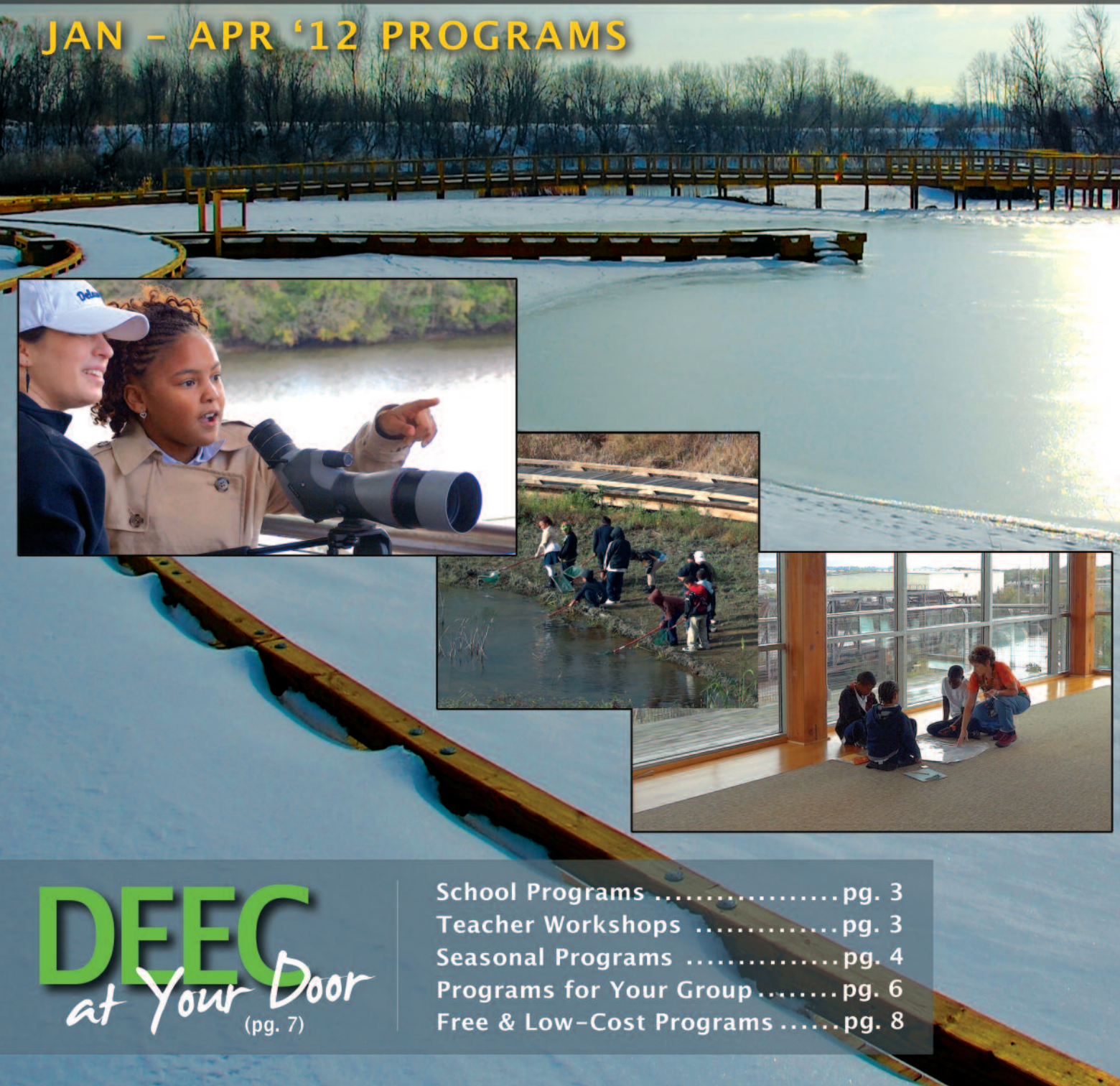


DEEC



DUPONT ENVIRONMENTAL
EDUCATION CENTER at the
RUSSELL W. PETERSON URBAN
WILDLIFE REFUGE on the
WILMINGTON RIVERFRONT

JAN - APR '12 PROGRAMS



DEEC
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DEEC AT A GLANCE



The **Delaware Nature Society (DNS)** operates the DuPont Environmental Education Center (DEEC) in Wilmington, showcasing where the city, river and marsh meet. Located on the edge of the 212-acre Russell W. Peterson Urban Wildlife Refuge adjoining the tidal Christina River, the site is home to many species of amphibians, birds, mammals, fish, reptiles and native plants. The Riverfront Development Corporation of Delaware owns the facility and provides maintenance and security services and an operational budget to DNS for its management and programming. For information on renting DEEC for a private event, please call 302.425.3929 x184 or email kfahner@centerontheriverfront.com. The facility is open to the public year round and features indoor and outdoor exhibits, a 10-acre garden and a quarter-mile boardwalk that extends into the marsh.

