Mission to Save a Dinosaur

Summer 1992

This May, I was the recipient of a grant from the Rhode Island Foundation's Virginia B. Butler Fund for Humane Educators. The grant provided funding which allowed me to participate in an Earthwatch expedition. Earthwatch is an organization which provides volunteers who pay to assist scientists all over the world. I wanted to participate in an expedition that would have direct contact with animals- a passion of mine. I felt it was important to me as an Environmental Educator who is constantly surrounded by school children to be able to say to kids-"look what I did" and "you can do it too!" So, I set my sights on one particular expedition that fit my all needs, including vacation time-Saving the Leatherback Turtles in St. Croix. I was bound for St. Croix before I knew it. Little did I know how greatly it would affect me both physically, and spiritually.

With an estimated 50,000 individuals left in the world, leatherbacks are one of seven marine turtles all of which are considered to be endangered. Our Eathwatch mission in St. Croix was to patrol nightly a 3 kilometer beach which is part of a Sandy Point Wildlife Refuge. We recorded data on the behavior of nesting females as they came ashore to lay eggs. Using Earthwatch volunteers for eleven years has successfully eliminated the poaching of eggs, has helped tag almost 300 females, and has assisted in the successful hatching of 62,000 hatchlings. From my daily journal, I wrote:

May 22, Day 1: "Physically, it's going to be challenging, as we set out at 7:30 p.m. to walk up to 10 miles a night til 5 am. There are eight of us together as "Team V". Donna and Peter, our two Principal Investigators, seem to be very dedicated and personable. They are here for their second year patrolling the beaches from March to July. Both scientists are completing their own research, besides training about 80 volunteers, educating local people and school children each night on the beach and recording data. Peter will take samples of blood from most of the females we encounter to carry out his research using the turtle's DNA and how it may relate to the individual's nesting beach preference. Donna will photograph all the turtles' pineal glands located at the top of the head. Each is thought to be unique, possibly as a personal identification mark, much like a whale's fluke is used. I look forward to our first turtle"

Of all the sea turtles, the least is known about leather-backs. They are the largest of all turtles reaching 6 feet in length and weighing up to 1300 pounds. Leather-backs have never been kept live in captivity, nor have they been tracked as hatchlings. Consequently, their open sea behavior remains a mystery.

Closely related to the ancient dinosaurs, leatherbacks evolved about 130 million years ago. Other marine turtles are much "younger", evolving only 30 million years ago. Leatherbacks are unique because they have no shell - only a streamlined carapace made out of thickened skin. They eat jellyfish exclusively, which may bring them as far north as Novia Scotia. They are the only marine reptile able to travel in colder water. Scientists believe it may have something to do with their low surface area to high volume ratio, helping to retain warmth even though they are cold-blooded.

During the warmer months, female leatherbacks find sandy beaches in warm tropical waters to come ashore to nest. Many threats await these turtles on land and in the sea. Though Leatherback meat is thought to be poisonous to eat by locals, their eggs are used in cooking and as an asphrodisiac in many customs as well. (Continued on page two)



(Continued from page 1)

Some leatherbacks return to their (nesting grounds only to find high rise beach hotels, or no beach at all due to erosion. Lights from the cities may disorient land-seeking females, as they spend most of their long lives in the blackness of open water. Leatherbacks are also victims of plastic bags that seem to imitate jellyfish floating on the water's surface. Also, like all oxygen breathing marine animals, thousands of sea turtles fall victim every year to shrimp nets that don't have excluders.

Strangely, Leatherback turtles, as well as most turtles, seem to be impervious to the many changes that meet them in the modern world. Despite the obstacles they face in their environment, most refuse to give up doing what they have been doing for millions of years. Whether its a snapping turtle crossing the road, or a leatherback wanting to nest, both have a prehistoric instinct that will not give up. I say all the power to any animal that will not be detered by humans! Unfortunately, their determination is not quite enough to increase their population. All of them need our help.

May 22, Night 1: After seeing my first turtle, I am in awe. She smells like the deep sea-not an awful smell, but mysterious like she's been to depths I'll never see. As she goes into her laying phase, she enters a trance. Donna tells us that it's O.K. now to use the flashes on our cameras, to touch her and to kneel beside her. She's oblivious except for the loud grunts here and there as any female in labor would make. She cries "turtle tears". Some say it's because she'll never see her hatchlings. Scientists know it's tears from a salt gland near her eyes. After about an hour an a half, she heads toward the water. Her tag names her as "AAG209". "Goodbye", I whisper and give her my own personal blessing to protect her from future harm.

