. Delasey indicated that quarry blasting can be felt more than a half-mile away. He expressed concern that the blasting may affect veterans using the new veteran services being provided at Hagedorn. He also expressed concern about the quarry's impacts on bobcat habitat.

Mr. Skorets expressed concerns about the quarry's operations on water quality.

Mr. Hendersen also expressed concerns about the quarry's operations on what he called a "grade A" trout stream. He circulated photos of siltation in the stream.

Mr. Catania thanked everyone for their comments. He noted that the Trust has stringent guidelines associated with the conveyance of land that would guide the process if US Concrete submits an application. He also said that all public comments and concerns would be taken into consideration during such process, but expressed the hope that US Concrete would not submit an application.

Mr. Catania provided the Board with a report on the status of activities at **Petty's Island Preserve in Pennsauken Township, Camden County**. In May, the Trust submitted a preliminary proposal in the amount of \$75,000 to the William Penn Foundation for funding toward a feasibility study of three alternate locations for, and the design of, the cultural and education center, as well as wayside exhibits and other interpretive applications. William Penn Foundation has responded at the staff level with a grant recommendation in the amount of \$82,500. Since the Board unanimously approved the Petty's Island Conceptual Vision Map in June 2011, and the Trust plans to use a consultant under term contract with the Department of Environmental Protection to conduct the feasibility study, Mr. Catania indicated that no Board action is required to accept William Penn Foundation funding or move forward with a feasibility study.

Mr. Catania updated the Board regarding its contract with the New Jersey Audubon Society (NJAS) for educational programming and stewardship at the Petty's Island Preserve. The contract awarded November 1, 2011 was a one-year contract that could be renewed for four one-year terms. Mr. Catania noted that the Trust and NJAS have had a very successful first year, as will be explained in detail by Ms. Rosselet, and the Trust plans to renew its contract with the NJAS and its subcontractors, Delaware Riverkeeper and Cooper River Watershed Association, for another year. In a power point presentation, Ms. Rosselet provided details regarding NJAS's educational and stewardship activities at Petty's Island over the past year along with their community relations efforts, especially with public and charter schools in Camden County. Through this contract, hundreds of people have enjoyed spending time on this previously inaccessible island over the past year.

New Business:

Ms. Dey presented the **Delaware Bay Migratory Shorebird Project 2013 Budget Request** for the Conserve Wildlife Foundation (CWF) and for the Endangered and Nongame Species Program (ENSP). Ms. Dey advised the Board that the annual amount the Trust provides is critical because it helps develop the scientific support for regulatory actions such as horseshoe crab harvesting restrictions and red knot listing. Ms. Dey discussed 2012 data indicating that the stopover population of red knots on Delaware Bay increased to 25,488, almost double the count of 12,804 in 2011, but is consistent with the counts done over the previous 10 years. The improvement in the number of red knots is most likely a consequence of increased horseshoe crab egg production over the past few years based on the horseshoe crab harvest restrictions. Counts in January 2012 of red knots on their main wintering area in Tierra del Feugo increased slightly to 14,200 (from 9,850 in 2011). As mentioned at the March 2012 Trust meeting, the Atlantic States Marine Fisheries Commission will implement the Adaptive Resource Management (ARM) Model to set harvest quotas for horseshoe crabs. The model relies on data from Delaware Bay and will base harvest quotas on biological measures, not historic or political quotas.

The proposed 2013 shorebird budget is \$98,800; \$20,200 more than budgeted in 2012. This increase is based on the uncertainty of what, if any, federal funds will be available for Delaware Bay Migratory Shorebird Project activities this year. It is hoped that federal funding will become available and the full amount being requested from the Trust will not be needed.

Mr. Hall expressed concern that the Trust's shorebird account is now less than \$400,000 and, at current spending levels, will be depleted in three or four years. A long discussion ensued as to what could be done to replenish the account and the best way to address the greatest threats to Delaware Bay migratory shorebirds with limited funding. Mr. Catania suggested that a committee be formed to explore ideas and to investigate sponsoring a Delaware Bay Migratory Shorebird summit. Mr. DeVito and Mr. Eisenhower volunteered to serve with Mr. Catania on the committee.

Mr. Catania noted that, as with prior budgets, the 2013 shorebird budget should be approved with a rider authorizing a reallocation of expenses between categories subject to a limitation of the total budgeted amount. He also noted the need for authorization of a \$35,000 upfront payment to CWF in order to fund Delaware shorebird work to be done in May and June 2013 with receipts for such work to be provided at a later time. Mr. DeVito motioned to approve the 2013 budget with the reallocation rider and upfront \$35,000 payment. Mr. Hall seconded the motion and, by vote of 7 to 0, the 2013 shorebird budget.

The Board considered the **Belcher Creek-Burton/GA Land Management Assignment Offer in West Milford Township, Passaic County**. Ms. Yeany recused herself from the matter. Mr. Torok motioned to accept the Management Assignment Offer. Mr. Hall seconded the motion, and the offer was accepted by a vote of 6 to 0 with Ms. Yeany abstaining.

The remaining 2012 meeting date is December 7, 2012.

Mr. Hall motioned for the meeting to be adjourned. Mr. DeVito seconded the motion and, by a vote of 7 to 0, the meeting was adjourned at 2:17 PM.

Respectfully submitted,

Theresa Lettman
Secretary/Treasurer



**NEW JERSEY NATURAL LANDS TRUST RESOLUTION OF THE BOARD OF
TRUSTEES DESIGNATING AUTHORIZED REPRESENTATIVES OF TRUST'S
FINANCIAL ACCOUNTS
FEBRUARY 22, 2013**

WHEREAS, among other powers, the New Jersey Natural Lands Trust (NJNLT) is authorized by N.J.S.A. 13:1B-15.122 to acquire in the name of the Trust, hold and dispose of real or personal property in the exercise of its powers and the performance of its duties under N.J.S.A. 13:1B-15.119 et seq.; and

WHEREAS, among other powers, the NJNLT is authorized by N.J.S.A. 13:1B-15.122 to make, enter into and perform all contracts and agreements necessary or incidental to the performance of its duties, the maintenance of its property and the execution of its powers under N.J.S.A. 13:1B-15.119 et seq.; and

WHEREAS, among other powers, the NJNLT is authorized by N.J.S.A. 13:1B-15.122 to do all acts and things necessary or convenient to carry out the powers expressly granted in N.J.S.A. 13:1B-15.119 et seq.; and

WHEREAS, among other powers, the NJNLT is authorized by N.J.S.A. 13:1B-15.123 to accept gifts, legacies, bequests and endowments for any purpose which falls within that of the Trust and, unless otherwise specified by the person making such a gift, legacy, bequest and endowment of money in furtherance of the Trust, to invest the same in whole or in part in an interest-bearing trust account or general obligations of the State of New Jersey; and

WHEREAS, specific individuals are required by the financial account holder(s) to be designated as "authorized representatives" under the Trust's financial accounts individually, without countersignature or co-signature, to give instructions on behalf of the Trust for transactions in the accounts including, but not limited to, the transfer of funds by wire, check or otherwise, or the writing, drawing or requesting of checks on the Trust's accounts; and

NOW, THEREFORE, BE IT RESOLVED that the Board hereby authorizes Chairperson Michael Catania, Secretary/Treasurer Theresa Lettman and Executive Director Robert Cartica to execute any other forms necessary in order for them to be deemed "authorized representatives" under the Trust's accounts who are authorized individually, without countersignature or co-signature, to give instructions on behalf of the Trust for transactions in the accounts including, but not limited to, the transfer of funds by wire, check or otherwise, or the writing, drawing or requesting of checks on the Trust's accounts.



**NATURAL LANDS TRUST
SPENDING AUTHORIZATION FOR
CALENDAR YEAR 2013**

EXPENDITURES

	<u>2012 Authorization</u>	<u>2012 Expenditure</u>	<u>2013 Authorization</u>
04-2 MATERIALS AND SUPPLIES	\$2,000	\$686	\$2,000

General Printing, Office Supplies and Mail Services - \$2,000

Includes routine office supplies, photocopying, reference materials and publications, maps and reproduction of maps, creating signage, and similar expenses. Production and printing of the Annual Report is not included under this category. If needed, this item will fund additional functions for outreach and volunteers for management and acquisition.

04-3 SERVICES	\$46,700	\$20,676	\$36,700
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Travel - \$700

Includes funds for refreshments for Board meetings and parking vouchers and staff reimbursement for occasional use of personal vehicles.

Information Processing - \$1,000

Includes computer repairs and purchase of software.

DAG Expenses – \$20,000

Includes charges assessed to the Trust for professional services provided by staff of the Attorney General's office.

Other Professional Services - \$15,000¹

Includes cost of title searches and filing fees for land donations and legal advertisement of meeting dates, membership fees and bank service charges. Also includes routine professional service contracts for surveys and preparation of deeds. Minimal back taxes are included as part of this line; however, substantial tax payments will be included in each offering brought to the Board. Professional Services also includes any costs associated with creation and maintenance of the Trust's website and for Trust professional accounting services.

¹ Does not include account maintenance fees and asset management costs associated with recently established accounts with Vanguard Financial Services.

	<u>2012 Authorization</u>	<u>2012 Expenditure</u>	<u>2013 Authorization</u>
04-4 MAINTENANCE AND FIXED CHARGES	\$58,000	\$16,072	\$70,000

General Maintenance of Buildings, Grounds, Equipment and Vehicle - \$23,000

Includes funds for maintenance of rental units (including furnace or roof replacement, road regrading, power restoration, and other emergency measures), gates and access, safety/stabilization needs, tree trimming and removal, encroachment surveys, etc., as needed. Major planned maintenance and capital improvement projects are not included within this authorization and would be submitted individually, together with a recommended funding source, to the Board of Trustees for consideration.