At DEEC, DNS provides safe, fun and educational outdoor experiences for all ages and offers programs for school groups, teachers, community and recreation centers, faith-based groups, Boy Scouts, Girl Scouts, and professional organizations. DNS is also building upon established relationships with Wilmington-area schools and organizations with a wide variety of free and low-cost programs. DNS works to improve the health of the environment and community through citizen science activities, including water quality monitoring and other volunteer supported opportunities.

Hours

Russell W. Peterson Urban Wildlife Refuge
Gates open everyday: 6:30 am - Dusk

DuPont Environmental Education Center
Through March 11, 2012
Tuesday – Saturday: 10 am – 3 pm
Sunday: 12 pm - 4 pm

March 12 - November 5, 2012:
Tuesday - Saturday: 11 am - 5 pm
Sunday: 12 pm - 4 pm

Closed November 24, December 24 & 25, January 1, 2012
*Note: please call for severe weather closure information:
302-656-1490*

Admission

Free to individuals and families.
Groups by reservation only. See page 6.

Contact Information

DuPont Environmental Education Center
1400 Delmarva Lane, Wilmington DE, 19801
Phone: 302-656-1490, Fax: 302-425-4813
www.delawarenaturesociety.org

About the Delaware Nature Society

DNS, a nonprofit membership organization, fosters understanding, appreciation and enjoyment of the natural world through education, preserves ecologically significant areas and advocates stewardship and conservation of natural resources. We welcome new members and encourage you to join today! Membership benefits include: special pricing for DNS programs and events, online program enrollment, Native Plant Sale preview sale days, discounts at retail partners, reciprocal admission to nature centers nationwide and much more!

We wish to thank John Harrod, Lesley Bensinger and Rod Hampton for providing the photographs used in preparation of this publication

SCHOOL PROGRAMS & TEACHER WORKSHOPS

Specific connections with Delaware Science Content Standards including coding for Standard, Strand, and Statement at each grade level are available by request. Email Lesley@delawarenatureociety.org for additional information.

School Programs

Senses

Grades Pre-K – 3, 1.5 hours, \$6/student
Use your senses to discover Wilmington's wild side. Listen for sounds of nature and wildlife. Look for plants and animals and discover the textures and scents found in our botanic garden. After a hike around the gardens, use your keen senses to participate in a "senses challenge."

Weather is a Breeze

Grades Pre-K – 3, 1.5 hours, \$6/student
Become a junior meteorologist as you explore how weather affects plants, animals and humans. Collect weather data using thermometers, identify cloud types and construct a water cycle. Put your knowledge to the test and dress for the weather in the "I'm prepared for precipitation" relay race.

Exploring Entomology

Grades Pre-K – 3, 2 hours, \$6/student
Observe insects up close and personal. Examine insect anatomy including the head, abdomen, thorax, antennae, and wings under magnification. Catch and identify insects as you study biodiversity. Learn why humans depend on insects to survive in a game of 'nectar collectors'.

Water Wise

Grades Pre-K – 3, 2 hours, \$6/student
Discover the properties of water through scientific experimentation and examine the water cycle first hand. Investigate a tidal pond and wetland, test the permeability of different surfaces, and put water to work in a water powered obstacle course.

Fantastic Fish

Grades 4 - 5, 2 hours, \$6/student
Meet the many fish of the Christina River and the marsh at DEEC. Study fish anatomy and use body structures to predict what fish eat, how fast they swim and if they are the hunter or the hunted. Use a spinning cast net, reel in fish traps, and dip with nets to try your luck catching fish.

Land & Water

Grades 4 - 5, 2 hours, \$6/student
Look at the land from the perspective of an osprey, raccoon, and snapping turtle. In the marsh, find evidence of water interacting with the land. Investigate how humans affect soil erosion and deposition.