We were privileged to be one of the first teams to see hatchlings, since one of the first females of the season had laid eggs in March. Taking up to 2 months to incubate, the 2 and 1/2 inch long hatchlings begin to chip out of their shells each using its natal pipping tooth. The movement caused by the nestlings stimulates others. In a spiral frenzy, they make their way to the surface of the sand from their 2 and 1/2 foot hole. They wait just under the surface until they sense the cooler temperature of dusk. Then they begin their dangerous journey toward the safety of their true home-the open ocean. Scientists think that the smell of the sand from their nesting hole and the sand they come in contact with during their crawl to open water triggers a homing instinct that will forever imprint in their brain for future nesting. If lucky, they make it to the sea, where once in the longshore currents, they are sent adrift and where fewer predators can reach them. Many do not hatch, or become either trapped in their nest lacking the energy to struggle out, are led astray by the lights of the cities, or are eaten by ghost crabs, night herons or gulls.

May 22, Night 1: "Tonight on the beach during a lull, Peter approached and put something into my hand. It was dark and I felt it squirm. It was a leatherback hatchling-a little powerboat of energy with an instinct to swim. On its belly was a deflated pink balloon- the yolk sac soon to be absorbed into the belly and enveloped by the skin- the last bit of nourishment before it was time to feed on its own. As I put my hand over its head, it instinctively pushed its head up as if the sand around him had caved in preventing him from reaching the ocean. The front flippers, like oars continued to row in my palm as the back flippers were flat and still-waiting

for their chance to act as rudders in the water. In ten to twenty years, I hoped, this hatchling would be 6,000 times larger ready to come ashore, if it was a female, or if a male, never to see shore again. I didn't want to think that this vulnerable little creature would probably end up in the food chain, as many hatchlings do."

Each night we would walk in a patrol of four to the ends of the beach and meet in the middle for a break. Working in total darkness for 10 nights, we began to despise the bright Caribbean sun until our nocturnal eyes adjusted. Our nights became routine, but never boring. Once we got the feel for what was expected of us, we were on our own. Every night, we recorded the tags on each flipper, measure the length and width of the carapace, counted the eggs laid, or if she had laid in an erosion prone area, caught and relocated the eggs, triangulated the nesting spot, and recorded any other information or behavior.

May 23, Night 2: We get ready to begin our second night. After 12 inches of rain during the day, it continued to pour. I dream of clear May days in R.I.! We mope about the cottage anticipating an uncomfortable wet night. As the time approaches, we prepare ourselves with ponchos and shower curtains, make peanut butter sandwiches for 2 am break, and douse ourselves with "bug juice". As we get on the beach the rain stops,



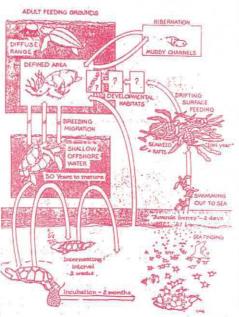
leatherback

then begins to drizzle. Finally, the skies clear. The constellation Scorpio, brighter than ever rises into the sky to chase Orion out. It turns out to be a record night as eight turtles come ashore. One of them, the oldest recorded female since 1979, is named "Rachel", after Rachel Carson."

We were lucky so far as there were turtles every night. The more turtles to attend to, the fewer miles we had to walk.

May 25: Night 4: After spending much of the night on the sandy side of the beach-evidenced by sand a few inches deep in my shoes, my patrol switched to the grassy side-a firmer surface but with ankle deep itchy grass. As I walked, I began to imagine turtle shapes. One materialized out of my imagination in the glow of the Christiansted city lights. She glistened from the wet waves and grunted from the effort of becoming a landlubber. As we approached, our lights were turned off. We sat silently anticipating a nest dug in an area safe from erosion. It would be my first nest that wouldn't have to be relocated. "Keep coming", I whispered as we hoped she would climb out of the high tide line. She chose a nice dry area to body pit in. The grass and soft sand flew everywhere. When her body lay even with the rest of the beach, she decided it was time to dig. Slowly and in the dark, we took sitting positions at her back end. In a dim light, we could see that she was almost deep enough. A few extra digs from Peter helped, as she seemed to favor the muscles in her right flipper. When she was ready to lay, I gently pulled back the flipper she tried to cover the nest with. I noticed how the skin looked and felt like that of an elephants old, gray and calloused. My job for this turtle was to count the "yolked" eggs. As they dropped two- to four at a time, I clicked the counter, hoping I wasn't seeing more than what she actually laid. "86 yolked" I whispered to the team member





