



THE NORMAN BIRD FLYER

Volume 20, No. 2

Spring 1999

What's the point about *Non-Point*?

Unlike point source pollution, which originates from a specific identifiable point, **nonpoint pollution** comes from diffuse sources, such as oil leaks from car engines, disease causing microbes and nutrients from failed septic systems, or erosion from unprotected construction sites. Nonpoint pollution can have a major impact on public health by contaminating drinking water and groundwater supplies. It can also restrict harvesting from commercial shellfish beds; limit recreational uses of surface waters; and impact other natural resources, such as wildlife habitat.

Nonpoint pollution directly impacts the economic and recreational benefits of clean water. Surface runoff was determined as a major contributor of pollution in 70 percent of the Rhode Island water bodies identified as having nonpoint pollution problems. Two other nonpoint pollution sources, groundwater contamination and failed septic systems, were implicated in 49 percent of these problem water bodies. Nonpoint sources of fecal contamination have also been implicated in the closure of approximately 17,000 acres of potential shellfish harvesting waters in Rhode Island.

The key to water quality protection is prevention. The Rhode Island Home*A*Syst program sponsored by the University of Rhode Island Cooperative Extension has put together a



checklist for pollution risks in and around homes. By going over this checklist, homeowners are able to assess the environmental impact of their household water usage (septic systems and well water), yard and garden care, stormwater management, and many other pollution risk areas.

Once pollution risks are identified, there are solutions that are quite simple to execute. For example, drips and spills from automobiles are cleaned up rather than washed away by rain, or, grass clippings, leaves and other yard wastes are swept off paved surfaces and onto lawns away from water flow routes.

Now You Can Find Us on the Web!

www.normanbirdsanctuary.org

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(cont'd from pg. 1)

Why is it important to take action? Simply identifying risks will not prevent problems. Safeguarding one's health, preventing contamination of water supplies and other natural resources, and protecting a financial investment are crucial reasons for making voluntary improvements around our homes.

Rhode Island communities are responsible for land use and reducing pollution from nonpoint sources. In

addition, it is crucial to manage future growth in order to protect public health, ensure the functioning of critical resources and preserve the commercial, recreational, and ecological value of the natural resources.

Sources for this article include:

RI DEM, Office of Environmental Coordination,
Nonpoint Source Pollution Management Program

National Farm*A*Syst/
Home*A*Syst Program,
An Environmental Risk-Assessment Guide for the Home, 1997.

To find out more please contact

Rhode Island Home*A*Syst at (401) 874-5398.
or attend our special program. Details are below.

Drinking Water Wells and Septic Systems Lecture and Tour

June 9th & 10th

6:30PM - 8:00PM (June 9th, lecture)

4:00pm - 6:00pm (June 10th, tour)

Fee: \$ 5

ADULT PROGRAM

During this two part series you will learn: how you can ensure the protection of your drinking water; the basics of groundwater; well water testing and protection; and practical tips on maintaining and prolonging the life of your septic system. This two session program will include indoor demonstrations and a slide show, followed by a tour of advanced treatment septic systems installed at private residences in Portsmouth. On the tour, you will visit three sites to learn firsthand the functioning of advanced, on-site wastewater treatment.

This is great opportunity to learn about environmental risks in and around your home. Included in the cost of the program is a 116 page *Environmental Risk-Assessment Guide* (this has the checklist mentioned in this newsletter's article).

Session Trainers: Alyson McCann, RI Home*A*Syst Program Coordinator; George Loomis, Director, On-site Waste Water Training Center of URI; David Dow, Program Manager, URI's on-site Wastewater Training Center.



Environmental Education Programs

Preschoolers with Parents

Ages 3 - 5 years

Teacher: Marilyn Lyell

Days: Wednesdays

Dates: Session 1 April 14, 21, 28, May 5
Session 2 May 12, 19, June 2, 9

Time: 1:00-2:00 pm

Fee: \$30.00 nonmember \$25.00 member

Explore nature with short walks, simple nature crafts, stories, songs and lots of joy and silliness. Parents are guaranteed to have fun too. These are one hour programs once a week for four weeks. Please be sure to dress for the weather. Choose your Session(s) from dates provided.

Geology of Hanging Rock

Saturday, May 1st

9:30 - 11:30 am

Fee: \$8.00 NM/\$6.00 M

ADULT PROGRAM

Join Hap Morgan, local naturalist, for this perennial field trip out to the 250 million year-old rock formation called Hanging Rock. Learn about the powerful forces which helped create this prominent landmark. Please dress for the weather and wear comfortable hiking shoes.