Forces in Motion

Grades 4 - 5, 2 hours, \$6/student
Look to the air and in the water and discover forces in motion. Explore the unique adaptations birds have for flight. Discover the effect of load on the movements of a rubber band powered bird. Celebrate the Christina River's rich maritime history and design a boat to compete in a DEEC boat race.



Wilmington's Wetlands and Watershed

Grades 6 - 8, 2.5 hours, \$7/student
Think globally, act locally to learn what wetlands and watersheds have to do with the quality of our streams and rivers. Test four water quality parameters, investigate point source and non-point source pollutants, and measure biodiversity along the Christina River and its adjacent wetlands.

Remnants of Wilmington's Past

Grades 6 - 8, 2.5 hours, \$7/student
Explore the history and remnants of Wilmington's past in a walk along the Christina River. Imagine Wilmington as it was when the Swedes arrived in the 1700's. Discover evidence of human activity from the colonial, industrial, and post-industrial eras using GPS technology. Strike a pose and create a still picture of historical eras and use archeology to explore how scientists learn about ancient civilizations.

Climate Change Science

Grades 6 - 8, 2 hours, \$6/student
Explore what sea level rise would mean for Wilmington's Riverfront and survey the aquatic biodiversity of the marsh to learn what's at stake. Conduct a science experiment that demonstrates the greenhouse effect and examine what you can do to reduce the effects of global climate change.

Teacher Workshops

Registration and clock hours are available through the Delaware Teacher Center.

Forces in Motion

Wednesday, March 14, 4:30 – 7:30 pm

Leader: Lesley Bensinger

This workshop prepares teachers for the field trip program Forces in Motion at DEEC. Teachers will use hands-on field study and data collection to look to the air and in the water and discover forces in motion. Explore the unique adaptations birds have for flight. Activities include the use of a rubber band powered bird to illustrate the difference between potential and kinetic energy and the effect of load on movement. Teachers will celebrate the Christina River's rich maritime history and design a boat to compete in a DEEC boat race.

Wilmington's Wetlands and Watershed

Thursday, February 29, 2012, 4:30 – 7:30 pm

Leader: Lesley Bensinger

This workshop prepares teachers for the field trip program Wilmington's Wetlands and Watershed at DEEC. Teachers will use hands-on field study and data collection to test 4 water quality parameters and learn to interpret the results. Participate in an activity that defines the Christina River watershed and clarifies the difference between point-source and nonpoint-source pollutants, use metaphors to understand the economic and ecological values of wetlands, and explore the aquatic organisms that depend on the Christina River to survive.

SEASONAL PROGRAMS

Programs for Children and Families

The Icky Sticky Frog (Ages 1½- 2½ - Parent participation required at no extra fee)

Program #: W12-230-DC, Thursday, April 5, 9:30 – 10:30 am, Member/Non-Member: \$8/\$14, Leader: Lesley Bensinger

Discover amphibians in this frog themed adventure! Read The Icky Sticky Frog and search for his relatives in DEEC's pond. After a marsh walk hop inside and make a froggy craft.

Snow Science (Ages 6+)

Program #: W12-261-DC, Saturday, January 21, 10:30 am - Noon, Member/Non-Member: \$7/\$12, Leader: Lesley Bensinger

Examine snowflakes under a microscope, learn how animals survive Wilmington's winter and make your own ice cream.

DEEC Mammal Detectives (Ages 6+)

Program #: W12-262-DC, Saturday, February 4, 10:30 am - Noon, Member/Non-Member: \$7/\$12, Leader: Lesley Bensinger

Discover what the red fox, raccoon, and beaver do for the long winter and look for clues they left behind.

DEEC Family Naturalist Series (Ages 6+)

Saturdays, 10 am - Noon

Program #: W12-263-DC, February 18, Winter Photography

Program #: W12-264-DC, March 17, Duck Migration Madness

Program #: W12-265-DC, April 28, Amphibian Exploration

Member/Non-Member (Single Session): \$8/\$14, Member/Non-Member (Series): \$20/\$35, Leader: Lesley Bensinger

Explore the marsh as a family focusing on a new topic each month.

Busy Beavers (Ages 6+)

Program #: W12-267-DC, Saturday, April 7, 1 -3 pm, Member/Non-Member: \$7/\$12, Leader: Nancy Carol Willis

Learn about the habits of beavers and hike to a beaver lodge.