Simplified life cycle of sea turtles. Modified and elaborated from Carr et al. (1978)

writing down data. Paul, another team member, had to count the "yolkless"- in all sizes from aspirin shaped and sized to 1 inch dumbells. As of yet, no one knows the significance of the yolkless eggs -usually laid last and thought to be either a predator detractor or a moisture provider for the rest of the eggs. At last, she resisted me holding her flipper any longer and I knew she was through laying. Now began the longest part of the process- the tamping of the sand and the disguise. The end result looked like "John Deere tire tracks" with sand spray in between. A triangulation of the nest was taken by other team members to make sure the location could be found 2 months from now. I searched her body for any apparent scars or ecobiota-barnacles or seaweed. Lots of healed scars possibly from boat motors or run ins with sharks. A full penny sized hole through her left rear flipper - perhaps a bullet? She disguised the location of the

nest crawling in a zigzag pattern down the beach for well over 30 minutes - a true master and "expert" mom. Finally, she knew it was enough. She had done all she could do to ensure the next generations safety. She proceeded to move quicker than ever towards the surf. Gone in seconds and perhaps back in another ten days to lay another clutch."

The expedition was a wonderful experience - one that I will forever be in my heart and blood. I hope I can help again in the future and I urge anyone interested in these fascinating reptiles, endangered species or even the ecology of the Caribbean to inquire. To quote Archie Carr, the foremost authority on sea turtles who passed away recently:

"The obligation to save these turtles is very real, just as we have an obligation to save whales and condors and all the rest of wild nature, wild species and wild landscapes-the mere fact that they are there, that we don't know what we're doing when we remove them, that is distressing to many to us to see them gone".

-by Lisa Pritchard, NBS Education Coordinator

Note: The federal Endangered Species Act which was originally passed in 1973 to protect those animals in danger of becoming extinct is now up for reauthorization in the senate. It's been loosely imposed, if not threatened in the last eight years. Please write to your senators urging their support for this important act.

For more information about an Earthwatch expedition, contact the organization at 680 Mount Auburn Street, P.O. Box 403, Watertown, Ma. 02272, or call (617) 926-8200. For more information about this expedition, join Lisa for her slide show and discussion on Wednesday, September 16 at 7 pm. See listing in Summer Programs.



PRESIDENT'S REPORT:

The past year has been a full and rewarding one for the Norman Bird Sanctuary. A variety of programs were offered throughout the year, summer camp was fully subscribed and our two major fundraisers, the Harvest Fair and Birds and Breakfast, were both successful. Our buildings and grounds were well-cared for as part of an ongoing program of careful maintenance. All this was done under the guidance of our Director, Larry Taft, with the able assistance of an outstanding staff.

The most exciting event of the year was the completion of the Gray Craig Project. What seemed like an impossibility three years ago became a reality through the combined efforts and contributions of the State of Rhode Island, the Town of Middletown, the City of Newport, numerous foundations and, most importantly, you, our membership. We hope our efforts will act as an incentive to others interested in the protection of open space by sending out a message that it can be done!

After 40 years of acting in an advisory capacity to the Director and the Trustee, the Rhode Island Hospital Trust National Bank, this year the board made the decision to incorporate and shall henceforth be known as the Friends of the Norman Bird Sanctuary. As the duties and responsibilities of the board increased, it seemed expedient to guarantee the indemnification of its members. Also we found in the course of the Gray Craig capital campaign that foundations and individuals were more prone to contribute to a nonprofit corporation with tax exempt status. This was done with the full cooperation and support of the Trustee.

Just as the Advisory Committee before it, the Friends finds its primary mission in the trust established under the will of Mable Norman Cerio. That is to preserve the Norman Bird Sanctuary as a sanctuary for the protection of animals and birds and the enjoyment of lovers of nature and the public generally, and to assist the Trustee in the overall operation, maintenance, management and development of the Sanctuary. Also we believe it is our mission to conduct programs for children and adults in environmental education and natural sciences, and to work with individuals and groups in the region in the preservation of natural habitats and open space.

Environmental protection and open space protection are key issues for the 90's. The Norman Bird Sanctuary has a commitment to its membership and the general public to be in the education vanguard in these areas.

Respectfully submitted,

anne S. Damon

Anne S. Damon

Norman Bird Sanctuary's Annual Report April 1991- March 1992

MEMBERSHIP/VISITORS:

The Sanctuary has 1380 active members. Membership has increased by 8% over the previous year, despite the slow-down in the economy. The number of visitors that signed to hike the trails this year was 9076 which represents a 5% increase over the previous year, and continues a steady 7 year trend. May and October continue to be the most popular months for Sanctuary visitors.

