

The Norman Bird Flyer

A QUARTERLY NEWSLETTER

Spring/Early Summer 1994

REARING BUTTERFLIES FROM CATERPILLARS

by Amy Bartlett Wright

I still remember that day I found that caterpillar. I was 10 years old at my parents' home in Maryland, playing in a grove of persimmon trees. I picked up some of the ripe fruits and branches that had fallen, and found a large fat green caterpillar attached! Its skin looked translucent; the body was smooth without hairs or spikes.

I ran inside with my prize and hunted the cabinets for a glass jar and metal top. I knew woolybears would pupate in a glass jar and that they needed some food inside and holes in the jar lid. This big green caterpillar was not like any caterpillar I had ever seen so I wanted to be sure to take great care in preparing its place for pupation. That night it spun a silk cocoon, then two weeks later, a large beautiful turquoise green moth with two long tails on its hindwings emerged. I watched its wings slowly

move and expand until a few hours later it was ready to fly. By then I could identify it as the luna moth. I let it out of my attic bedroom window and watched it sail down through the high tree branches and flutter into the persimmon grove. I was hooked. Then began a life-time fascination with caterpillars their mysterious change into flying beauties.

I began looking for caterpillars and observing them closely, but there was little for me to read about

(Continued on page 2)



New Spring Programs....
(More programs inside on page 9)

WOODLAND WARBLERS

Sunday May 1st 1 - 4 pm.

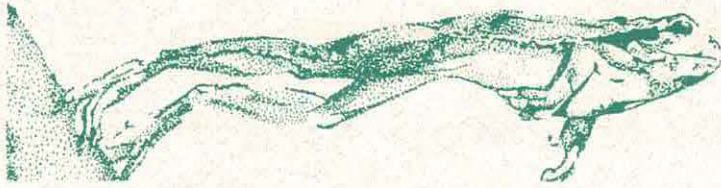
Early to mid May is the best time to spot warblers as the Sanctuary woods are visited by these migratory birds on their northward journey. Join Sanctuary director Larry Taft for this Sunday afternoon program where you will learn to identify these elusive birds first by using stuffed specimens and then by going out in the woods to find them. Please wear sturdy shoes and bring binoculars and a field guide if you have them. (A limited number of binoculars are available for use). Fee : \$ 9 (\$ 6 NBS members). Please see registration form on page 13

SPRING MIGRATION AND SUMMER BIRD WALKS

Continuing through the Spring and into the Summer months, Larry Taft will guide participants through the Sanctuary trails. Walks begin at 8 am every Sunday morning. Walks usually last about an hour. If weather is inclement, walks will be cancelled. Free! Registration is not required.

Inside this Flyer

- ... More Spring and Summer Programs for Children, Adults and families
- Birds and Breakfast Info
- ... NBS Herb Sale
- ... and more Spring news



Director's Notes

As I sit and write these notes it is the first week of April. Outside in the Sanctuary's fields, the Woodcock has already begun its annual courtship ritual. The Witch Hazel bush behind the Sanctuary barn has been in full yellow bloom for weeks now, offering a bright contrast to the numerous Cardinals that perch in its branches waiting for their turn at the feeder a few feet away. The Spring Peepers down at Red Maple Swamp Pond are in full chorus.

The male Red-wing Blackbirds made their grand entrance two weeks ago, back up from the tropics ahead of the females, and are scoping out new territories for the Season. I'll bet they were surprised by the late March snow storm! In just a few short weeks, the ground will have thawed and the woods and fields of the Sanctuary will once again abound with signs of life.

With the arrival of the spring season, the Sanctuary staff and volunteers will begin many new projects. Our scheduled prescribed burn (which we wrote about in the Fall Flyer) will be postponed until next Fall due to a record snowy winter.

The burn, which will be conducted under very specific conditions should accomplish two objectives: to help restore the grassland habitat for the wildlife that use these fields for hunting or nesting such as the Barn Owl, Northern Harrier, Bobolink and Savannah Sparrow and to help train other wildlife managers in our state in the use of fire as a wildlife management tool.