Conservation/Preserve Management Projects - \$47,000

The following preserve management projects related to the Trust’s mission of preservation of biodiversity are included in the budgeted amount planned for this calendar year. The costs for each project are gross estimates and quotes have not yet been sought.

- Preserve inventories and/or management plan development: \$15,000
- Salary for hourly Trust GIS specialist/land management assistant: \$16,000
- Invasive plant control and preserve management (various preserves): \$16,000

04-5 ANNUAL REPORT	\$500	\$197	\$250
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2010 Annual Report - \$1,000

The requested authorization includes the cost of graphic layout and development of the annual report for posting on the Trust’s website.

04-7 CAPITAL	\$5,000	\$5,973	\$5,000
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Miscellaneous Equipment Purchase and Replacement - \$2,500

This budget allows for and miscellaneous small equipment purchases used for land management and office function.

TOTAL SPENDING AUTHORIZATION	\$112,200	\$43,604²	\$113,950
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² Includes abatements to revenue generated by Trust rental units (\$152).



**The New Jersey Natural Lands Trust
LAND OFFERING FORM**

Site Name: Retreat-Roy/GA
ID#: 722-08

Donor(s): Green Acres
Address: PO Box 412
City, State, Zip: Trenton, NJ 08625
Phone: 609-984-0500
Agent/Contact: Bob Watson

Municipality: Southampton Township
County: Burlington
Quad Name:
Frontage: Route 70
Blocks: 2702/3201
Lot: 6/10

Acreage/dimensions: 72 acres
Zoning:
Assessed value: \$70,800
Annual taxes:

Improvements: None
Offer restrictions: None
Offer contingencies: None
ROWs or easements: DEP Access Easement related to Groundwater Monitoring
Type of Acquisition: Agreement

Property taxes paid through end of year transfer: Yes
Property taxes paid by:

Farmland assessed: No

Estimated annual management costs:
Land management fund donation: N/A

Owner will prepare deed: Green Acres will prepare deed
Intended date of closing:
Owner will provide property survey & monuments: Green Acres will provide survey

Description of Offering

This approximately 72-acre land donation offer to Green Acres is located in Southampton Township, Burlington County. The property consists of two parcels; one 69 acres and the other 1.6 acres. Both properties have significant road frontage on either side of Route 70 but, due to a wide DOT right-of-way, neither offer public access to the road. The owner acquired the property in the 1950's for development purposes, but prior to development the Big Hill Landfill began operating and causing odor and noise problems for LeisureTowne and surrounding residents reducing the development potential of the property. In 1978 the DEP began inspecting and investigating the landfill. It determined that the landfill had caused groundwater contamination in the area requiring extensive remediation including a cap, leachate collection system and ground water extraction wells on and off-site, on-site water treatment system, reinjection system and long-term monitoring. To effect the remediation, DEP required an easement on 19.62 acres of the offered property in order to deforest, install roads and wells for water monitoring purposes and fence the area. The area is considered a "Classification Exception Area" to define the extent of the ground water contamination. Although a good portion of the offered property is not subject to the DEP easement, the property is essentially undevelopable given its proximity to the landfill. DEP compensated the property owner less than \$30,000 for the easement. Based on the inability to develop the property, the owner has offered to donate it to Green Acres.

Ecological Description

The property is within the Pinelands. Approximately 75 percent of the property is forested and includes some areas of forested wetlands. The remaining 25 percent of the property along the northern property boundary is deforested and disturbed by the groundwater monitoring activities. The New Jersey Endangered and Nongame Species Program has identified the undisturbed portion of the larger parcel as suitable habitat for timber rattlesnake, Cooper's hawk, northern parula and brown thrasher. The smaller parcel is also ranked 4 under the Landscape Project as suitable habitat for timber rattlesnake, northern pine snake, barred owl and worm-eating warbler.

Management Issues and Concerns

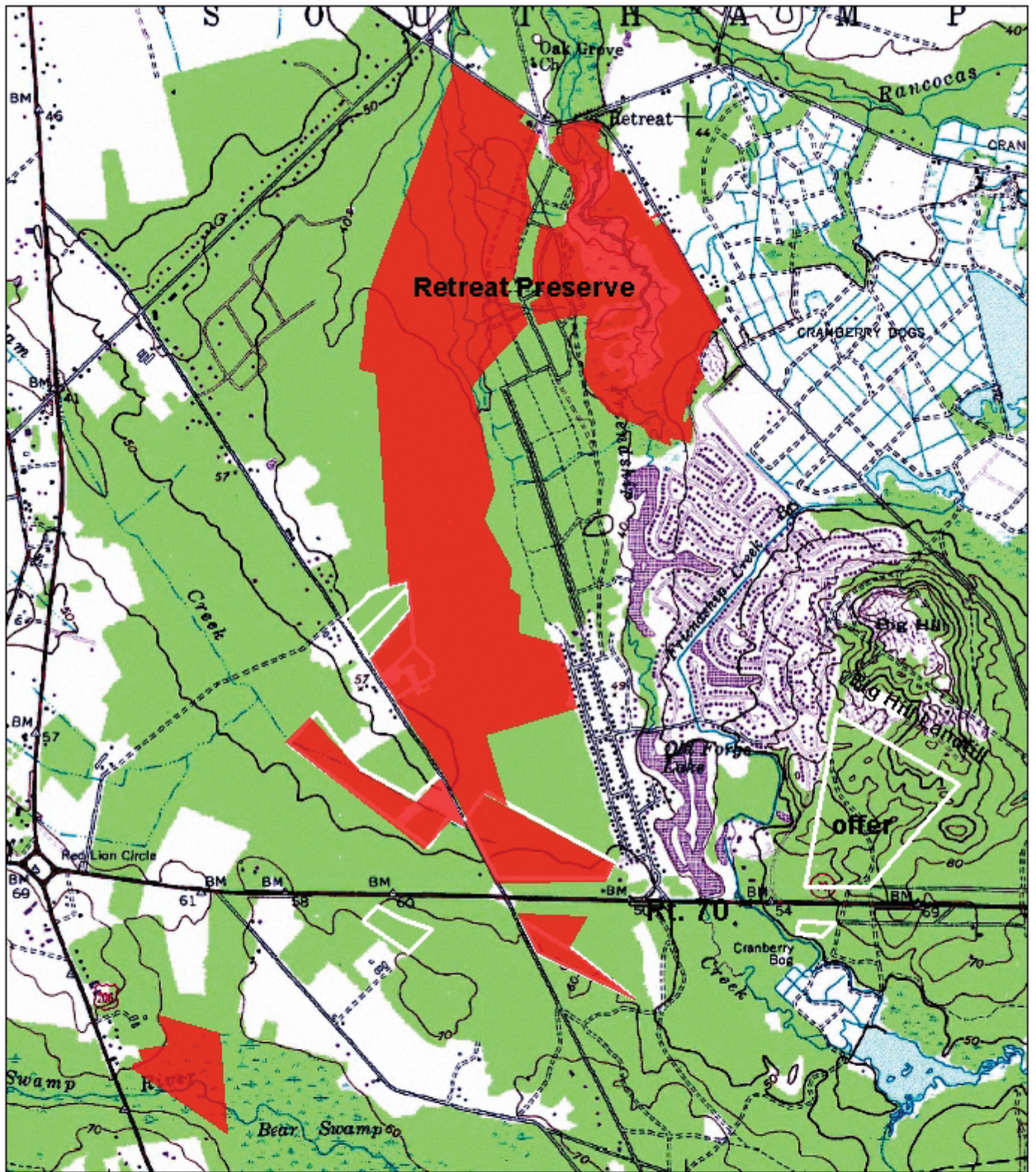
Staff inspected this property on August 14, 2012 and, other than the landfill, no problems were noted. In addition, these properties will be evaluated and inspected by Green Acres for contamination and other potential hazards prior to acquisition. Staff does not expect management of this property to pose significant management concerns.

Acquisition Criteria

The property meets the Board's acquisition criteria for Endangered Species Habitat since it includes suitable habitat for state or federally listed plant or animal species. As a Green Acres Land Management Assignment, there is no offer of a land management donation.