OPERATING BUDGET FOR FISCAL YEAR 1991-92*

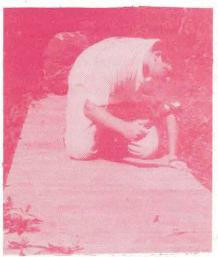
REVENUES	
Contributions	3,747
Membership	35,134
Sales	6,231
Grants	8,150
Interest	1,333
Norman Trust	30,000
Entrance Fees	7,739
Program Revenues	47,253
Fundraising	21,598
Miscellaneous	329
Transfer From Reserve	7,841
Total Revenues	169,355
EXPENSES	
Salaries, Payroll Taxes, Employee Benefits	96,552
Administrative Expenses	34,024
Buildings, Grounds and Equipment	14,948
Capital Improvements	13,698
Miscellaneous Education Program Expenses	10,133
Total Expenses (* unaudited figures)	169,355

GRAY CRAIG PRESERVATION PROJECT:

This year marked the culmination of the Sanctuary's effort to preserve the open space of the adjacent 81 acre the Gray Craig Estate with the purchase of nearly 50 acres of land and development rights. The conclusion of this project marks the beginning of a new chapter in the organization in the formation of a partnerships with the Town of Middletown and the State in managing public land and monitoring conservation easements.

STEWARDSHIP AND MANAGEMENT:

In addition to the ongoing stewardship and maintenance of the Sanctuary property and visitor center, projects in this category included the resoration of much of the trail system after the destruction of Hurricane Bob last August, and the extension of the trail system out to the newly acquired Gray Craig property. These efforts were carried out with the assistance of We also began closvolunteers. ing the refuge 1 day per week to give the refuge a respite from the impact of visitors and give the staff the flexibility to conduct wildlife managment projects on the property without conflicting with visitor safety and enjoyment.



A volunteer puts the finishing touches on the boardwalk across Paradise Brook.

EDUCATION:

This past year 3,708 children from Preschool through Grade 9 particiapted in the Sanctuary's educational programs through visits to the Sanctuary or as part of in-school outreach programs offered at the schools. Though we continue to provide programs for the many schools that want single field trips or special in-school presentations, we have emphasized long-term school programs as part of our year-round environmental education curriculm. This year we offered two or more programs to the following schools: Gaudet Middle School, The New School, St. Michael's School, Educational Resource Center of Rhode Island, YMCA, Fort Adams Preschool, and Underwood Elementary.

This was the second year of Project **ISLLE** (Island Schools Learning About Their Local Environment), a program that reaches approximately 280 4th graders on Aguidneck Island and Little Compton. The students learn about Aguidneck Island's natural history through 5 in-school programs and 2 natural history walks. As a compliment to the Project ISLLE goals of environmental education, this year we also began the filming of an educational video that will introduce students to the Sanctuary and environmental concepts, and will also serve to reach those students who are unable to particiapte in the program. Project ISLLE is sponsored in part by the Rhode Island Foundation.

This year we began a partnership with St. Georges School, The National Audubon Society, three local elementary schools, as well as an environmental education center, high school and elementary schools in Trinidad. Billed as IEPP (International Environmental Partnership Program), 5 St. Georges

students began field censusing projects and teaching environmental lessons to elementary students, and exchanged information with their colleagues is Trinidad.

We continue to offer a variety public programs for adults, children and families. This year the Sanctuary collaborated with the RI Audubon Society, the Nature Conservancy, Swinburne School and Island Arts. More than 680 adults and children were involved in these programs. Our increasingly popular Nature Day Camp for for children from Preschool through 7th grade continues to be an integral part of our environmental education program. During the 1991 summer season there were 357 participants.

We also expanded the use of volunteers by training and recruiting for the teaching of school programs, Preschoolers with Parents Nature Hour, and resident animal caretaking. Two volunteers, Mary Beth Hunte and Marilyn Lyell provided a full year of volunteer teaching to approximately 100 preschoolers for the Nature Hour, and 12 teenangers took part in the weekly caretaking of the resident display animals during the year.

VOLUNTEER OF THE YEAR:

The Sanctuary presented the first annual Volunteer of the Year Award to Frances Holmes at the Annual Meeting on June 16th. Fran has been involved in all aspects of the Sanctuary's operation including fundraising, education and also working in the office whenever needed. Her greatest donation of time has been in the area of fundraising having coordinated the crafts tent for the Harvest Fair for several years and being a major organizing force for Birds and Breakfast. Many thanks to Fran for her countless hours of dedication to the Sanctuary and its programs.