We found one unexpected side benefit in cutting down numerous cedars to create the fire breaks for the burn. With the help of some local scout troops, we will use the trees to continue the old fashioned hand-hewn post and rail that now surrounds the children's garden along the perimeter of the parking lot.

As we mentioned in the winter newsletter, this Summer, we will be slightly increasing our non-member entrance fee to the trails and museum. Hopefully this will encourage a few more people to join as members.

We have had lots of success recruiting volunteers to help with visitor registration and information and making sales in the "Barn Owl Shop". To assist our volunteers, we ask that each time you visit and/or make a purchase in the shop please show your membership card to get your free admittance and 10% discount. This will help make their job much more pleasant.

Happy Spring!

Jerry

(Continued from page 1)
their identification. If I could find one feeding on a parsley plant (Black swallowtail) or in the young leaves of a milkweed (Monarch) or feeding in a folded leaf of stinging nettle (Red admiral), or just walking across the road—I would always wonder what the caterpillar would become: butterfly or moth, how would it be colored and would I recognize it? I had to rear the unknown caterpillar until the adult emerged from the pupa or cocoon. If it did emerge, I could identify the adult from many field guides, but the caterpillar, of course, was then gone? If the adult did not emerge, I never knew what the caterpillar had been.

Now I am grown with two children of my own, but I have maintained my interest in caterpillars. A few years ago, I came across an unknown hairy caterpillar feeding on pussy willow. I fed it in a jar and sketched it accurately before it pupated. When an American dagger moth emerged, my illustrated field guide to caterpillars had begun.

THE LIFE CYCLE

The caterpillar is just one form in the life cycle of insects of the Order Lepidoptera, butterflies and moths. The mated female butterfly lays an egg on or near the plant the caterpillar will feed upon as it grows. The tiny egg hatches at the right time, usually when the weather is warm enough for the plant and caterpillar to grow. The newborn caterpillar cuts its way through its eggshell and begins feeding on the foodplant. As it eats and grows, its body becomes too tight. The larva then stops eating and molts, shedding its tight skin. Soon it is comfortable in a newly formed looser skin and will resume feeding. Later it will outgrow that skin and molt again. These stages between moltings are called instars. A caterpillar will go through several before it reaches full size in its final instar.

If a caterpillar survives predators and disease long enough to reach maturity, it will enter the next stage of the life cycle, the pupa. The pupa is the resting stage of the insect's
(Continued on next page)



(Continued from page 2)

life. In mid-summer or fall, mature caterpillars can often be found wandering away from their protected feeding places and foodplants. They are probably looking for a place to pupate. This is a perfect chance to rear them.

The pupating caterpillar may hang from a branch or roll a leaf around itself or dig into the soil. It may also weave a silken cocoon, or protective covering around itself. Pupae come in many shapes and colors, each characteristic of its species. Butterflies have (pupae and) chrysalises which are pupae that have shiny metallic colors. Moths have bare pupae or pupae inside protective cocoons.

When the time is right, the adult will be ready to come out of the pupa. Butterflies push and break open a spot on the hanging pupa until it splits far enough for the butterfly to pull its body out. The emerged adult hangs from the shed pupa or twig until it is ready to fly. Minutes after emerging, the butterfly holds out its limp wings and flaps them slowly. This movement pumps blood into the wing veins, expanding the wings to their full span. Within a short time, the wings stiffen and the adult is ready to fly, feed on a flower, drink nectar and water, and search for a mate. With mating, the life cycle has again begun with a new generation.

REARING CATERPILLARS

Rearing caterpillars or butterflies is basically providing the optimum conditions for the insect to go naturally through its life cycle while being contained. You must feed the caterpillar the food it prefers, keep the container clean, and place the container in a location with an even temperature.