Spring Break: Nature Day Camp at the Riverfront (Ages 6+)

Ages: 6-12, Program #: W12-268-DC

Monday, April 9 - Friday, April 13, 8 am - 5 pm, Member/Non-Member: day: \$55/\$70, full week: \$250/\$325

Monday: Reptiles and Amphibians, Leader: Laurie Curl; Tuesday: Aquatic Ecology, Leader: Nancy Carol Willis;

Wednesday: Mammals, Leader: Nancy Carol Willis; Thursday: Geocaching and Letterboxing, Leader: Lesley Bensinger;

Friday: DEEC Photography, Leader: Bethanie Delfunt

Spend all or part of your spring break exploring a freshwater tidal marsh and Wilmington's Riverfront!

Family Marsh Trek (Ages 6+)

Program #: U12-261-DC, Saturday, May 5, 10:00 – 11:30 am, Member/Non-Member: \$7/\$12, Leader: Lesley Bensinger

Lace up your sneakers for an hour long hike into the rarely traversed North Marsh and create your own blend of trail mix.

Welcome Back Osprey (All family members)

Program #: W12-284-DC, Saturday, March 31, 1 - 2:30 pm, Members/Non-Members: \$7/\$12, Leader: Lesley Bensinger

Celebrate spring migration and the return of the DEEC osprey.



Parents Night Out!

For Children Only: Ages 5+

Fridays, 6:30 - 8:30 pm

Program #: W12-280-DC, January 13, Let it Snow

Program #: W12-281-DC, February 10, Nocturnal Animals

*Program #: W12-282-DC, March 9, Star Gazers (*Parents invited to register and participate, telescope and binoculars provided)*

Program #: W12-283-DC, April 13, Spring has Sprung

Member/Non-Member: \$15/20 per evening

Leader: Laurie Curl, Sheila Vincent (DNS astronomer), Lesley Bensinger

Set mom and dad loose to have dinner along Wilmington's Riverfront while you stay at the DEEC and have all the fun with games, a scavenger hunt and an evening hike. Dinner provided. Parents receive a coupon towards a meal at Timothy's Riverfront Grill.



Adults & Teens

Dragons and Damsels of Delmarva

Program #: W12-201-DC

Wednesday, January 11, 6 - 7:30 pm

Member/Non-Member: \$10/\$15

Leader: Hal White, University of Delaware Professor and author Natural History of Delmarva Dragonflies and Damselflies.

Join Hal White, lifelong odonate enthusiast and expert, as he skillfully and entertainingly shares the unique and interesting natural history of Delmarva's Dragonflies and Damselflies. Lecture followed by a book signing.

Going Green on a Dime

Program #: W12-202-DC

Tuesday, February 7, 6 - 7:30 pm

Member/Non-Member: \$10/\$15

Leader: Brenna Goggin

From window cleaner to unclogging pipes, learn cheap and environmentally safe methods to put that sparkle back into your house.

John Heinz National Wildlife Refuge Birding & Green Building Tour

Program #: W12-012-AS - Ashland

Program #: W12-204-DC - DEEC

Wednesday, March 14

8:30 am - 1:30 pm for Ashland,

9 am - 1 pm for DEEC

Member/Non-Member: \$15/\$22

Leader: Sally O'Byrne

Location: Ashland Nature Center or DEEC

Explore this natural gem minutes from the

Philadelphia airport with vast impoundments holding migrating waterfowl and a 'green' visitor center. Bring a lunch.

Build Your Own Rain Barrel

Program #: W12-204-DC

Thursday, March 15, 6 - 8:30 pm

Member/Non-Member: \$30/\$45

Leader: John Harrod and Greg Gagliano

Location: DEEC

Convert a trashcan into a rain barrel much cheaper than buying a pre-made one. Bring your favorite plastic trashcan. All necessary parts provided.

Tracking Time

Program #: W12-205-DC Max: 12

Sunday, March 18, 3 - 5 pm

Member/Non-Member: \$10/\$15

Leader: Derek Stoner

Springtime is prime time to observe tracks made by mammals and birds. Explore the Marsh and field around DEEC to identify tracks made by deer, raccoons, possums, and more.

Canoeing the Christina River

Program #: W12-206-DC

Friday, April 27, 12 - 4 pm

Member/Non-Member: \$30/\$45

Leader: Jim White

Canoe the Christina River into the Russell W. Peterson Urban Wildlife Refuge looking for wildlife and travel downstream seeing the Riverfront from a new perspective.