Summer Programs for Adults, Children, and Families

Wild Edibles Walk Tuesday, August 4 6:30-8 pm

Red Clover fritters with horseradish dip and Curly Dock bread with Rosehip jam are some of the delicacies to be tasted from nature's cupboad. Join us for a walk discussing the variety of wild edibles found on Aquidneck Island. NBS Naturalist Hap Morgan will lead the group on a short hike through the fields and forest of the Sanctuary. Hand-outs with recipes will be available as well as delectable samples. Fee: \$9 (\$6 NBS members). Limited to 12 adults. Pre-registration and pre-payment are required.

Honeybees at NBS Sunday, August 9 1-2 pm

Mike Mitchell, our wonderful volunteer beekeeper at NBS loves to share his passion for these insects with both kids and adults. He'll discuss their natural history and their honey-making techniques using a demonstration bee hive. Maybe you'll learn how to do the "bee dance" as well! Please join us for this lively and buzzing hour! Children must be accompanied by an adult. Fee: \$4 adult/per family (\$2 NBS memebrs adult/per family). Pre-registration and pre-payment are required.

Going to Bat for Bats Wednesday, August 12 7-8 pm

If you are intrigued by these ecologically important, but misunderstood animals, then you're invited to join Edith Anthony, Associate Professor of biology from Rhode Island College as she discusses the natural history of the world's bats. Find out about the bats we have flying in Rhode Island and how to help them. Older children accompanied by an adult are welcome. Fee: \$3 (\$2 NBS members). Pre-registration and pre-payment are required.



Seaweed Pressing Tuesday, August 18 6-8 pm

Beautifully textured and colorful sea algae wash ashore this month and can be preserved through pressing and mounting techniques. Lisa Pritchard, NBS Education coordinator has an interest in this Victorian craft and will gladly assist in the identification and preservation of these plants. Participants should meet at NBS first before gathering plants along the shore. Bring a shallow9"x13" pan, tweezers, and an old sheet for cutting. Plants may be pressed at the sanctuary for pick-up at a later day, or taken home if you have your own press. Fee: \$8 (\$6 NBS members). Limit: 8. Pre-registration and pre-payment are required.

Hurricanes! SPECIAL Monday, August 24 7-8 pm

WPRI Weatherman Tony Petrarca will be at NBS to discuss those north eastern calamities-hurricanes as we begin the season. He'll have footage from last year's Hurricane Bob, diagrams to explain these phenomenons and handouts to take home. Perhaps he'll have a prediction or two about the hurricane season ahead. Fee: Free. Pre-registration is required by Friday, August 21.



Fall Migration Bird Walks Every Sunday morning beginning August 30 8 am

The season of migration is well underway for shorebirds and insect-eaters at this time. Hawks are also beginning to migrate along the coast. Join Larry Taft, NBS Director as he leads these one hour walks through the Sanctuary trails or along the shore. Meet in the Sanctuary parking lot. Bring binoculars, and guide books, if you have them and wear sturdy walking shoes. Fee: Free. No pre-registration is required.



Wild Flower Walk Saturday, September 12 1-3 pm

Field wildflowers are in full bloom or are going to seed as the summer fades to autumn. Field Naturalist and Botany instructor, Millie House will guide participants along the Sanctuary trails to identify some of the native late bloomers. Fee: \$6 (\$4 NBS members).Limt: 15. Pre-registration and pre-payment are required.

Saving the Leatherback Sea Turtles

Wednesday, September 16 7 pm

Through slides and discussion, Lisa Pritchard, NBS Education Coordinator will share her experience about the Earthwatch expedition she participated in last May. Learn about the natural history of these endangered species and how you can help them. Adults and children are welcome. Fee: \$3 (Free to NBS members). Pre-registration and pre-payment are required.

Get the Drift and Bag It Saturday, September 19 9 am-noon (Rain or shine)

NBS members are encouraged to join with R.I. Audubon Society and the Middletown Conservation Commission in "Get the Drift and Bag It" by picking up trash along First, Second and Third beaches as part of a statewide beach clean-up day. This day will help to kick-off "Coastweeks" a national celebration designed to focus public attention on our valuable shores. Last year 1250 volunteers from around the state collected 26,000 pounds of trash along 44 miles of shore. Volunteers will also be asked to fill out survey sheets, documenting the types of material that they collect. The information will later be entered into the state database and will affect legislation concerning marine debris. Interested participants should dress for the weather and wear gardening or work gloves. Meet at the Second Beach parking lot. To sign up, please call NBS at 846-2577.