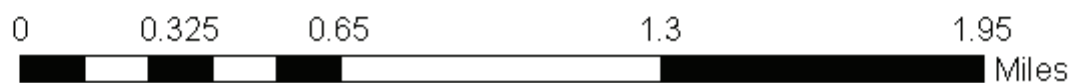
Staff Recommendations

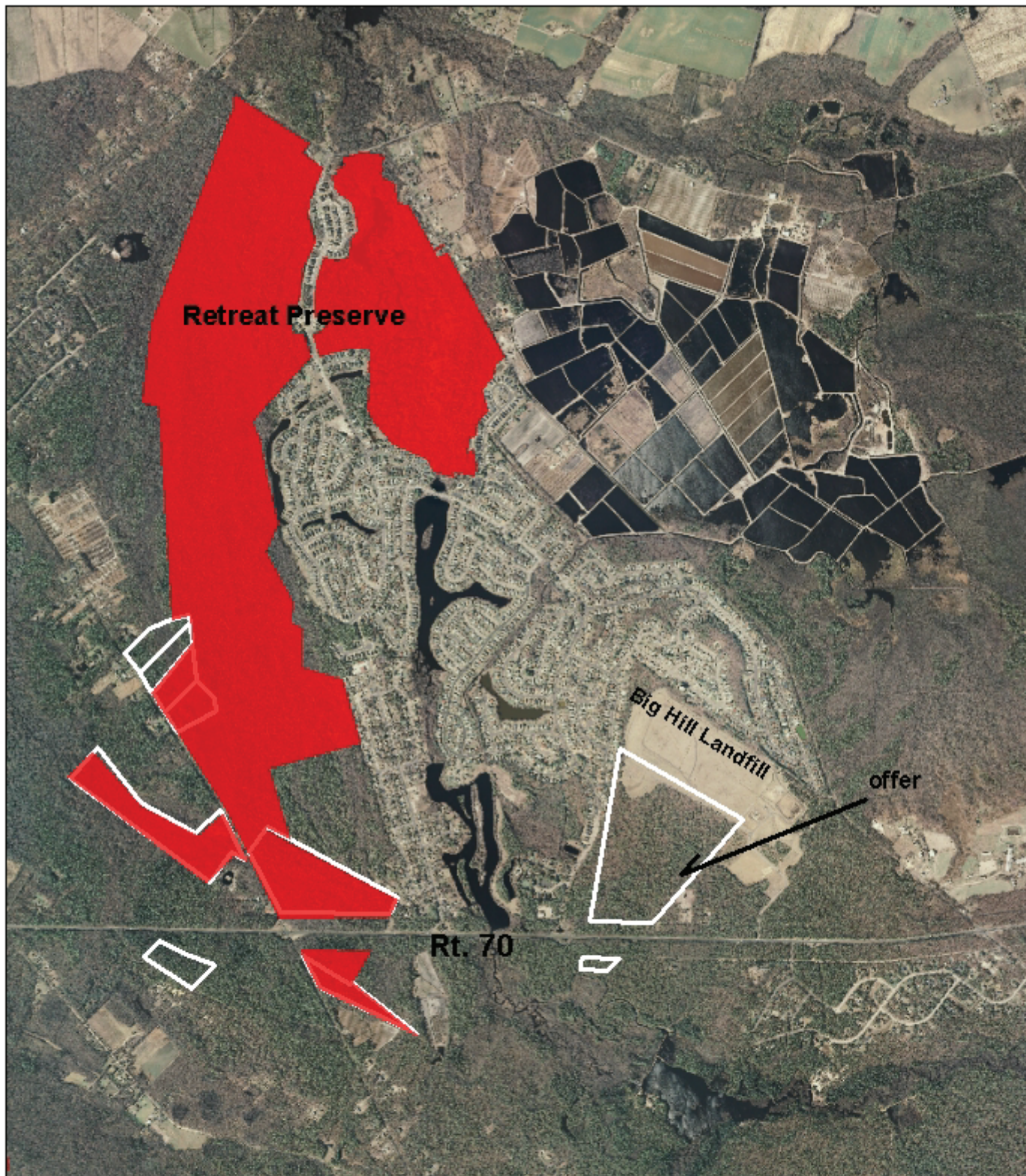
Staff recommends the approval of this Green Acres Land Management Assignment as an addition to the Trust's Retreat Preserve.



**New Jersey Natural Lands Trust
Retreat- Roy/GA**

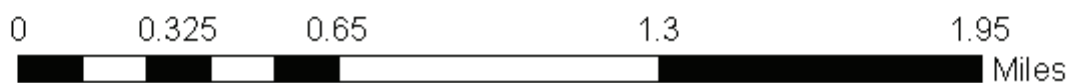
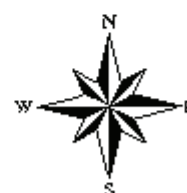
Southampton Township, Burlington County
72-Acres- Management Assignment





**New Jersey Natural Lands Trust
Retreat- Roy/GA**

Southampton Township, Burlington County
72-Acres- Management Assignment





**The New Jersey Natural Lands Trust
LAND OFFERING FORM**

Site Name: Hirst Ponds-The Nature Conservancy
ID#: 352-01

Donor(s): The Nature Conservancy
Address: 200 Pottersville Road
City, State, Zip: Chester, NJ 07930
Phone: 609-861-4128
Agent/Contact: Heather Austin

Municipality: Galloway Township
County: Atlantic
Quad Name:
Frontage:
Block: 346/349/462/471
Lot: 19/1, 7, 9, 15, 17, 18, 19/5-7, 21-24/1, 3, 4, p/o 9, 10, 11, 13

Acreage/dimensions: 375 acres
Zoning:
Assessed value: \$1,985,580
Annual taxes:
Improvements: None

Offer restrictions: None
Offer contingencies: None
ROWs or easements: None known at this time
Type of Acquisition: Fee

Property taxes paid through end of year transfer: Yes
Property taxes paid by: Donor

Farmland assessed: No

Estimated annual management costs:
Land management fund donation: No

Who will prepare deed: Trust will prepare deed
Intended date of closing:
Will property survey & monuments be provided: No

Description of Offering

The Nature Conservancy (TNC) offers its Hirst Ponds Preserve as a Land Donation Offer to the Trust. The preserve is comprised of 22 separate tax parcels all located in Galloway Township, Atlantic County, some contiguous and others not. The parcels total approximately 375 acres. The scattered parcels have frontage on Leipzig, Mannheim and Prague Avenues, and Herschel and Duerer Streets. There are a number of single family homes interspersed in the area that share property boundaries with the preserve as does Barkswood Kennel, a dog and cat boarding and grooming facility.

Ecological Description

TNC began acquiring land in the area in 1984 to protect a pair of large, high-quality coastal plain intermittent ponds, which provide critical habitat for the state threatened Pine Barrens treefrog, state threatened barred owl and other plant and animal species. The smaller of the two ponds, to the north and known as Barkswood Pond (so named for the adjacent kennel), contains occurrences of the globally rare, state endangered Hirst Brothers' panic grass, state endangered Boykins lobelia as well as two other rare plants, rose-color coreopsis and mudbank crown grass. It is also known for a historic occurrence of the state endangered slender arrowhead. The larger pond, known as Labonsky Pond, sits at the southern end of the preserve and also contains occurrences of Hirst Brothers' panic grass, Boykins lobelia as well as four other rare plants, rose-color coreopsis, mudbank crown grass, narrow-leaf primrose-willow and floating heart. Hirst Brothers' panic grass is a federal candidate species, which means that it is a species that the U.S. Fish and Wildlife Service has determined warrants listing under the Endangered Species Act but awaits formal listing. The two ponds on this preserve collectively one of only two known occurrences of Hirst Brothers' panic grass in New Jersey. With the Trust's acquisition of the Hirst Ponds Preserve, all of New Jersey's populations of Hirst Brothers' panic grass will be in public ownership. It seems that the species' presence is sporadic and, in 2012, Hirst Brothers' panic grass was observed in only two locations—a pond in Wharton State Forest and one in Delaware. The Hirst Brothers' panic grass was observed here in 2003 but no more recent observations have been reported. This is not surprising, however, given that coastal plain intermittent ponds are inherently variable, with plants responding to hydrologic changes and many years may elapse before conditions are again suitable. The species was discovered in these ponds in the late 1950s by Frank and Robert Hirst and was described as a plant new to science in 1961. The brothers at the time of their discovery lived in Atlantic County and were recognized as the leading authorities on the flora of New Jersey's Pine Barren ponds. The entire property is forested with more than 50 percent of the property being forested wetlands.

Management Issues and Concerns

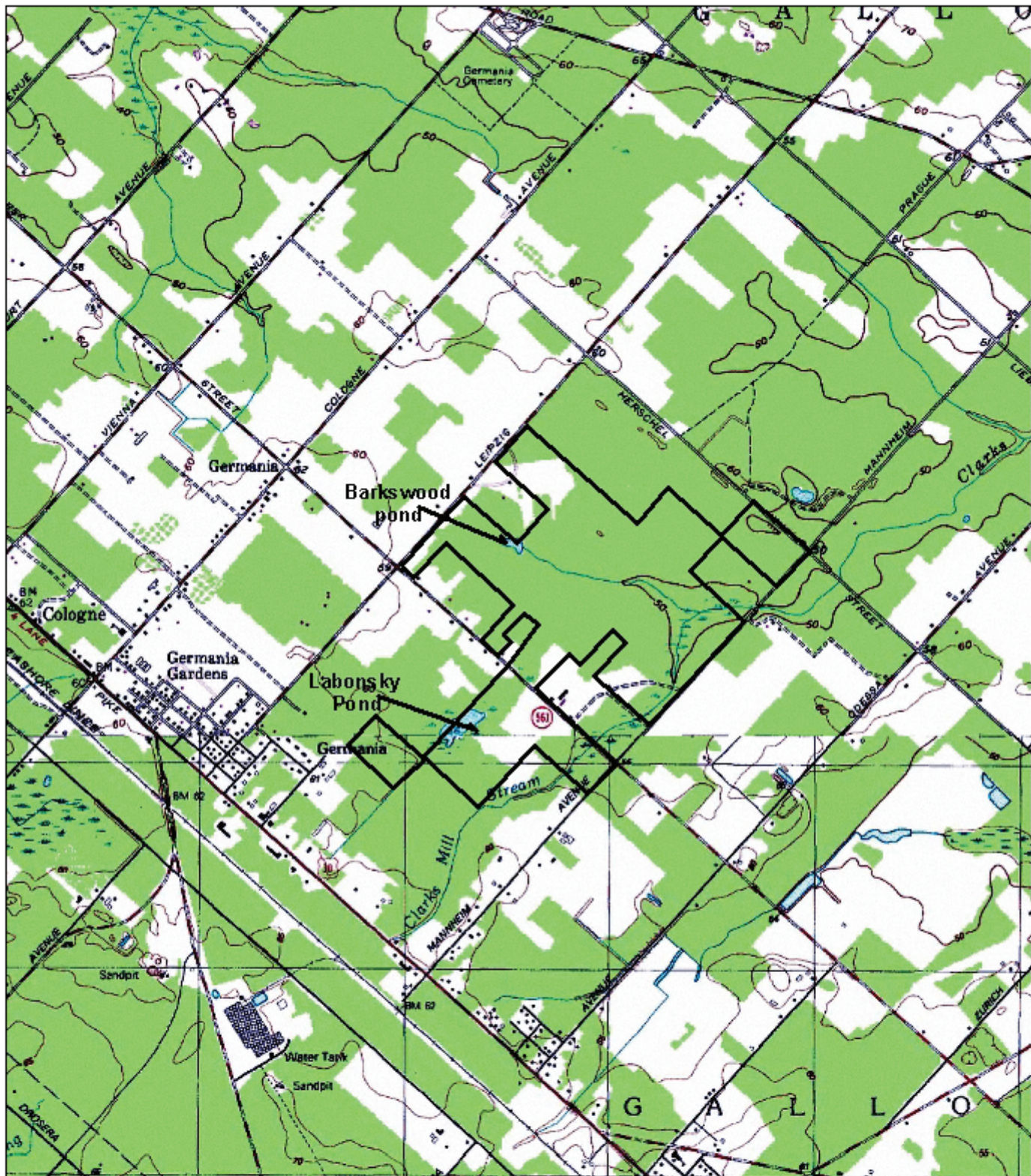
This will be a new preserve. Although much of the information related to surveys and deeds has not yet been transferred by TNC to the Trust, Staff does not expect this property to pose significant management issues and concerns. It should be noted that some ditching has been done to both ponds that may need to be addressed.