Greenway Bike and Hike

Saturday, May 22nd

9:00am - 2:00 pm

Fee: no cost, contribution appreciated

FAMILY PROGRAM

We are teaming up with Aquidneck Island Land Trust and biking from the Glen Farm along the greenways to the Norman Bird Sanctuary. Following the short bike ride enjoy some refreshments then head out on a hike through the trails of the Sanctuary. This program allows you to learn more about the greenways, why they are developed, and what open space areas are earmarked for future acquisitions. Be sure to bring your helmets and we recommend Mt. bikes.



April Vacation Week

Dates: April 19 - 23

Time: 9:00am - 3:00pm

Fee: \$ 110 NM/\$130 M

CHILD PROGRAM

This year's Spring Camp has a refreshing new look! Spend two days at the Sanctuary discovering how plants and animals survived the cold winter months! Since our Winter Camp trips were so successful, we are going to hit the road again. In spirit of Earth Day, one day will be spent visiting the Johnson Landfill: look inside a three story machine as it divides milk jugs, glass bottles, soda cans and garbage, then drive on top of the second highest spot in Rhode Island, the landfill. Two other days will be spent visiting the newly renovated Children's Museum in Providence and Casey Farm in North Kingston. For children in grades K-4th.

Wildflower Walk

Saturday, May 1st

1:00 - 3:00 pm

Fee: \$ 8.00 NM/\$6.00 M

ADULT PROGRAM

A wide variety of wild plants abound here at the Sanctuary. Spring and early Summer is a time of rich colors, smells, and textures. Join NBS Property Manager, Veronica Hinds, as she points out many of the trees, shrubs, grasses and wildflowers around us. Please dress for the weather and wear comfortable walking shoes.

Bats, Bats, Bats

Thursday, June 24th

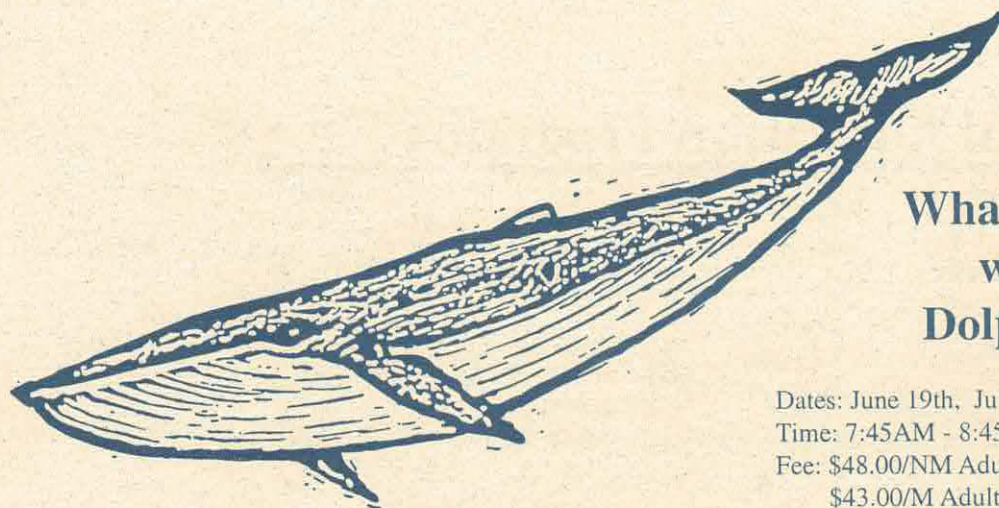
6:30 - 7:30 pm

Fee: \$ 8.00 NM/\$6.00 M

FAMILY PROGRAM

Live Animals / slides / Props

Join Amber Santangelo of Wild Again for this excellent program. People often think that all bats carry rabies and are flying mice that want to fly in your hair and suck your blood. Not true! The incredible variety of these mammals fills an important ecological niche throughout the world. Learn the origins of myths surrounding bats and the facts about their natural history, including their amazing abilities of echo-location and flight.



Whale Watches with the Dolphin Fleet

Dates: June 19th, July 22nd, August 19th

Time: 7:45AM - 8:45PM

Fee: \$48.00/NM Adult \$43.00/NM Child

\$43.00/M Adult \$38.00/M Child

FAMILY PROGRAM

Search for the Humpback, Minke, Finback, Blue and Right Whale on a research vessel with the Center for coastal Studies out of Provincetown, MA. During this four hour boat trip, whales will be spotted on their northern feeding grounds. Numerous seabirds will be seen as well. A Sanctuary staff member will accompany the group and drive everyone out to the cape. We will leave the Sanctuary at 8:00am so please arrive a little early. Our plan is to arrive early in Provincetown for a bite to eat before we load the boat. Our boarding time will be 1:15 and the boat will return to port about 5:30pm. For the return trip, the Sanctuary will provide snacks and refreshments. Participants should dress appropriately for the weather and we suggest bringing, binoculars, cameras, field guides, and sunscreen.