Urban Birding in April

Program #: W12-016-AS

Tuesdays, 8 - 11 am

April 3 - Russell W. Peterson UWR

April 10 - Alapocas Woods

April 17 - Banning Park

April 24 - 7th Street Peninsula

Member/Non-Member (Series): \$30/\$45

Member/Non-Member (Single): \$12/\$18

Leader: Sally O'Byrne

Locations: Various - you will be contacted in advance.

As an urban explorer, bird some of the under-appreciated 'natural' areas of Northern Delaware from Wilmington's urban marshes to its deciduous parklands. Wear long pants and shoes that can get wet.

Spring Wildflowers of the Brandywine

Program #: U12-201-DC

Thursday, May 10, 9 - 11 am

Member/Non-Member: \$10/\$15

Leader: John Harrod

Explore, identify, and learn the beautiful spring ephemeral wildflowers of Brandywine Park in Wilmington. Meets at the park entrance on the corner of Lovering and Hancock.



GOT AN IDEA FOR A DEEC PROGRAM?

E-mail john@delawarenaturesociety.org

PROGRAMS for YOUR GROUP

For community centers, professional organizations and clubs, faith-based groups, Girl Scouts, Boy Scouts and any other group. Programs can be scheduled for day or evening hours on weekdays or weekends, are 1.5 hours in length and cost \$6 per person unless otherwise noted. Advance reservation is required. Programs have a minimum charge for 12 participants. Smaller groups accepted but must pay for 12 participants. To reserve a program or find out about other opportunities at DEEC email Lesley@delawarenaturesociety.org or call 302-656-1490, ext. 157.

What's in the Water?

Explore what's in the marsh water! Use nets to catch aquatic animals in the tidal pond and examine them with magnifying lenses and microscopes in the lab. Discover how animals and plants in the marsh depend on each other and construct your own food chain to take home.

Fantastic Fish

Meet the many fish of the Christina River and the marsh at DEEC. Use a spinning cast net, reel in fish traps, and dip with nets to try your luck catching fish. Examine a variety of fish to learn what they eat and how they live.

Marsh Mammals

Hunt for animal tracks and other evidence that the furry residents of the marsh leave behind. Learn how they survive in the marsh and touch real animal furs. Use clues to identify the animals that visit the pond when no one is looking.

Eco-Explorers

How do you affect the environment? Search for signs of human activity in the marsh and test the quality of the water as you look for evidence of our impact on nature. Learn about wildlife and what you can do to protect the animals and plants that call DEEC home.

Marshy Adventures

Explore the biodiversity of the marsh habitat. Look for marsh residents in air, on land, in soil, and in water. Examine plants and animals using nets and magnifiers. Learn about marsh food chains, the water cycle, and why the Christina River is important to Northern Delaware.

Nature Journaling

Use digital cameras, draw pictures, and record your observations as you hike through the marsh ecosystem of the Russell W. Peterson Urban Wildlife Refuge. Identify plants and animals found in the marsh and make a record of your experiences in a nature journal of your own to take home.

Nature Photography

Capture the Russell W. Peterson Urban Wildlife Refuge through the lens of a digital camera. Learn photography skills and how to compose outstanding photos where the city, river and marsh meet. Print and decorate a frame for your favorite photo. 2 hours, \$8/person

Marsh Insects

Hunt for insects found in the air, land and water at DEEC. Collect and observe insects up close, learn insect anatomy, assemble a marsh food web puzzle, and discover some of the important jobs insects have in nature.

Marsh Amphibians

Explore the marsh for frogs, toads and salamanders. Listen to the frogs' chorus, use nets to catch live amphibians and view them up close, and find eggs and tadpoles in the pond. Spring only.

Backyard Habitat Gardening Tour

1 hour, \$6 per person

Stroll through the DEEC botanic garden and see how beautiful native plants provide for wildlife in Delaware. Discover how you can easily turn your property into a welcoming home for birds, butterflies, and other wildlife.

DEEC at a Glance Tour

30 minutes, \$3 per person

Discover the DuPont Environmental Education Center, Delaware Nature Society, and the many unique features of the Russell W. Peterson Urban Wildlife Refuge. Following the tour, explore the site on your own with a more careful eye.

Building and Boardwalk Exploration Tour

1 hour, \$6 per person

Listen to the history of the marsh, see plants currently in bloom, and look for animals that are active in the Russell W. Peterson Urban Wildlife Refuge. Bring binoculars or share ours to catch glimpses of great blue herons, bald eagles, and much, much more from our boardwalk and building!