Acquisition Criteria

This property meets the Board's acquisition criteria for Endangered Species Habitat since it includes suitable habitat for state or federally listed plant or animal species. There is no offer of a land management donation.

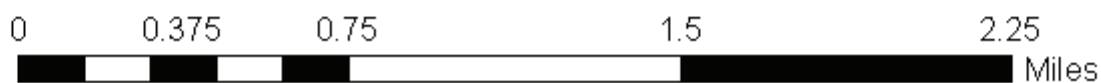
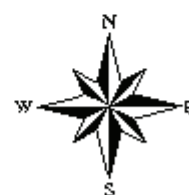
Staff Recommendations

Staff recommends the approval of this Land Donation Offer as its new Hirst Ponds Preserve.



**New Jersey Natural Lands Trust
Hirst Ponds-TNC /GA**

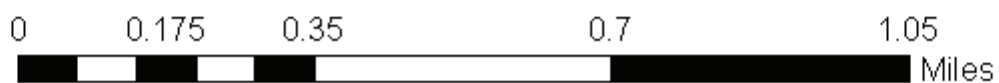
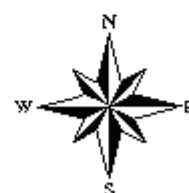
Galloway Township, Atlantic County
375- Acres- Management Assignment





**New Jersey Natural Lands Trust
Hirst Ponds-TNC /GA**

Galloway Township, Atlantic County
375- Acres- Management Assignment



To: Michael Catania, Chairperson
James Hall, Vice Chairperson
Thomas Gilmore, Board Member

From: Robert J. Cartica, Executive Director

Date: February 11, 2013

Subject: Moorestown Acquisition Fund—Approval for Expenditures

In accordance with the Board of Trustees' resolution dated March 6, 1992, the Moorestown Acquisition Fund is to be used by the New Jersey Natural Lands Trust (Trust) for costs related to acquisition of land and interest in land within the Moorestown Project Area. The funds shall be used for all costs related to acquisition of land or interest in land, including purchase price, studies, title search and insurance, recording fees, and other administrative costs related to such acquisition within this area. Due to the need to negotiate with property owners in an expeditious manner, disbursements for costs related to acquisition of land or interest in land may be made, within the Moorestown Project Area, upon approval of the Chairperson, Vice Chairperson, Executive Director and Board member Thomas Gilmore so designated by Chairperson Catania by letter dated September 5, 2003.

The Trust requests approval to use the Moorestown Acquisition Fund for reimbursement of the Green Acres Program's future acquisition of properties within the Moorestown Project Area. At present, Green Acres is processing four separate acquisitions. There are very few vacant properties left in this area but to the extent that the property owners are willing to apply to Green Acres for a sale of their property, the Trust should reimburse them with Moorestown Acquisition Funds.

We hereby approve this category of disbursement from the Moorestown Acquisition Fund. In accordance with the March 6, 1992 Board resolution, this written consent shall be reported to the full board at its next regularly scheduled meeting.

Michael Catania, Chairperson

Jim Hall, Vice Chairperson

Thomas Gilmore, Board Member

Robert Cartica, Executive Director



New Jersey Natural Lands Trust 2012 Annual Report

Statement of Purpose

The New Jersey Natural Lands Trust was created by the Legislature in 1968 as an independent agency with the mission to preserve land in its natural state for enjoyment by the public and to protect natural diversity through the acquisition of open space. The Trust preserves land primarily by donations of open space through acquisition of title in fee simple or of conservation easements, and manages its properties to conserve endangered species habitat, rare natural features, and significant ecosystems. The Trust invites passive use by the public for recreational or educational purposes wherever such use will not adversely affect ecological communities and biological diversity.

The Trust also recognizes that ownership and management alone are not enough to achieve its mission. Public education is an integral function of protecting natural diversity. The Trust distributes information designed to convey a conservation ethic for the protection of open space and its natural values.

New Jersey Natural Lands Trust contact information:

New Jersey Natural Lands Trust
Mail Code 501-04
P.O. Box 420
Trenton, NJ 08625-0420
Phone (609) 984-1339
Fax (609) 984-1427
Email: NatLands@dep.state.nj.us
www.njnlt.org

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Cover Design Credit:

Index of Preserves Referenced Within the 2012 Annual Report

Atlantic County

Bearshead Preserve ~
Clarks Landing Preserve ~
Hamilton ~

Camden County

Petty's Island Preserve ~
Four Mile Branch Preserve ~

Gloucester County

Raccoon Creek Preserve ~

Hunterdon County

Hagedorn Preserve ~
Sweet Hollow Preserve ~
Thomas F. Breden Preserve at Milford Bluffs ~

Ocean County

Crossley Preserve ~
Mystic Island Preserve ~

Warren County

Bear Creek Preserve ~

Sussex County

Paulins Kill River Greenway Preserve ~

In 2012 ... the New Jersey Natural Lands Trust brought approximately 530 new acres under Trust stewardship, making the Trust responsible for over 27,000 acres managed as a system of more than 120 preserves throughout the state.

The acquisitions represented additions to the **Bear Creek, Bearshead, Clarks Landing, Crossley, Four Mile Branch, Hagedorn, Mystic Island, Sweet Hollow** preserves and the **Thomas F. Breden Preserve at Milford Bluffs**.

Bear Creek Preserve Got Bigger

In 2012 the already big, 650-acre Bear Creek Preserve located in Allamuchy and Frelinghuysen Townships, Warren County got even bigger. Fifty percent bigger! At over 1,000 acres it is now the Trust's fourth largest preserve, following the Crossley, Hamilton and Great Piece preserves.

The new acreage came in the form of two separate acquisitions—one from the Presbyterian Camp and Conference Center and the other from The Nature Conservancy. The Trust, partnering with the New Jersey Green Acres Program, preserved 115 acres of the Presbyterian Camp and Conference Center's Johnsonburg Camp. To help Green Acres with the acquisition, the Trust obtained \$300,000 in grant money from the US Fish and Wildlife Service under

Section 6 of the Endangered Species Act, Recovery Land Acquisition Program for the preservation of high quality bog turtle habitat on this property. In addition to providing bog turtle habitat, this property also provides habitat for a number of rare plants including the state-endangered spreading globe flower, small bedstraw and Labrador marsh bedstraw.

In the second acquisition, The Nature Conservancy generously donated its 200-acre Glovers Pond Preserve to the Trust. In addition to providing a variety of habitats--forested floodplain along the Bear Creek, rich meadow marsh, spring-fed wetlands at the base of a limestone ridge, limestone forest, unique to the Ridge and Valley Region of New Jersey--the Glovers Pond Preserve serves as an important link for over 1,000 acres of preserved land, thereby enhancing habitat connectivity important for species such as bog turtle, wood turtle, barred owl and bobcat.

Prior to this year's additions, the Bear Creek Preserve already included portions of two Natural Heritage Priority Sites (Luse Pond and Southtown Sinkhole), which are important areas for supporting New Jersey biodiversity. The Johnsonburg Camp acquisition helps protect yet a third Natural Heritage Priority Site--Glovers Pond--which hosts a rare plant community associated with the adjoining limestone fen.

Although there are no maintained trails at this time, the Bear Creek Preserve is open to the public. Its visually stunning Franklinite marble and limestone rock outcrops and mix of habitats make Bear Creek a very interesting and enjoyable place to visit.

Happenings at the Hagedorn Preserve

For years the Hagedorn Preserve has been one of the Trust's sleeper preserves--there had been no new additions, no significant management concerns, and no big policy issues at this preserve. What a difference a year makes.

The New Year started out with a bang in the form of a new addition to the Hagedorn Preserve. In January 2012 the New Jersey Department of Human Services (DHS) transferred a seven-acre property known as Barren Run to the Trust. Although not immediately adjacent to the heart of the preserve, it is a nice forested property that adds to the surrounding contiguous forest and serves as habitat to bobcat, barred owl, eastern box turtle, wood thrush and veery. Situated in the Highlands Preservation Area, the forest at Hagedorn Preserve serves as important core forest habitat (defined as greater than 300 feet from altered land or a road). Conservation of large tracts of contiguous core forest habitat and minimization of fragmentation were identified as major issues of concern in the New Jersey Highlands by the USDA Forest Service (USDA 2002). So, while small, this new addition has significant ecological value.

Then, during his 2012 annual budget address, Governor Christie announced his decision to close the Senator Garrett W. Hagedorn Psychiatric Hospital, the Trust's long time neighbor, by June 30, 2012. The Trust's new neighbor would be Veterans Haven North, a 100-bed transitional living program for homeless veterans. While this change does not directly affect the preserve, the Trust had enjoyed a good working relationship with the staff of the hospital regarding maintenance issues. We look forward to getting to know and working with our new neighbor.