Parent/Child Day Saturday, May 8th 10:00 to 12:00 noon

During the last half hour of the program all participants will gather around the orchard and share each other's experiences. Sign up for both programs and get a 10% discount off the total cost. NOTE: A parent/child combination is not necessary to register for programs.

Animal Care and Awareness

Fee: \$8 / \$6 (NBS Members)

LIVE ANIMALS... Come for the afternoon and learn more about domestic and wild animals like dogs, cats, turtles, hawks and more. NBS along with the Potter League will host a program on wild and domestic animals. The Potter league, a local animal shelter, will emphasize the responsibilities involved with caring for cats and dogs. Secondly, Teacher Naturalist, M.R. Guido, will introduce program participants to the NBS resident animals.

Pine Needle Basket

Fee: \$15 / \$12 (NBS Members)

Join Strong Woman of the Seaconke, Wampanoag Tribe on this special Saturday as we learn to weave a small (3"x4") coiled pine needle basket. Strong Woman will be sharing the history and the significance of this special basket as she guides us through the coiling process. She offers many Native American programs throughout Rhode island, Massachusetts and Connecticut. We are pleased that she is teaching us this ancient weaving technique. All tools and materials are provided. Light refreshments served.

REGISTRATION INFORMATION

Unless stated otherwise, pre-registration is required for programs. Fees for programs requiring registration must be paid in advance by cash, check or Mastercard/Visa. Registration can be made by mail or by phone (with credit card payments) or now at our web site: www.normanbirds sanctuary.org. Fees will be refunded in full up to five days before the program. With less than five days notice, fees will be refunded only if you can be replaced with a person from the waiting list. Please use the registration form if registering by mail.

Thank You To All Those Who Gave So Generously To our Annual Appeal

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Reservations are strongly suggested and can be made using the registration form on page 9, or over the phone with a credit card.

Ticket Price

Adults: \$8.00 (\$10 at the door)

Children under 12: \$4.00 (under 3 free)

Sunday, May 16th

A spring morning of guided bird walks, and educational activities for the entire family. Enjoy a scrumptious breakfast buffet, including egg casseroles, fruit salad, homemade muffins and coffee cakes, pancakes, french toast, sausage and more.

**Birdwalks from 6:30 am until 11:00 am
&**

**Breakfast Seatings Are
7:30 8:30 9:30 & 10:30**

**Children's Theatre Performances
8:30 9:30 & 10:30**

ALL PAID RESERVATIONS WILL BE HELD AT THE DOOR

Volunteer Opportunities

Nature Guide

**Training & Orientation
April 15th & April 22nd
9:00am - 11:00am
ADULT PROGRAM**

Soon the Sanctuary will be busy with the arrival of school buses and hundreds of school children anxious to learn more about nature. Volunteers are needed to serve as guides for these groups.

If you have any experience teaching (does not have to be in a school) science education or a general knowledge of the outdoors you can be a nature guide. As a nature guide you will work with a group of 10 to 16 school children, leading them on a two hour hike through the property and visiting the various habitats.

April 15th is the orientation for new volunteers (veterans are welcome). **April 22nd** discusses activities for Field and Pond habitats.

Visitor Center

Spring is a busy time for visitors and shoppers in our store. Volunteers are needed, mostly on weekends, to work in our shop greeting and orienting visitors and making sales. An orientation will be provided for all those interested. Just volunteering for 3 hours a month can make a huge difference for our staff.

Trail Blazers & Clearers

If you work in an office all week, spending a few hours on the weekend outside here at the Sanctuary could be just the thing for you. After one meeting with our property manager, Veronica Hinds, you can set your own schedule and pace. Any amount of time is greatly appreciated.