The best place to find caterpillars for rearing is to look on the plants they eat, called the foodplant. Many of the field guides to adults include information on the caterpillar's foodplant. This is where the female lays eggs. If you notice a butterfly resting upon a plant or fluttering around the leaves, she might be laying eggs. Look for the tiny eggs or go back to that plant a few days later—you might see very small caterpillars beginning to chew the leaves. A clue to caterpillar activity is frass, or the insect's droppings on the leaves of the foodplant. The caterpillar's webbing may also give it away.



Collect the caterpillar by snipping off the leaf upon which he is feeding. Place the leaf, caterpillar and all, in a clean container—glass is best for viewing. The leaf will be its food. Be certain your captive has plenty of air. Poke holes in the jar lid or give it a mesh cover. Do not put the jar in the direct sun, or it may get too hot or cause condensation. A warm spot away from drafts is best. As the caterpillar eats, it will grow. In many cases, the caterpillar changes color as it grows in size. The parsley caterpil-

lar (illustration #1, page 1) is spiny and black with a white saddle when in its first instars, but as it matures, it becomes green with black stripes and yellow spots (illustration #2).

Place fresh leaves in the container and remove the droppings daily. Place a thin, smooth stick in the jar for the mature caterpillar to climb upon for pupation. Once it begins to pupate, all your caretaking efforts will be rewarded. Just watch! The caterpillar will position itself and over the course of several hours it will change color and shape. The caterpillar is gone, the insect is now a pupa! (illustration #3)



When the adult emerges a few days to two weeks later, don't disturb it. It will be a little longer before its wings are stiff enough for flight. When it flaps its wings and flies within the jar, take the jar outdoors and remove the lid or the stick where it is resting (illustration #4). Soon it will be free, flying from flower to flower.

Amy Bartlett Wright is a scientific illustrator, naturalist and a contributing writer for the *NBS Flyer*. She has recently authored and illustrated the *Peterson Field Guide to Caterpillars* and the new *Peterson Field Guide to Butterflies*. She is also the illustrator for many of the Sanctuary's museum displays. Amy lives in Portsmouth with her husband John, and sons, John and Peter.



THE BARN OWL SHOP

at the Norman Bird Sanctuary

Spring 1994 will be an exciting time
at the shop!

We will be significantly increasing our book
selection, particularly nature guides
and resource materials.

New titles include:

Our "own" Amy Wright's new Peterson's First Guide to Butterflies; ... Ginger Carpenter's Dragonflies of Cape Cod; ...Dunning's Secrets of the Nest; ...Madge's Crows and Jays; ... Swain's Groundwork, A Gardener's Ecology; and McQueen's Let's Talk Trash, A Kid's Book About Recycling.

There will also be many fun items for children and family entertainment. We'll be featuring new critters from **Folkmanis Puppets**, a great range of **nature puzzles**, a larger variety of **rocks and minerals** for collecting and a wide selection of optics (**spotting scopes and binoculars to hand lenses** for less than \$1)...just to name a few!

Look for some fresh new jewelry selections from **J.H. Breakell** and a new offering of natural floral pins and earrings. Also, you can count on the return of the **"Breakell Buckle"** as well !

Spring will bring us back outside (toting a **Sharon Culberson's picnic basket**, no doubt!)...so we'll again stock **SWAT**, the environment and kid friendly insect repellent/sunscreen combo.

In addition to finding some interesting products for you to shop for (and support the Sanctuary!), we are making it more convenient as well. Beginning in April, The Barn Owl anticipates accepting **Visa and Mastercard** for purchases. (Please remember to show your membership card to get your **10% discount!**)

We are excited about what's new
this spring and look forward
to seeing you!



NBS Herb Sale 1994

Herbs are plants that can be used to enhance the flavor of foods, create a pleasant summer tea, heal many ailments, provide decoration and fragrance - all with relatively little effort. When planted, herbs require little attention and can add just the right amount of zest to a vegetable or perennial garden. Along with herbs, we offer some varieties of antique flowers- those cultivars that have been planted and prized for hundreds of years.

The herbs and flowers listed below are grown by Carol Dowling of Gray Cottage Herb Farm in Tiverton, R.I. (If you are unsure about a particular plant, Carol has offered her advice at 624-1941). The plants are categorized by use, though some may have many uses! Plants are sold by sixpack (*), or in 3 1/2" (**) or 4" (***) pots.