In late spring, another neighbor, US Concrete, contacted the Trust regarding a conceptual proposal to swap 30.5 acres of the Hagedorn Preserve in exchange for a compensation and restoration package that included financial payments to the Trust, long-term restoration of Trust property, as well as the transfer to the Trust of 152.7 acres in Hardyston Township, Sussex County. The property proposed for transfer to the Trust was located the Wallkill River National Wildlife Refuge. US Concrete attended the Trust's June 2012 meeting and expressed concern that its quarry creates a potential public hazard due to existing high benches and steep slopes created by the previous owner, Pinnacle. In order to mitigate the hazardous slopes, it proposed to expand its quarry into the Hagedorn Preserve in the area of the Mt. Kipp summit. After the Board raised a number of policy and practical questions, Chairman Catania indicated that this conceptual proposal raised a number of complex policy concerns that should be considered by a Committee which would provide recommendations to the Board. The Committee spent time over the summer reviewing the conceptual proposal and visiting the quarry, the preserve and proposed replacement lands.

At the Trust's September meeting, the Committee reported its preliminary finding to the full Trust Board that US Concrete's conceptual proposal did not appear to adequately demonstrate that there were no reasonable alternatives to mining Trust property, as required by the Trust's *Guidelines for Conveyance of Land*. For this reason, the Committee recommended that the Trust discourage US Concrete from submitting a conveyance application.

Although US Concrete has not submitted a formal application, the Trust has received public opposition to the news of the conceptual proposal. The Trust received letters opposing the application from both Lebanon Township and Glen Gardner Borough. There were negative portrayals of the conceptual proposal in the press. Glen Gardner's attorney, the Director of Policy for the Raritan Headwaters Association and several local residents attended the Trust's September 2012 meeting to oppose US Concrete's conceptual proposal based upon concerns about potential adverse impacts to water quality, endangered species habitat and impacts to the viewshed. The Trust has assured the public that if an application is submitted, its stringent *Guidelines for Conveyance of Land* will be followed, and that any public meetings about the application will take place in either Glen Gardner Borough or Lebanon Township, not in Trenton.

As just one preserve in a system of more than 100 preserves, and without many management issues, it was easy for the Trust to overlook the importance of the Hagedorn Preserve over the past few years. As a result of the US Concrete proposal, the Trust has taken a fresh look at this Highlands preserve and has been reminded of its significance as critical habitat for rare animal species and for water quality, as well as being a beautiful viewshed enjoyed by the surrounding community.

Stumped on Public Access

One of the primary objectives of the Trust is the public's access to the landscapes and rich natural resources across New Jersey. At this time the Trust has only a select few preserves where visitors may follow designated routes over a natural landscape.

Unfortunately, sometimes this access provides an opportunity to dump debris and refuse. Repeated and relentless damage caused by unauthorized off-road motorized vehicles--including big trucks, ATV's and motorcycles--damages sensitive habitats for plants and animals. One person's favorite hunting or fishing spot can become another person's illegal playground. Signs installed by the Trust's land manager prohibiting dumping or motorized vehicle access are torn down as soon as they are posted.

In the spring of 2012, after numerous phone calls to report dumping of construction debris, including two discarded motor boats in the Trust's Hamilton Preserve, staff took action in a bold way.

Following hurricane Irene, fallen trees, stumps and root balls were in no short supply. The thought was to establish a barrier to trucks and ATV's, a massive embankment created entirely of tree stumps-- stacked and packed so close together as to prevent access to trucks or even block menacing ATVs. The NJ Department of Environmental protection determined that use of stumps for this purpose would be an adaptive reuse of a natural product. So, it was worth a try.

Several local contractor offered bids on the job, and provided valuable insight on how to go about the task. Local excavator Fred Puggi was selected and quickly got to work stockpiling load after load of tree stumps on the site. Then, using an excavator and a wheeled loader, moved each stump into position, creating a seemingly impenetrable barricade along the entire road frontage (1,500 feet in length). After completing the stump barricade, the site hopefully now secured from further dumping, a thorough cleanup of the all the debris and boats and trash commenced, filling a 30-yard dumpster. One more time, signs were reposted making it clear that dumping and ATV use was not welcomed. A gate for management access only was secured between the two biggest stumps.

But would it work?

It did! At least for a while.

It is easy to imagine how it happened. One evening, after dark, using chains and cables lashed to their 4x4 trucks, they tugged until a breach in the barricade allowed unwelcomed and illegal access. Gate locks were cut and signs where torn down.

The Trust will be persistent in maintaining its investment, and plans to repair the barrier and gate replace the signs, and strive to keep this public land open and available for worthy and appropriate public enjoyment.

Petty's Island Update

The Trust is pleased to report a very successful and exciting first year of educational programming at Petty's Island under its contract with New Jersey Audubon Society (NJAS) and its two subcontractors, the Delaware RiverKeeper Network and the Cooper River Watershed Association. Under this contract, hundreds of people were provided access to Petty's Island as participants in a wide variety of programs. NJAS led trips for three different Camden and

Pennsauken high school groups, supervised two volunteer clean-ups and led a number of trips open to the general public focused on the history of the island and its natural resources. Based on the success of its first year of educational programming, the Trust awarded NJAS the contract for another year. Similar but expanded programming is expected for 2013.

To help the Trust develop a broad and expansive interpretation of the island's cultural and natural resources, NJAS is reaching out to local community groups and others to participate in an Education Advisory Group. It is hoped that this group will provide input on any number of educational and interpretive issues including programming opportunities and the development of the topics and messages for interpretive wayside exhibits.

Decades ago a road circumnavigated the island's perimeter. A portion of this old road has been cleared by Trust Board members and staff and other volunteers to the southernmost point of the island where views of the Philadelphia skyline are spectacular. In October the William Penn Foundation awarded the Trust a grant of \$82,500 to expand and restore trails on Petty's Island and to produce and install interpretive exhibits at key locations along trails to interpret the historic and ecological significance of specific elements of the island identified on the Trust's Vision Plan. The exhibits will include QR codes accessible by code reader applications on phones and mobile devices linking visitors to additional material such as recorded messages from diverse stakeholders.

In 2012 the Trust took some big steps towards a future cultural and education center planned for the island. Using the William Penn Foundation grant funding, the Trust hired Lammey & Giorgio, an architectural, planning, project management and facilities management firm, to conduct a feasibility analysis of potential center locations and produce conceptual center designs. The Trust plans to convene another stakeholders meeting in 2013 to share Lammey & Giorgio's findings and seek input on the direction of the center.

Beyond the exciting developments related to educational programming and a future center, the real story at Petty's Island is how plants and animals are thriving in the midst of an industrial landscape located in a highly urbanized area. All kinds of critters make themselves at home on the island—bald eagle, deer, fox, osprey, American kestrel, red-tailed hawk, great blue heron, black-crowned night heron and more—and do not seem troubled by tanks, poles, lines and other structures. The globally rare water marigold is found on the island as well as numerous other rare plants and ecological communities. As the oil storage tanks and other structures are razed and the island is remediated, even more critical habitat will be created, making the island more suited to support New Jersey's native biodiversity.

Baselines and Easements: Volunteers Take the Field Notes

A long held, standard rule of responsible management of conservation lands is get out on the land and see for yourself. See what is there, what changes are taking place, what changes have taken place since the previous visit. Are there noteworthy indications of changes in the natural surroundings, wildlife movement patterns, habitat succession or other observations? When you are familiar with a location after repeated visits, over multiple years, your observations begin to show a pattern and tell a story. Documenting and recording those important observations and changes forms a written history of the site, a lasting record for long-term reference. Initial visits

establish the preserve baseline, and follow-up visits over time create a record of change; an organized way for you or others to peer back through time and plan for the future. Field notes as well as photographs and sketches allow one to compare or contrast your observations with those during a later visit. Once a preserve baseline is established, land managers can avoid depending on dimming recollections or mixed up memories and here-say.

Establishing a preserve baseline would seem straight forward enough. However, exercising good field note taking skills and filing the gathered data in an organized reference system is often relegated to the growing to-do pile of never ending paper work. “My to-do pile has grown like a weed.” said Trust Preserve Manger, Martin Rapp. To create and update the Trust’s preserve baselines we asked volunteer Peter Revilla to help. Peter has an Environmental Studies degree from Stockton State College and is employed as an environmental consultant and project manager for environmental remediation. He has a demonstrated commitment to environmental work that improves his community. That directed commitment lead him to volunteer for the Natural Lands Trust. Peter accepted the challenge to update our preserve baseline monitoring forms which help standardize the information gathered during preserve inspections. Peter is moving ahead with inspections of each of the Trust’s Conservation Easements. He has already visited several easements and made the necessary written and photographic records required to establish a solid baseline for future monitoring. This baseline data is important in case missteps, encroachments or violations occur on our conservation easements or preserves.

Peter has made helpful recommendations and continues to work independently to complete our overall inspection requirements. Staff has found working with Peter to be very easy, and his schedule for volunteering on weekends and evenings has resulted in much more work being accomplished. The Trust owes a thank you to Peter and other volunteers and helpers who work to keep The Natural Lands Trust’s statewide systems of preserves an accurately documented resource for people and wildlife.

The Botanical Mythology of the Paulins Kill Meadows

David Snyder

Department of Environmental Protection, Division of Forestry, Office of Natural Lands Management, Natural Heritage Program

A great many interesting new finds are yet in store for the botanist who has the opportunity to spend more time about Newton where Nature is still quite undisturbed in many places. Phillip Dowell, Fourth Annual Botanical Symposium of 1907.