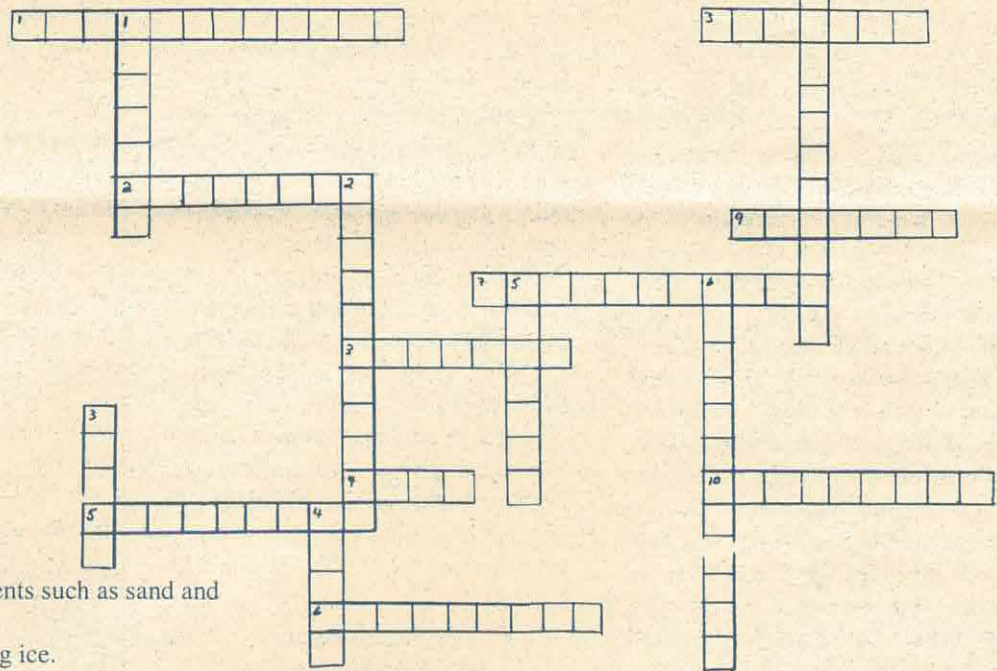
(more opportunities listed on page 8)



Bird Van Hits the Road During Winter Vacation Week Camp!

Our winter campers enjoyed two great field trips during their winter break. A tour of Roger Williams Park Zoo where they visited with the polar bears and then it was on to Mystic Aquarium. More great trips are planned for the spring break; Casey Farm, Children's Museum and the Johnson Landfill!

Geology Crossword Puzzle



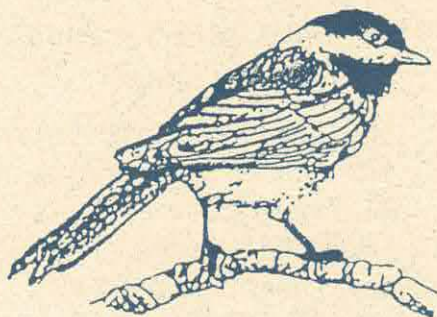
ACROSS

1. A rock made of sediments such as sand and pebbles.
2. A large sheet of moving ice.
3. Wearing away of rocks and soil by wind and water.
4. A _____ is made of minerals.
5. A safe place. Hint, the Norman Bird _____.
6. Study of the earth's surface; includes natural and political boundaries.
7. A rock that has been changed by heat and pressure.
8. A rock formed from magma or lava.
9. An inorganic substance which makes up rock.
10. A person who studies the Earth and how it is formed.

DOWN

1. The study of the earth and how it is formed.
2. Rock fmed from layers of sediments.
3. Remains of prehistoric life found within layers of rocks.
4. An elavated and steep sided rock formation.
5. The interaction of living things with their environment.
6. A common name for conglomerate rock.
7. The movement of the earth's crust.

Having trouble with an answer? Call the Sanctuary office at 846-2577 and we will be glad to help you out!



Bird Notes

Black-capped Chickadee

Of all the birds that visit our feeders, the Black-Capped Chickadee is certainly a staff favorite and by far one of the most entertaining. Kim Giunta, NBS Office Manager, says the chickadee is "a feathery ball of love."

If you are new to birdfeeding and birdwatching, the chickadee might be the first and most frequent visitor at your feeder. They love to eat sunflower seeds, particularly the sunflower hearts, and they are also attracted to suet cakes. With the use of the simplest window feeder, you can enjoy watching the crazy antics of this familiar backyard bird.

The chickadee is one of the best birds for learning about the various uses of auditory displays. One of the most commonly heard calls is the *chick-a-dee-dee-dee*. This vocalization is one of the most complex in the animal kingdom. The call can convey separate unique messages depending on the phrases. It is given in late summer and winter when the birds are in flocks. The call is used when a bird becomes separated from the flock, or after a disturbance has dispersed the flock. It works to bring the flock back together.

Black-capped Chickadees have an unusual social behavior in that they gather in small flocks that remain together until the start of the breeding season. Like many birds they hold both breeding and nonbreeding territories which are occupied and defended by a flock and not by an individual bird or mated pair. The flock contains six to ten birds and establishes a feeding territory which it defends against other neighboring flocks.