By ordering your herbs through the Sanctuary, you support our programs and maintenance of the refuge.

To place your order, fill in the form below as completely as possible. Fill in the # of plants next to each variety. Then, tally the numbers based on their prices and total. Send the form and your check to us by Thursday, April 28. Your order will be ready for pick-up at the Sanctuary on Saturday, May 7.

Culinary (Annual)

- ___ *Basil, Sweet...3.00
- ___ *Basil, Dark Opal...3.00
- ___ *Basil, Small Leaf...3.00
- ___ **Parsley, Gigante d'Italia...2.50
- ___ **Dill, Fern Leaf...2.50
- ___ **Dill, Bouquet...2.50
- ___ **Fennel...2.50
- ___ **Chamomile...2.50

**Culinary (Perennial)

- ___ Rosemary, Arp...2.50
- ___ Rosemary, Officinalis...2.50
- ___ Rosemary, Prostrate...2.50
- ___ Savory, Winter...2.50
- ___ Sage...2.50
- ___ Sage, Purple...2.50
- ___ Sage, Tri-color...2.50
- ___ Thyme, Lemon...2.50
- ___ Thyme, English Winter...2.50
- ___ Tarragon, French...2.50
- ___ Peppermint...2.50
- ___ Mint, Chocolate...2.50
- ___ Spearmint...2.50
- ___ Oregano, Italian...2.50
- ___ Lemon Verbena...2.50
- ___ Lovage...2.50
- ___ Lemon Balm...2.50

**Aromatic (Perennial)

- ___ Artemesia, Southernwood...2.50
- ___ Sweet Woodruff...2.50
- ___ Hyssop...2.50
- ___ Lavender, English...2.50
- ___ Lavender, Hidcot...2.50
- ___ Lavender, Munsted...2.50
- ___ Tansy...2.50
- ___ Santolina, Incana (Gray)...2.50
- ___ Santolina, Virens (Green)...2.50
- ___ Soapwort...2.50

***Scented Geraniums (Tender Perennial)

- ___ Assorted Scented (Carol's pick)...3.00
- ___ Old Fashioned Rose...3.00
- ___ Lemon...3.00



Antique Flowers (Annual)

___ **Nasturtium, Strawberries and Creme. Light yellow flower bordered by strawberry red. Grows to 6" (sun)...2.50

___ *Love in the Mist (Nigella) Light blue flowers that dry to dainty seed pods. Grows to 1 1/2' (sun)...3.50

___ *Poor Man's Orchid (Schizanthus) Also called "Angel's Wings". Speckled petite orchid-like flowers in light shades of pink, violet, and rose. Grows to 1 1/2'. (Light -shade)...3.50

___ *Farewell to Spring (Clarkia Amonea). Cup-like blooms in shades of rosey purple. Grows to 2-3' (Sun)...3.50

___ *Love Lies A Bleeding (Amaranthus). Ropes of deep red flowers that dangle from the stem. Grows to 3-4' (sun)...3.00

___ *Painted Tongue (Salpiglossis) Brightly veined petunia-like flowers in multi-colors. Long blooming! Grows to 1'. (Sun)...3.00

* = sold in 6 packs

** = sold in 3 1/2" pots

*** = sold in 4" pots

NAME: _____ PHONE: _____
ADDRESS: _____ STATE: _____ ZIP: _____

TOTAL # PLANTS ORDERED @\$2.50 _____ (X \$2.50) = _____
TOTAL # PLANTS ORDERED @\$3.00 _____ (X \$3.00) = _____
TOTAL # PLANTS ORDERED @ \$3.50 _____ (X \$3.50) = _____

TOTAL AMOUNT DUE = _____

Please send to NBS by April 26. Your plants will be ready for pick up on Saturday, May 7. Thanks!