Harold W. Pretz, an Allentown, Pennsylvania banker by profession, was by avocation a field botanist who spent much of his nearly 96 years studying the flora of eastern Pennsylvania and adjoining New Jersey. He became the leading expert on some of New Jersey’s most important botanical sites, including the site that he and the other botanist of the time called the Paulins Kill Meadows, located just northeast of Newton, in mostly Andover and Hampton townships, Sussex County.

Late in the afternoon of June 25, 1910, Pretz wandered along the edges of the Sussex Branch of the Delaware Lackawanna & Western Railroad that sliced through the eastern edge of the Paulins Kill Meadows looking for unusual plants and birds. He had parted from his traveling

companions, the Mattern brothers, Ned and Walter, at the Newton railroad station on Spring Street—they to make overnight arrangements at the nearby Hotel Waldmere, he to get a jump on his botanical explorations. His interest in the Meadows was piqued no doubt by all the rare and unusual plants that had been discovered there during a Botanical Symposium convened at the Hotel Waldmere in 1907. The attendees¹ of the Symposium, a week long joint meeting of the Philadelphia Botanical Club and the Torrey Botanical Club, were the first to document in a comprehensive way the diverse flora of the Meadows.

By the time the brothers (or the “boys” as he called them) rejoined Pretz, he had recorded few new plants of interest, but did make note of having heard the calls of “the rails and marsh wrens.” The goal for the afternoon was to investigate the flora of the Meadows, especially in the areas he called the “Tamarack Swamp” and the “Cranberry Bog,” located about equidistant between the Newton railroad station and the next station north at Branchville Junction. As the small party walked northeastward, Pretz recorded the presence of two of New Jersey’s pink-flowered orchids, the grass pink and the rose pogonia observing, “The later was about past but the former in best condition, abundant and beautiful.”

On Decoration Day, a few weeks earlier, Pretz and the Matterns, had discovered in the Meadows another one of New Jersey’s pink orchids. This species, *Arethusa* or dragon-mouth, is a rare plant known primarily from sphagnous bogs in the Pine Barrens and all but unheard of from northern New Jersey locations. Several other rare New Jersey plant species were observed by Pretz on that earlier day in May: *Andromeda*² (or bog rosemary), bog bean, bog willow, hoary willow, and several others. Also found were a number of “South Jersey” plants like golden club, large cranberry and pitcher plant. Although not rare, these species are all more characteristic of New Jersey’s Coastal Plain, especially the Pine Barrens. But here, in the peaty pools and on sphagnous hummocks in the dim light of tamaracks they grew side-by-side with their displaced northern brethren, plants which were relicts of geographic distribution from the last ice age.

As daylight drew to a close on the group’s most recent exploration of the Meadows, a hurried retreat was made to return to the Waldmere so as not to miss supper. No new plants had been discovered on that day and even the detour to look for eggs in the nest of the marsh hawk (now named the northern harrier), was unlucky (the nest was empty) but they did see a bittern and several sora rails as they walked back along the railroad.

The next day, June 26, 1910, Pretz and the Matterns were on their way by 7:00 AM, walking by foot from Newton to Springdale via Muckshaw Pond. This day’s mission was to collect various species of shield ferns at the “Big Spring” for study by Phillip Dowell,³ the leading expert on this

¹ The attendees were a who’s who of botanical luminaries: from the professional botanists such as Nathaniel Lord Britton, author of the first comprehensive flora of NJ and the first director of the NY Botanical Gardens, to the accomplished amateurs like Bayard Long, the acknowledged expert on the flora of southern NJ. (Long was independently wealthy—his father wrote the short story that was the basis of the libretto of Puccini’s *Madame Butterfly*—so he was able to devote his life to documenting the local flora.)

² This small woody shrub in the blueberry family was named for the Greek princess Andromeda in 1753 by the Swedish botanist Carl Linnaeus. Andromeda, in Greek mythology, had been chained to a coastal rock as a sacrifice for her mother’s boastful indiscretion, and just before she is swallowed by Poseidon’s sea serpent she was rescued by Perseus, her future husband. A literal translation is “to be mindful of men.”

³ Dowell, who was an old friend of Pretz (they met when Dowell taught at Muhlenberg College in Allentown), described several new shield fern hybrids, two of which were discovered by him at the Big Spring during the 1907 Newton Symposium.

difficult group. Reaching the spring, they paused for a drink before getting on with their fern collecting. They spent several productive hours searching among the bewildering array of the promiscuous shield ferns. Mission completed, they made the hike from the swamp to the Andover Junction railroad station for their return home, lugging their over-filled plant presses (102 fronds of the ferns alone) and whatever luggage they carried; their clothes and shoes covered in the muck and mire of the day's work.

Upon reaching the depot, the station master directed their attention to a stranger "which he ventured must be in the same business as [they] were." (Translation: he was also filthy.) The stranger was Kenneth Kent Mackenzie, a New York City attorney, and one of the most knowledgeable field botanists that New Jersey has produced (KKM lived in Maplewood, New Jersey). Mackenzie had spent the day collecting unusual sedges from the limestone swamps, lakes shores, sinkhole ponds and wooded ridges along the Sussex Branch, north of Andover Junction. It was Ned Mattern who first approached Mackenzie and asked in the awkward colloquialism of the time "what luck" had he that day. A conversation ensued, notes compared, and the day's botanical discoveries discussed and then continued onboard the train until they parted company at the Stanhope station.

In 1913, Mackenzie made his first field trip to the Paulins Kill Meadows; perhaps inspired by that chance meeting with Pretz and company, three years earlier. He returned once more in 1914. Mackenzie observed all the rare plants documented by Pretz and the earlier botanists and discovered several previously unreported species. At the time, Mackenzie was well on his way to establishing himself as the leading expert of the notoriously difficult sedge genus, *Carex*, and he recorded several good finds including the livid sedge (common in peatlands in the Pine Barrens but exceptionally rare in north Jersey) and the relocation of the mud sedge, then known only from three or four New Jersey locations.

Harold Pretz died November 8, 1973 and is all but unknown to today's generation of field botanists. If not for the ca. 16,000 plant specimens that he pressed, mounted and gifted to several local botanical institutions his discoveries would be lost.⁴ Mackenzie, (whose considerable botanical achievements are recognized far more today than had been during his lifetime), born in the same year as Pretz (1877), died in 1934. Botanically, the Mattern Brothers,⁵ have been relegated to obscurity—they made no botanical collections nor have they left behind any field notes that I'm aware of. Although they made significant botanical discoveries, only Pretz seems to have made note.

After fighting a losing ridership battle to the automobile, the Sussex Branch of the D.L & W. Railroad, which had provided the early naturalists easy access to the Meadows, ended all rail passenger service October 2, 1966. A few years later, in November of 1970, the historic Newton

⁴ Even the plant species discovered by and named for Harold Pretz (*Polygala pretzii*) is now regarded as too trivial, and has been discarded into the waste bin of botanical synonymy.

⁵ Robert L. Schaeffer, Jr. (who was a field companion of Pretz) told me that Walter Mattern had a heart condition and stopped going out in the field with Pretz, turning to painting instead. He was a close friend of the impressionistic painter Walter Baum (founder of the Baum School of Art). Mattern's impressionistic paintings are in the collection of several major art museums. He died in 1946. Several years after his 1910 Paulins Kill Meadows trip with Pretz, Edwin "Ned" Mattern, moved to West Point, PA where in 1918 he bought a feed store. A year earlier, he was assigned a U.S. patent for a machine that cut seed potatoes. His date of death is given as "?" on one online family tree.

Passenger Station was torn down. The Andover Junction station burned to the ground 20 years earlier. The last of the rails were pulled up in 1977.

The Hotel Waldmere had maintained at least a tangential natural history connection by hosting into the 1970s some of the annual meetings of the Sussex County Bird Club.⁶ In the years that followed, the hotel changed names and ownership a number of times and in 2012 it closed its doors under the name JC's Grill House.

The land fared less well.

The Paulins Kill Meadows has its origin in the glacier meltwater that was trapped by the surrounding hills. Throughout the Holocene the glacial lake that had formed filled with sediments and decomposing plant debris (mostly moss, sedge and grass species). The resulting deep layers—up to 37 feet—of organically rich muck soils and peat are underlain by white marl and calcareous sands. The micro habitats created by the interplay of the acid peat and rich calcareous soils, contributed to the high diversity of the Meadows' flora. As plant succession proceeded, sunny, open sphagnous bogs gave way to the wooded swamps, calcareous fens and the tamarack swamp explored by Pretz and Mackenzie. Glacial lake beds and northern bogs are known for their isolated populations of plants typical of more northern distributions—making them a botanist's paradise.

William Penn was the first owner of much of the Meadows, having acquired about 5,000 acres in 1715. Penn willed the tract to his sons who then sold it in 1760. In the intervening years, the parcel was broken up and resold and partially reconstituted, and, in 1915, over 1,200 acres were purchased by Colonel Samuel Price Wetherill of Philadelphia for a peat mining operation.

A year after Mackenzie's last recorded field visit, the transformation of the Paulins Kill Meadows from wilderness to commodity was underway. The initial operation started at the northernmost corner of the property and then inched southwest. A network of ditches was dug to drain the land and the vegetation was cleared so that the sod could be stripped away from the underlying peat layer. Cover crops were repeatedly planted and plowed under. The ground was "harrowed to break it into small pieces" and then it was "dug by caterpillar-mounted drag-line shovels and then stacked in heaps to dry." Colonel Wetherill named his peat product "Hyper Humus" and the corporation was named "Hyper-Humus Company."