Chickadee flocks are often joined by other species as they move about their territory feeding. Species that are frequently seen with the chickadees include Downy Woodpeckers, Tufted Titmice, Kinglets, White-breasted Nuthatches and during the fall migration, many species of warblers. Their flocking season is from August through February. You may still be able to witness flocking behavior at your feeders, so grab a Peterson Field Guide and identify some of these amazing birds.

*Veronica Hinds
NBS Property Manager*

BREEDING: Deciduous or mixed coniferous woodland, usually 1 brood

NESTS: Excavate or enlarge a cavity, lined with plant down, moss, feathers, hair, insect cocoons.

EGGS: White, finely marked with reddish-brown 0.6"

DIET: Includes spiders and their eggs

LIFESPAN: Longevity record for wild Black-capped Chickadee is 12 years.

Volunteer Opportunities (cont'd)

Teacher Naturalist Assistants

We are seeking teenagers (13 and over) for help this summer. If you like summer camp and believe that you can be an effective leader and a positive influence on children, then volunteering as a **Teacher Naturalist Assistant (T/NA)** may be a wonderful opportunity.

For three weeks T/NA's work with NBS Teacher/Naturalists supervising children entering grades K-7 for our Nature Day Camp. Responsibilities include assisting the Teacher/Naturalists prepare for the day's activities, participating in games, songs, hiking, and crafts with children. The T/NA will also be responsible for some clean-up and organization of camp materials and safety supervision with the Teacher/Naturalist.

Applicants should have some experience working with children, an interest in nature and an ability to work independently part of the time. For an application, please contact Fred Orwiler, 846-2577. We have limited space so pick up an application soon.

Thanks to the kind donations of some of our members last summer, our scholarship fund was able to sponsor 22 children for our Nature Day Camp last year! Won't you consider a donation to our scholarship fund and join those people who have already contributed. A complete list of contributors will be listed in our next newsletter.

REGISTRATION/MEMBERSHIP FORM

PLEASE JOIN US! NBS Membership Form

- ☐ INDIVIDUAL (\$20) ☐ FAMILY (\$30) ☐ SUSTAINING (\$50)
- ☐ PATRON/BUSINESS (\$100) ☐ SUPPORTING (\$250) ☐ BENEFACTOR (\$500)

ADDRESS & PAYMENT INFORMATION

Name: _____ Phone #: _____
Address: _____
Town: _____ State: _____ Zip code: _____

Form of Payment: CHECK VISA MASTERCARD

Card # _____ Exp. _____

Signature: _____

Please Make Check Payable to: Norman Bird Sanctuary
583 Third Beach Road, Middletown, RI 02842

Program Fees	\$ _____
Membership	\$ _____
Birds & Breakfast	
Adult Tickets @\$8	\$ _____
Children Tickets @\$4	\$ _____
TOTAL DUE	\$ _____

Please Register the Following:

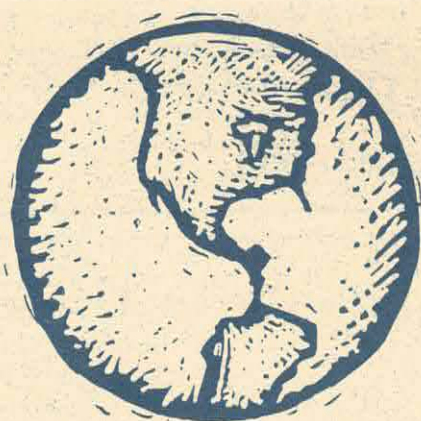
Name	Age & Grade (if under 18)	Program	Fee
_____	_____	_____	_____
_____	_____	_____	_____
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TO CURRENT RESIDENT OR:

*Join Us For Free Guided
Birdwalks Every Sunday
Morning at 8:00 am*



Earth Day Everyday!

**Earth Day Celebration
Saturday, April 17th
9:00 am to 1:00 pm**

Clean-up

*As residents of this lovely planet, we know that Earth Day is coming on Monday, April 22nd. Why not spruce up our local environment a few days before with the Norman Bird Sanctuary's annual Earth Day Clean-up. We will supply the 30 gallon paper trash bags (so environmentally correct) and refreshments. The NBS and the surrounding Third Beach and Hanging Rock Roads are all in need of attention. Let's all pitch-in for Earth Day 1999! Please call the Sanctuary to confirm your participation. **NOTE:** We advise wearing long pants, a long sleeve T-shirt and gloves.*