Fresh Herbal Wreath Making Saturday, September 19 1-3 pm

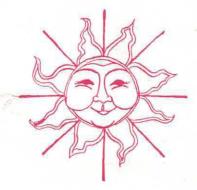
Create this colorful and fragrant fresh herbal wreath that will dry on its 6" base to remind you of Summer throughout the seasons. Small bouquets of artemisia, statice, thyme, and sage are but a few herbs from which to choose. Sharon Culberson from Hilltop Gardens will be your instructor. Bring heavy scissors. Fee: \$21 (\$18 NBS members). Pre-registration and pre-payment are required.

Life Between the Tides Sunday, September 20 1 pm

During "National Coastweeks" discover the fascinating organisms that live in the salt marsh and the rocky and sandy shores on this informal walk with Sanctuary Director, Larry Taft. On the walk, a discussion will take place about the animals and plant life that can be found above high tide or caught in a net. Wear shoes that can get wet and insect repellent. Adults and children accompanied by an adult are welcome. Meet at the Third Beach Club parking lot. Fee: Free. Limit: 20. Pre-registration is required.

Rock Climbing for Teens and Adults Saturday, October 17 1 pm

Learn the basic rock climbing knots, the important calls and the safe use of climbing equipment. Then, challenge yourself as you scale one of the Sanctuary ridges under the guidance of Sanctuary staff, Lisa Pritchard and Larry Taft. You must be at least 16 years old to participate. Wear loose fitting clothes and sneakers or rock climbing shoes. Fee: \$20 (\$15 NBS members). Limit: 10. Pre-registration and pre-payment are required.



Basketmaking with Sharon: The Elbow Basket Saturday, October 17 1-4 pm



This beginner-intermediate basket will hold dried flowers on a door or letters hanging near a desk. Made with neutral Fall colors accented with bright purples, greens and/or blues, it's a perfect basket to give as a gift. Please bring heavy scissors and clothespins. Fee: \$21 (\$18 NBS members). Pre-registration and pre-payment are required.

Program Registration

Please complete and return with payment for program registration. Registration with this form helps us greatly. If you need more space for additional registrants, please copy this form.

Name(s) of		
Registrant(s):		
Address:		
Town:	Zip:	
Phone: Home:	Work:	
Program Title	Date(s)	Program Fee
1.		
2.		
3.		

Total Program Fees:

NBS membership:

To become a member or to renew a membership, please check the appropriate category and include dues in with the program registration check

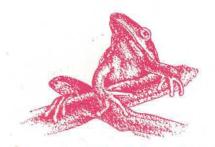
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Individual (\$20) Family (\$30) Contibuting (\$35)
Sustaining (\$50) Institution (\$100) Patron (\$	100)
Supporting (\$250) Benefactor (\$500) Life (\$1	000)

Please make checks payable to Norman Bird Sanctuary

TOTAL AMOUNT ENCLOSED _____

Please send this form and payment to 583 Third Beach Road Middletown, R.I. 02840

Volunteers and Donations WE CAN'T DO IT WITHOUT YOU!



Along with the warmer weather, Spring brought a flurry of activity here at the Sanctuary. We are grateful for all of you who helped us with office tasks, camp registration, Birds and Breakfast, and trail maintenance.

For help at or with donations for Birds and Breakfast 1992:

B&B Committe Members: Fran Holmes, Hellie Casagrande, Bev Murphy, Sher Williams, Candy Powell, Gillian Hall, and

Patti Duke Corgan.

Businesses that donated: Country Cuisine, Pickles A Deli, Ocean Coffee Roasters, The Doubletree Hotel, Harvest Natural Foods, The Marriott, Crockett's Marketplace, Sheffield & Harvey, The Bank of Newport, Coffee Corner, Kathleen's, The Cookie Jar, St. George's School, The New School, Crystal Springs, Designs Unlimited, Grandma's Pantry, Waverleys, Studels n' Cream, Dunkin Donuts, Allie's Donuts, R.I. Nurseries, Handmaids, Kinderlein, The Rodale Press, Cardinal Distributors,