Volunteer Corner by Susan VanDerhoof

During their school vacation in February, the members of Scout Troop #3 donated 135 hours to the Sanctuary and helped Scout mate, Todd Fisher take one step closer to his Eagle Badge. The troop spent their time limbing cedar trees which will be used for the fence in our parking area. Be sure to stop by and see the results of their hard work. Thank you to: Todd Fisher, Mike Henry, Alan Aten, John Mossey, Robert Zeuge, Roland Zeuge, Cam Hawes, Adrian Butler, Steve, Evan and Sean Aten, Chris and Peter Hahn, Robert Ramos, Eric Hamilton, Tim Davis,

Curtis John, Tim and Eric Oldford, Eric Tremain, and Shirley and Dave Fisher.

(Thank you also to Shirley Fisher for the great photos)



A warm welcome to Barbara Walsh, Dorsey Given and Martha

Haynes—all new additions to our volunteers who donate their time to help in the office or in our visitor's center. Spring has brought a flurry of activity to the NBS office and thanks to all of our volunteers for helping to lighten the load for the staff!

One of the most exciting additions to the Sanctuary are the volunteers who will be in training this Spring to be Docents for our Education Program. The Education Committee has been hard at work developing a comprehensive training program for our volunteer teachers. The Docent program will be a great benefit to the Sanctuary by increasing the number of groups we can accommodate for guided walks, as well as increasing much needed revenues. Thank you to Susan Kevin, Marilyn Lyell, Marybeth Hunte, and Jeff Moniz for all their work in developing our training program. Welcome to all of our new Docents, Mary Talbot, Jenny Morgan, Glenna McCaffrey, Jim Peckham, Carol Weiss and Sharon Schultz.

Be sure to stop by and take a look at the wonderful raffle prizes available for the NBS Annual Raffle. For only \$1.00 you might win anything from a Coleman Canoe to a basket filled with gardening supplies. The Sanctuary is eternally grateful to Mary Talbot for all her hard work in gathering all the raffle prizes and to all of the people and businesses who donated prizes.

HELP!

Our busy season is upon us and we need volunteers to assist the staff in a variety of areas including working in our store, serving as rangers patrolling our trails, trail maintenance... If you would like to volunteer, please contact Susan at the Sanctuary office for an application!

MANY THANKS TO:

Susan Logler for our new filing cabinet
Hodges Badge Company for help with our Harvest Fair mailing (yes, planning has already started!)
Ron Flores for our beautiful new stuffed specimen
Lucy Roenigk for the new telescope



NBS VOLUNTEER PROGRAM TO BE HONORED

On April 18th Volunteers in Action will present their Model Volunteer Program Award to the Norman Bird Sanctuary. In receiving this award, the Sanctuary will join a select number of organizations throughout Rhode Island who have met the criteria for management of their volunteer programs.



Sunday, May 15th

*A spring morning of guided walks, bird exhibits and educational activities for the entire family, followed by a scrumptious breakfast buffet served in the Sanctuary's 19th century barn. **Walks** will leave the barn starting at 6:30 am.*

*Breakfast seatings at
7:30, 8:30, 9:30 and 10:30 am*

For Tickets Please complete the form below and send it along with your payment to:

*Norman Bird Sanctuary
583 Third Beach Road
Middletown, RI 02842*

Name: _____

Address: _____

Phone: _____

Seating Time: 7:30 8:30 9:30 10:30

Total No. of Tickets _____

Price: \$8.00 per adult and \$4.00 per child (3 to 12 years of age)

NBS Annual Raffle

Support the Sanctuary by purchasing raffle tickets at Birds and Breakfast. The sale will continue throughout the Spring. The winners will be drawn at the Sanctuary's annual meeting on June 15.