New! Exploring By Canoe (Ages 12+)

3 hours, \$20 per person

Take your group or class on an adventure as you canoe the Christina River and the Russell W. Peterson Urban Wildlife Refuge, a freshwater tidal marsh on the edge of the city of Wilmington. Learn basic paddling skills, hike along the shore to survey plant and animal life, and discover the functions and importance of wetlands. Canoes, paddles and life preservers included in cost, no canoeing experience required.

ARE YOU LOOKING FOR A VOLUNTEER OPPORTUNITY?

Guides, greeters & interpreters needed.
Contact John Harrod at 302-656-1490 or email john@delawarenaturesociety.org

DEEC at Your Door

Choose an outreach program and let DEEC come to you! Enjoy presentations for your group and activities at your site. Programs are 30 minutes at \$3/student or 1 hour at \$6/student, plus a \$35 travel fee. Travel fee waived for locations in the City of Wilmington.

Nature in your Neighborhood

Investigate your neighborhood in a whole new way. Explore the animals and plants that also call Wilmington home. Examine a robin's nest, feel feathers, and touch a raccoon fur.

Learn how animals survive city living. Register your group for both Nature in Your Neighborhood at your site and any field program on page 6 for \$8 per person!

Animals of the Marsh

Learn about the native animals inhabiting Wilmington's own tidal marsh. See live animals and taxidermy, touch real animal furs. Register your group for both Animals of the Marsh at your site and any field program on page 6 for \$8 per person!



Help us celebrate the **43rd Annual Earth Day Festival** at the DuPont Environmental Education Center at the Russell W. Peterson Urban Wildlife Refuge on the Wilmington Riverfront on **April 21, 2012!**



23 Delaware Futures students volunteered with marsh restoration at DEEC. The students removed invasive plants, cleaned bird boxes, picked up litter and conducted biodiversity studies.

FREE & LOW-COST

Programs, Events & Activities for All Ages

NOTE: For some free programs, registration is required. Call 656-1490 or email andrea@delawarenaturesociety.org and provide your name and number of people attending and a telephone number.

Delaware's Coastal Zone Act: An Evolving Legacy

Saturday, January 14, 12 pm – 3 pm

Free, Pre-registration required

Enjoy an autobiographical film of Delaware's Governor Russell W. Peterson, a rebel with a conscience, committed to protecting the delicate coastline and open spaces that define our state. After the film, stroll the boardwalk on a naturalist-led walk.

Environmental Book Club

Thursday, February 23, 6 – 7:30 pm

Free, No pre-registration required.

Join us for a lively discussion of selected books relating to our natural world. The current book selection is Mark Kurlansky's *Cod: A Biography of the Fish that Changed the World* and *World Without Fish*. For more information contact Brenna Goggin at brenna@delawarenaturesociety.org or 302-239-2334.

Green Drinks

Tuesday, March 20, 6 – 8 pm

Free, No pre-registration required

A casual and unstructured happy hour - no agenda, no speaker; no power point presentation - just a good time with a cool beverage overlooking the City. For everyone who shares a passion for the environment, sustainable/green living, energy efficiency and green power, environmental legislation and advocacy, green product-sourcing and, well, you get the picture. Cash bar.

Earth Day Festival

Saturday, April 21, 11 am – 3 pm

Free, No pre-registration required.

Celebrate the 43rd Earth Day with activities for the whole family. Come to DEEC to explore how to think globally and act locally with canoeing, live music, green exhibitors and more!

Recurring Programs for Families & Individuals

Note: For Group programs, see page 7, visit our website or call 656-1490.



Netting in the Marsh

Tuesdays - Sundays: 2 pm

\$3 per person. No pre-registration

Beginning March 11, explore the marsh using nets and more! See how many animals and insects you can catch and identify.

Nature Walks

January - March 12, Tuesdays - Sundays: 3 pm.

March 13 - April 30, Tuesdays - Sundays: 1 pm.

Free, No pre-reg. required.

Discover flora and fauna while exploring the boardwalk with a naturalist. Sunday nature walks start with family story time!

Discovery Cart

Explore books, pictures, animal artifacts, and much more! Themes change monthly, so come and visit often! Available during building hours.

Story Time Tuesday

Tuesdays, 10 am. Free. No pre-registration required.

Enjoy a different marsh-themed story every week followed by a nature walk or a live animal experience!