Frasch's Confections, and the Narragansett Bay Baking Company, Workers and Bakers: Michele Manning, Lois Rogers, Kathy Finn, Susan Logler, Morris and Barbara Hirsch, Lori Dobbin, Mary Spitzman, Marion Nelson, Mary Smith, Alex O'Donnell, Mil Kinsella-Sullivan, Diana DiBari, Kathy Markell, Dierdre Roettinger, Martha Ullmann, Helene Pritchard, Betsy deLeiris, Connie Spinney, Marjorie Ward, Colleen Curry, Mary Boffenkamp, Fran Holmes, Karen Roberts-Johnson, Ruth Jernigan, Cheryl Stevens, Jan and Jeff Metz, Jennifer Kesson, Mark and Dottie Vissman, Yong Marhoffer, Bill and Betty Harvey, Marilyn Disbrow, Jenny Morgan, Stacia Wise, Peg Devine, Cally Gottlieb, Jane and David Steele, Patricia Busse, C.G. King, Pat Kalble, Bill and Michelle Roche, Chris Callahan, Donna McHenry, Brenda Mallicoat, Doris and Fred Midgley, Barbara Maguire, Beth Chisholm, Katie Horan, Lore Owen, Kim Mattheson, Mary Beth Hunte, Roger Gilman, Jessica Mooreland, Jim Owen, Lorraine Irving, Kathleen Tilley, Beverly O'Keefe, Marjorie Ward, Pete and Ronny Peterman, Gay Sheffield, Liz Champagne, Anne Damon and Susan Millard.

For help in the office/mailings: Kim Richardson, Brenda Miller, Greg Lulkoski, George Bacon, Brenda Miller, Lila and Heather Warburton, Fran Holmes, Natasha Harrison, Joellen Densley, and St. George's Students; Meg Oliver, Kathryn Clark, and Lois Claus.

Donations/Volunteers for the animals: Forster Peabody, Matt Oakley, Landon Merrill, Emily Leslie, Hera Tar, Evan Moore, Joellen Densley, Mike and Karen Kosinski, Laura and Stan Mazuroski, Valerie Long, The Logler family, Newport Sausage Company, Sugg's Market, The Berube family, Adele's, Frank Neri, the Food Chalet and Beth Rabin.

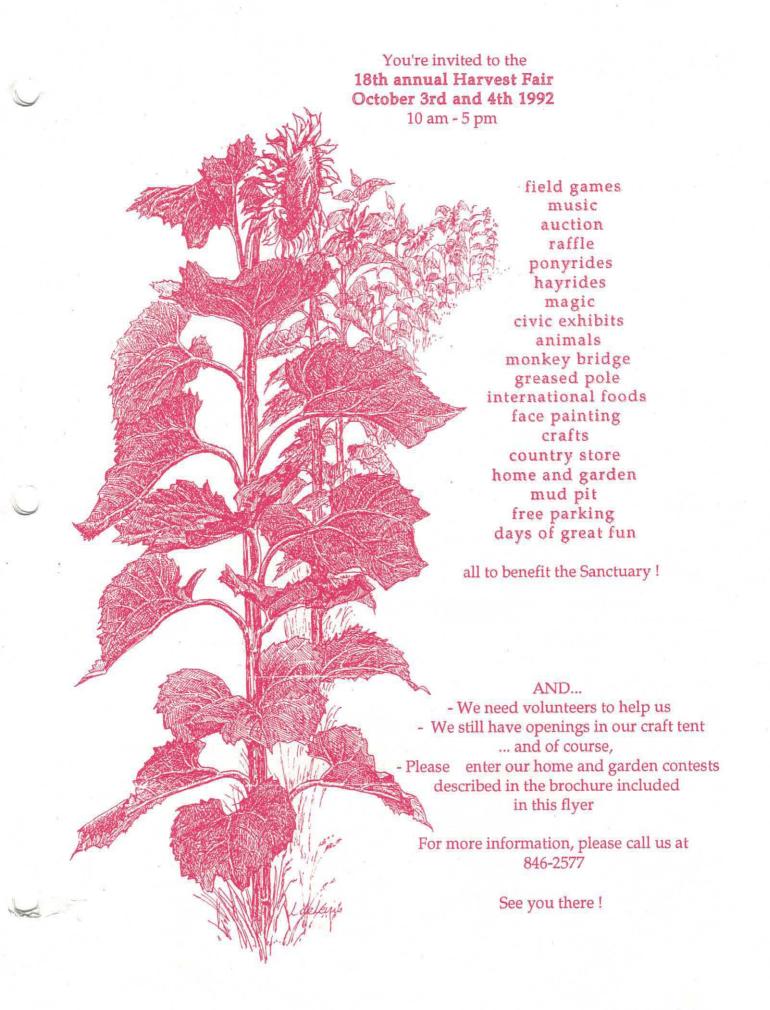
In the Gardens: Sharon and Dennis Culberson, Sarah, Sam, and Sophie, Marguerite, Kali and Kasey Crocker, Alex O'Donnell, Glenna, Nolan and Neal McCaffrey, Pam Zable and family, Robynn Orr, Diane Klabechek, Bubba Bowley, Doris Groner, and Mary Boffenkamp.