Grand Prize:

-A 15' Coleman Canoe with paddles

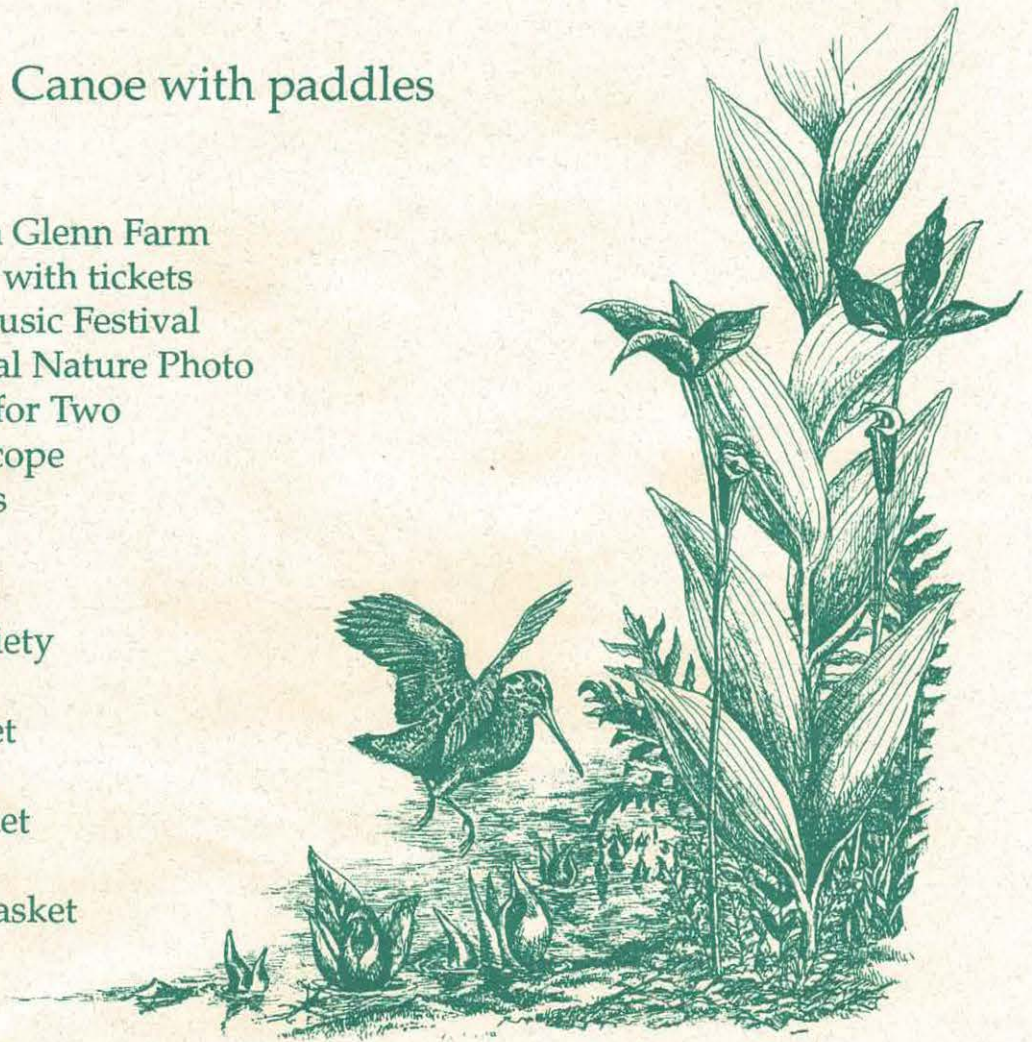
First Prizes:

- Trail Rides through Glenn Farm
- Free Tuxedo Rental with tickets to the Newport Music Festival
- A Jim Nash Original Nature Photo
- A Helicopter Ride for Two
- A Swift Spotting Scope
- Ornamental Shrubs

Second Prizes:

These include a variety of theme prizes:

- A Gardening Basket
- A New Age Basket
- A Naturalist's Basket
- A Birding Basket
- An Outdoor Fun Basket



To purchase your Spring raffle tickets, please fill out the form below, and mail with a check to NBS, 583 Third Beach Road, Middletown, R.I. 02842.