By 1934, the Hyper-Humus Company had risen to be one the largest peat producing companies in the United States, with its enriched peat product having been used "on the White House lawn...famous football fields, parks, golf courses and private lawns throughout the United States." In time, the deep peat calcareous fens and grassy meadows, the cranberry bog and tamarack swamp, Pretz's pink orchids and Mackenzie's rare sedges were essentially reduced to potting soil. Gradually, and ironically, the name Paulins Kill Meadows fell into disuse, having been replaced by "Hyper Humus."⁷

⁶ Among the members of the Sussex County Bird Club who attended the 1970 annual meeting at the Hotel Waldmere were the New Jersey naturalists James L. Edwards and Jim Zamos, naturalist and film maker George Johnson, and Eloise Lehnert, whose Warren County property was purchased by the state and forms a significant portion of the New Jersey Natural Lands Trust's Limestone Ridge Marsh Preserve.

⁷ In the 1800s the wetlands were known as the "Gray Swamp" named for the abundance of gray birch, which according to Harold Pretz, were still "abundant throughout" in 1910.

In 1985, the Hyper-Humus Company was subsumed by the Hyponex Corporation, which in turn was gobbled up by the Scotts Company in 1988. Two years later, the Philadelphia District of the Army Corps of Engineers, alleging that a Section 404 permit was required, directed a halt to the peat extraction at the Hyponex facility. In 2003, the U.S. District Court for New Jersey approved a judicial consent decree settling the Hyponex enforcement action through the grant of conservation easement on the property to the New Jersey Natural Lands Trust and along with a \$125,000 management fund and long-term restoration requirements. The remainder fee interest was purchased by the New Jersey Department of Environmental Protection using Green Acres and New Jersey Waterfowl Stamp funds. In 2005, the property was transferred to the Division of Fish and Wildlife for management and renamed the slightly redundant Paulinskill River Wildlife Management Area (“kill” is Middle Dutch for “river”). With this settlement, nearly 75 years of active resource extraction came to a conclusion and a new phase of resource protection began.

In the portions of the Paulins Kill Meadows that were being mined for its peat and muck soils it's likely that much of the wildlife fled; certainly the larger mammals (like deer) could have. The birds simply flew away or stopped coming back. With the cessation of mining operations which had created large water-filled impoundments, bird diversity rebounded. In 2005, Sharon and Wade Wander were contracted by the New Jersey Natural Lands Trust to conduct a comprehensive biological inventory of the Meadows. They documented 247 bird species, 61 of which have some level of conservation status. At the time of the Wander's inventory, Pretz's bitterns (least and the state endangered American), rails (king and Virginia) and sora, all were confirmed from breeding populations, however the northern harrier no longer nests there nor anywhere else in Sussex County. To compensate for this loss, there are nesting bald eagles and the number and kinds of shore birds are impressive, and according to Tom Halliwell, the Paulins Kill Meadows is one of the best inland sites for shore birds. It also has a respectable diversity of butterfly and moth species.

And the plants?

As luck would have it, ground zero of the peat extraction operations coincided with the largest concentrations of rare plant species and the highest quality natural plant communities. The plants, lacking any discernible legs or feet, were obliterated and the plant communities destroyed or irrevocably altered. Based on aerial imagery, the last areas to go were the cranberry bog and tamarack swamp which were destroyed sometime between 1963 and 1970. Most of this area has been transformed into open, watery wetlands which, in places, are under several feet of permanent standing water with no chance of recovery. Certainly all of the plant populations recorded by Mackenzie and likely many of Pretz's were located in this area. At least four plant species known to these botanists appear to have been extirpated from the Meadows, including *Arethusa*, the beautiful little pink orchid discovered here by Pretz in 1910.⁸

⁸ In Greek mythology, *Arethusa* was an Eleian Nymph of fresh water, who in a desperate effort to preserve her purity from the unwanted amorous advances of the river-god *Alpheios*, appealed to the goddess *Artemis*. *Artemis* took pity and transformed *Arethusa* into a spring of water, hoping to conceal her from the river god. *Alpheios* was not deceived and continued his pursuit secretly disguised as a river and eventually he caught up with the Nymph. And like it has for the orchid, it did not end well for the Eleian Nymph.

A remarkable discovery was made in the Meadows on July 9, 1963; a discovery that seemed to have been made against all odds—or perhaps the gods’ subterfuge had weakened. The lucky discoverer was Vincent Abraitys, a former Hunterdon County chicken farmer-tax collector turned naturalist-author, who spent much of his free time tracking down birds and lost locations of New Jersey plants. Tucked away at the southern end of the Paulins Kill Meadows, just off of the Sussex Branch railroad, a little northeast of the Hotel Waldmere in downtown Newton, and just southwest of the ever advancing Hyper-Humus peat mining operation, Abraitys discovered a relatively tiny, brushy remnant of the deep peat calcareous fens that had once dotted the Meadows.

There were no tamaracks to be found in the fen and the abundant red maples and black ash and the various shrubs were complicit in transforming the fen into a wooded swamp. But in the remaining peaty and sphagnous openings, grew several of the “fancy plants” (as Vince liked to call them) known to the earlier botanists. He found bog willow and bog birch, large cranberry and golden club, thin-leaved cotton grass and sweetgale; he even found one of Mackenzie’s lost sedges, the small yellow sedge, a species first described by Mackenzie from specimens he had collected on June 26, 1910 from the shore of White Lake along the edge of the Sussex Branch railroad, north of the Andover Junction railroad station. (This site is now flooded.) To Abraitys’ surprise, hidden among the vegetation along an edge of the fen he found a small patch of *Andromeda*. In later explorations, Abraitys added a couple of plants never previously documented from the Paulins Kill Meadows—the pretty little stiff gentian and the curious wisp of a plant, northern aster.

Abraitys’ last recorded field trip to the fen was made on September 12, 1979. He added no new plants that day but in his notes he expressed his concern that the “bog [was] being overgrown” which meant strategic clearing of the woody vegetation was needed. To this end, he sought the help of Jim Zamos. Jim Zamos is a life long resident of Newton, a former superintendent of the Hackettstown Fish Hatchery, the former owner of Newton real estate business, and one of New Jersey’s premier birders. Although the two were longtime friends and birding companions, the real reason that Abraitys approached him may have been Jim’s stated field philosophy of “keep your eyes and ears open and your mouth shut.” Abraitys’ philosophy was a slight variation on Jim’s theme: “keep it under your hat.” A deal was struck. Abraitys would show Jim the bog with its fancy plants and in exchange Jim would keep an eye on the place and try to keep the worst of the woody succession at bay.

I first met Vincent Abraitys over the telephone in 1979. Mary Hough was then the curator of the Rutgers University herbarium and, with David Fairbrothers, coauthored the first publication on the rare and endangered plants of New Jersey. She told me that Vincent Abraitys had taken a few young protégés under his wing (her words) and I should give him a call. For some reason, Abraitys had always been suspicious of “those Rutgers people” and because of my association with “those people” it took me a while (and a number of good botanical finds) to be brought fully under his wing. Over the next five years we shared many new plant discoveries and botanical adventures. (He once made me ride on the roof of his station wagon so I could see above the tall roadside vegetation in an effort to relocate a rare orchid that he had misplaced.) Still, he never once tipped his hat about the Hyper Humus Bog, as he called it.

When Vince died November 3, 1983 (nearly 10 years to day after Pretz had died), I was given by his wife his card file of all the plants he had observed in New Jersey. There were many

thousands of entries on thousands of plants starting from about 1956. The rare plants he had discovered in the Paulins Kill Meadows were there, but all were devoid of any meaningful directions.

My first serious attempt in locating the fen was on June 14, 1984. I had prepared for the search as best I could, reviewing the information on the specimens labels collected by the earlier botanists, reading through all of Vince's card file notes and studying my Newton West U.S Geological Survey Topographic Quadrangle Map. From the map, I learned at least what areas not to search—the areas now marked as open water added in a 1971 revision of the map. And just for good measure, I stopped off at Jim Zamos' real estate office in Newton. I told Jim what I was up to and he then showed me to the wall in his office. The wall had been wallpapered, from floor to ceiling, with a set of Sussex County topographic maps. Jim pointed to the place on the wall—the map—where the fen was located and gave me directions on how to find it.

After a few wrong turns, I found the fen. Since I was expecting something a little more open, I had walked past it at least once. There was very little open habitat left, but the plants were still there—fancy and otherwise. Bog birch formed small, shoulder high thickets. There were scattered knee-high shrubs of the bog willow. Shrubby cinquefoil shared sphagnous hummocks with cranberry and pitcher plants. In the shallow pools grew the rare flat-leaved bladderwort. I searched and searched but did not find the *Andromeda*.

In the summer of that same year, I learned from Tom Halliwell (birder, botanist and another *Abraitys* protégé) that Jim Zamos had recently shown him the *Andromeda* at the fen. Arrangements were made, and on the 25th of August, I was back at the fen with Tom and Rick Radis (naturalist, author and yet another *Abraitys* protégé). Kalm's lobelia was in full flower and the northern aster was close to blooming. The bog bean and golden club formed small, but healthy populations in shallow-watered, mossy- bottomed pools. And, all but invisible in some dense vegetation grew a few small, straggly and not at all healthy shrubs of *Andromeda*. It was clear that the plant was not long for this earth and not Jim Zamos, and not even mighty Perseus would save *Andromeda* this time.

In the intervening years, I returned to the fen a number of times looking for some of the still lost plants of the Paulins Kill Meadows: the rest of Mackenzie's missing sedges, some of Pretz's orchids and especially the totally ungrass-like seaside arrow-grass, a flowering plant which is a model of nondescriptiveness.⁹ Of these, I only found a single plant of the grass pink orchid; not in flower but in fruit, the capsule filled with hundreds of dust-like seeds. With luck, some day in the future, some visiting botanist will again describe it as "abundant."

I don't know why on those later field visits I didn't make an effort to search for the *Andromeda*—to see it one more time—but sometime after 1984, unobserved by anyone, that tenuous population of the little shrub with its small evergreen leaves and small pale pink bell-shaped flowers, quietly winked out of existence.