Donations and Volunteers for education: Mary Beth Hunte, Marilyn Lyell, Lois Vaughn, Joellen Densley, Linda Evans, Jeff Moniz, Pam Clark, Jan McCarthy, Kathy Irving, Bev Murphy, Linda Poulton, Julie Toland, Javier Tavel, Bobbi Lamonte, and Kathleen Tilley.

For help in establishing the new Gray Craig Trail: Glen Johnson, Hem Boromeo, Bubba Bowley, Dan deLeiris, Greg Lulkowski and Looking Upwards, Andrew Yates, Rob Blanchette, Pat DelTredici, Emily Kappelman, Jerome Callaghan, Noah Butler, Will Silverstein, Isabel Babcock, David Birdy, and Meredith Hatfield.

- --- If you would like to give a gift to the Sanctuary by volunteering, we are need of people for the following jobs.---
- * Weeders and waterers for our gardens Choose between caring for the "Spaghetti", "Buried Treasure", "Rainbow" or "T-pee" beds of the children's gardens or our perennial and herb gardens. Children are welcome when accompanied by an adult. Time commitment and hours are very flexible.
- * Retail Consultant person needed to help with item selection and store design and reorganization. Hours and time commitment flexible.
- * Weekend Receptionist volunteer needed to greet visitors, collect trail fees and work in Sanctuary store. Sunday after-

In memory of Pontell Staley, we are grateful for a donation from Leroy and Floride Taylor



Norman Bird Sanctuary 583 Third Beach Road Middletown, R.I. 02840 Non-Profit Org. US Postage Paid Newport, R.I. 02840 Permit No. 43

To Current Resident or

Community Calendar

August 3: RI NOFA meeting at NBS. Call Sharon

Culberson for time and details at 624-8171

August 8: Nature Conservancy Walk at NBS. Members are free. Call the Nature Conservancy for more details at 331-7110

August 13: The 10th Annual Meeting of the Easton's Point Association 6 pm at NBS. Program:" Shoreline Access and the Rights of Way to the Water". Pot luck supper. All are welcome.

August 14-16: NOFA (Natural Organic Farmers Association) Summer Conference, "Digging In and Branching Out" Hampshire College, Amhurst MA. Contact Amy Wales and Mark Allman, Moccasin Hill RFD, Lincoln, MA. 01773
September TBA: Household hazardous waste pick up. Call DEM 277-2808 in August for exact location and date.
October 3-4: Aquidneck Island Harvest Fair at NBS 10 am-5 pm. Bring the entire family, except the dog! If you'd like to volunteer, call the Sanctuary at 846-2577

-NBS SHOP "SQUAWK"-

Don't forget to visit the Sanctuary store during the summer months and look over these great buys! Remember, NBS members get a 10% discount!

- * Dinosaur Poster great to hang on your wall after you have been to the dinosaur exhibit at the Roger Williams Park Zoo.
- * Hummingbird Feeder & Hummingbird Book buy them together for the special price of \$16.50 (save \$3.00).
- * Flower Press Kit only \$10.00 (save over \$5.00).
- * Neither Bags canvass bags with the Sanctuary logo to use whenever you go shopping \$8.50.
- * Nature Day Camp T's in aqua or white \$8-10
- * 1992 Bird Calendars only \$2.00. Beautiful photographs suitable for framing.



The Norman Bird Flyer is published quarterly by the Norman Bird Sanctuary, a non-profit 450 acre nature preserve established under the will of Mabel Norman Cerio.

Trustee: Rhode Island Hospital Trust National Bank Board of Directors: Betsy deLeiris -Chair, Dickson Boenning -Vice Chairman, Paul Raducha-Treasurer, Charles Moore-Secretary, Larry Allen, Cheryl O'Neil Fisher, Thomas Gunzelman, Katherine Irving, Allen Libby, Candace Powell, Ray Rogers, Gay Sheffield, Jocelyn Sherman, and Julie Toland.

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Naturalist: Hap Morgan
Caretaker: Matt Benson
Secretary/Receptionist: Sue VanDerhoof
Address: 583 Third Beach Road, Middletown, R.I.
02840
(401) 846-2577

Summer Hours until Labor Day:
Open daily for hiking 9 am-5pm
Fall Hours: Closed Mondays except for holidays.
Please, no dogs, horses or bikes.

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