My most recent visit to the Paulins Kill Meadows was on October 22, 2012. This field trip was with Martin Rapp, preserve manager of the Natural Lands Trust. Martin had explored far more of

⁹ The species was first discovered at the Meadows in 1907 by Dr. Elsie Kupfer. It was last documented as present in 1961 by Bob Hirst, who along with his brother Frank, are famous for being the discoverers of the globally rare Hirst Brother's panic grass in the New Jersey Pine Barrens.

the Meadows than had I and he had discovered some areas that he thought looked interesting for plants. We parked in a small dirt pull-off at the gated lane that led to the Sussex Branch Rail Trail. Stepping over the usual dumped lawn clippings, minor construction debris, a perfectly good leather belt, coffee cups, and beer bottles (this is New Jersey after all), we headed northward on the trail. Just south of where the second growth wet woods interfaced with the southernmost edge of the now defunct peat mining operation, we dropped down off the embankment and hiked northwest through the woods to the edge of the open wetlands, the former site of Pretz's Tamarack Swamp.

The woods, which were a tangle of nonnative invasive shrubs—barberry, wineberry and multiflora rose—had little to interest a botanist. The edge of the expansive treeless wetland was reached but a broad, very deep and water-filled ditch prevented access. Here we improvised a make-shift bridge built of rotten logs and decidedly undersized tree branches and here we momentarily abandoned good judgment and crossed over.

The habitat that remained was even less than I had hoped to find. Not a wetland but a botanical wasteland. Much of the site was overgrown with rank vegetation, in places covered with dense stands of the invasive phragmites and purple loosestrife. Being late October, virtually nothing was in bloom; the vegetation mostly dead and brown. Knowing the once rich botanical history only made it more depressing. Theodore Roethke's poem "Moss-gathering" came to mind. Good luck finding anything here, I thought. The birds, however, didn't seem to mind the new landscape and the deer seemed happy as well.

We found our way first to the Paulins Kill, which had been ditched—for reasons still not fully understood—about 1860. From there we made our way back towards the rail trail, looking for the openings that Martin had thought seemed promising. These we found and they were more interesting; more open and not covered with quite as many invasives. It was about here that I had started noticing some low vegetation that was a slightly different color of dead—tanner and definitely sedge-like. *Rhynchospora*?

After rummaging about in the tangled, matted vegetation, some seeds were found, making identification possible: *Rhynchospora scirpoides*, the bald beaked-rush. This species is very rare in New Jersey and known mostly from some peaty Coastal Plain intermittent ponds in the southern part of the state. And like the *Arethusa* orchid, it is barely known from northern New Jersey, with only four previously documented locations, all but one in Sussex County. Those sites were all turfy-bottomed limestone sinkhole ponds but here it grew in peaty, newly created meadow-like openings. And it occurred here in the thousands.

Had the species always been here but missed by those earlier botanists? Or was it a recent phenomenon resulting from seeds carried unknowingly by waterfowl? As Jim Zamos recently said to me, "Things change." We tend to view plant populations as static and unchangeable, but for whatever the reason—natural or human caused events or perhaps a need to flee the gods—plants continue to migrate.

From here, Martin and I made our way back to the trail and continued northeastward. Just past the wooded slope that lead up to Jim Zamos' home, we turned westerly along an old road and passed by the spot where Tom Halliwell had recently discovered New Jersey's only extant population of Gattinger's panic grass. Eventually we made our way to a wooded island-like

limestone ridge we thought might be worth exploring. The woods were completely overrun by the usual nasty assortment of invasive sticker and thorn bushes, making the going slow. It was late, and we hadn't had lunch, so we agreed to finally call it quits and headed back to our truck.

Before leaving the Meadows, a short detour was made to show Martin the fen discovered by Vincent Abraitys. Vince's little lifeboat of a refugium was taking on water. Woody succession continues and the openings were even smaller. Most of the rare plants were still present but in smaller numbers. The bog birch was nibbled down to a foot or less by white-tailed deer that continue to eat out both the woody and herbaceous heart of the fen. In places the highly invasive Japanese stilt grass now carpets the spongy ground and Japanese barberry is edging in. Things do indeed change.

Back in our truck, we headed south to Newton, driving up Spring Street, past the site of the old railroad station, past JC's Grill House, and up to Hayek's Market and Deli on Rt. 206. We sat at a picnic table in the parking lot eating our sandwiches and tapioca pudding perched on a rise of elevation, that had we been back in the days when William Penn owned his tract, we would have had a glimpse of the Meadows below. Some strangers approached—seemingly unaware or undeterred by our muck and peat covered clothing with its touches of dried blood from the cuts and scratches suffered in our earlier bushwhacking—and asked directions to the Newton family court house. We shrugged. A story missed—sad or otherwise. As we sat there talking at the table under the half shade of its too small umbrella, we decided that after we finished lunch we would head down to Andover Junction and explore some limestone ridges north of the old station on land that is now a part of the newly created Kittatinny Valley State Park. Our conversation was intermittently drowned out by the sounds coming from the constant passing stream of cars, SUVs and trucks driven by their indifferent drivers and by the sounds of construction as builders worked to complete the new addition being added to the popular market.

Just possibly, somewhere out in space, perhaps out past the stars in the constellation of Andromeda, the sound waves of Ned Mattern's voice travel ever outward, carrying the faintest echo of a one hundred year old query asked of a long dead New Jersey botanist waiting on the platform of a railroad station that no longer stands, "What luck?"¹⁰

Amidst change, life goes on—grand and bold or subtle and unfathomable. And, if we observe and listen, there are still discoveries to be made and new mythologies to create.

¹⁰ For those who think that this statement is a fanciful implausibility—because sound waves cannot possibly travel through the vacuum of space—science says otherwise. Astronomers at Cambridge University, England, using NASA's orbiting X-ray telescope discovered a sound emanating from a black hole in the Perseus cluster of galaxies. The sound, a single note (B- flat to be precise) is the lowest sound wave ever to be detected from the Cosmos: "The Perseus cluster black hole's B-flat... is 57 octaves below middle C or one million, billion times lower than the lowest sound audible to the human ear." And that note has been sounding and traveling for a very long time. Space is not a complete vacuum but is filled with an amazing amount of seemingly insignificant gas and dust. This is the medium through which the sound waves travel and this is how the past is heard. Did I mention that Harold W. Pretz played the piano?

Hunting Update

During the 2012-2013 hunting season over 3,715 hunters registered at Trust preserves through its website: www.njnlt.org. The Trust allows deer hunting only at many of its preserves to protect biodiversity. The deer population in New Jersey is far greater than the ecosystem can sustain. Over-browsing by deer depletes native vegetation resulting in impacts to animal and plant habitat, such as decreased food sources and increased invasive plants.

In order to hunt at selected Trust preserves, hunters access the Trust's website, electronically submit information to the Trust and print their own hunter registration letter with the required accompanying preserve map. The Trust is able to sort hunter registrations by preserve. Using this information, Trust staff may reach out to hunters registered at a specific preserve to determine their interest in volunteering to help with clean-ups and maintenance projects at that preserve. The Trust continues to use a "lottery" system for the ever-popular but limited hunting opportunities at our Limestone Ridge Preserve and Thomas F. Breden Preserve at Milford Bluffs.

It is important to note that the Trust does not allow hunting for waterfowl, small game, turkey or bear, as it believes that only deer over-browsing poses a threat to biodiversity. In addition, Sunday bow hunting is not authorized on Trust preserves. The Sunday bow hunting law permits bow hunting on Sundays on state wildlife management areas and private property during deer season. The new law does not apply to Trust preserves as they are neither wildlife management areas nor private property.

While hunting on Trust preserves, all rules and regulations in the New Jersey Division of Fish and Wildlife game code must be followed. Hunting deer by bow and arrow, shotgun or muzzleloader are acceptable, depending on the preserve. No target shooting or discharge of weapons other than for deer hunting purposes is permitted. Permanent deer stands are not allowed, and portable deer stands, while permitted, must be removed after the hunting season is complete or are subject to confiscation by the Trust.

Thanks to Our Volunteers

The Trust would like to acknowledge and thank its many volunteers for their invaluable contributions to the maintenance of Trust preserves. If you are interested in becoming a Trust volunteer monitor or attending a workday, please contact the New Jersey Natural Lands Trust at 609-984-1339, or email NatLands@dep.state.nj.us.

Donations

The New Jersey Natural Lands Trust gratefully extends its thanks to the following who have donated land, funds or services to the Trust in 2012 to help preserve and protect New Jersey's natural diversity:

New Jersey Audubon Society
Frank and Marie Parry
Peter Revilla
The Nature Conservancy
William Penn Foundation

For more information about how you can make a donation to further the Trust's mission to acquire, preserve and manage natural lands for the protection of natural diversity, please call 609-984-1339.

The New Jersey Natural Lands Trust financial report is available upon request.

Stefan Martin Prints for Sale to Benefit the Trust

In 1984, the Trust commissioned a series of limited edition prints created exclusively for the Trust by New Jersey wood engraver Stefan Martin. Each of the three prints highlights an object of the Trust's preservation efforts: the State-endangered Peregrine Falcon, titled "Peregrine Falcon;" a northern New Jersey stream habitat titled, "Morning Stream;" and a grouping of three Pine Barrens Gentian, titled "Gentian." After Stefan Martin's death in a 1994 fishing accident, a fellow artist noted that Martin was "absolutely one of the most important artists in New Jersey. He won many awards, was nationally known, and very well-loved."

Unframed prints are \$150 each, or \$400 for all three (a \$50 savings). Remaining as of this writing are 203 "Peregrine Falcon," 127 "Morning Stream," and 18 "Gentian" prints.

To order, contact the Trust at 609-984-1339, or email NatLands@dep.state.nj.us and indicate which print or prints you would like to order and your name and phone number. We will get back to you with ordering details.

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