Name: _____
Address: _____
City/Town: _____ Zip: _____
Phone: _____

I would like to order ____ tickets @ \$1.00 each = _____
or ____ book (6 tickets/book) of tickets @ \$5 each = _____

TOTAL ENCLOSED: _____

Programs For Adults

PETTAQUAMSCUT CANOE TRIP (Adults)

Sunday, May 29 8:30 am- 4 pm

The Pettaquamscut (Narrow) River is approximately six miles long, parallels the Narragansett Bay and is located in the town of Narragansett. By catching the tides just right, we can paddle and float along the currents making this one of the most pleasurable canoe trips around. We will put the canoes in the water at Narragansett and paddle up river with the incoming tide to the Gilbert Stuart Landing, have lunch nearby and then paddle back down the river with the outgoing tide. Hap Morgan and Larry Taft will lead this day-long trip. Canoes, paddles and life vest will be supplied. Please bring a lunch and meet at NBS. A chartered bus will pick up and drop off at the NBS parking lot. Fee: \$40(\$35 NBS members). Please register by May 22. A minimum of 10 people will be required.

WILD MEDICINAL WALK

Tuesday eve. June 21, 7 pm

It's the first day of Summer and time to explore the Sanctuary's forests and fields for the wild medicinal herbs. Hap Morgan, naturalist and herbalist will guide you along the trails helping you to identify the native and introduced species of plants which may be used for simple home remedies. Wildcrafting techniques will be discussed for the proper gathering and storage of the medicinals. Handouts of local herbs and herbal recipes for salves, liniments and teas will be supplied. Please dress for a summer evening hike and wear comfortable shoes. Fee: \$9 (\$6 NBS members). Class size: 12

For program registration, please use the form on page 13

WILDFLOWERS AT GARDEN IN THE WOODS

Thursday, May 26 5-6:45 pm

Please be our guests on a guided tour through Garden in the Woods, in Framingham, MA.-the botanical garden of the New England Wildflower Society. This week in bloom promises to show us glorious rhododendrons, azaleas, trilliums, jack in the pulpits, and the prized Yellow Lady's Slipper, to name a few of the 1500 varieties in this 45 acre Sanctuary. Tour participants will stroll through various habitats each exhibiting their subtle or showy spring displays. Hap Morgan, NBS Education Specialist will accompany the group, as well as a guide provided by GIW. Participants can meet at the Sanctuary at 3:30 pm to carpool, or can meet the group at GIW for the 5:00 pm tour time. Please wear sturdy walking shoes. Tour will continue even if weather is inclement. Fee: \$15 (\$13 NBS members) or \$14 (\$12 NBS members) who are seniors (age 65 and older). Because of these special arrangements, we must have a registration deadline of May 5.

Springtime Wildflower Wonders Two special programs for the season



PITCHER PLANT

After the Garden in the Woods Tour, continue your fascination with wildflowers at home...

SPRING FLORA WALK

Thursday, June 2 6:30 pm

The columbines, mayflowers, and wood anemones are some of the varieties of wildflowers in bloom in the Sanctuary this time of year. Though most of our spring wildflowers are not considered showy, their beauty is unmatched. On this gentle walk, Hap Morgan will discuss some of the natural history, folklore and medicinal usage of these native plants. Wear sturdy walking shoes. Fee: \$9 (\$6 NBS members) Class size: 12.

Special:
Both Wildflower Walks,
May 26 and June 2
\$22 (\$17 NBS members)
(SAVE \$2)

Spring and Early Summer Children's Programs

For children in grades K-4
APRIL VACATION WEEK
Tues.-Fri. 9:30-12:30 April 19-22

Look for the signs of Spring as nature wakes from her long winter's nap. We'll spend more time exploring the outdoors, as the weather warms, but will find time to learn new games and stories, and create crafts indoors. Dress for the weather. A healthy mid-morning snack will be provided. Fee: \$45 (\$40 NBS members). Class size: 2 groups of ten

For children ages 3-5

NATURE HOURS

Preschoolers with Parents

-ages 3-4, with parent

Wednesday 12-1 (*New class- New Hour!*)
- OR -

Fledglings - ages 4-5

Fridays 1-2:30 pm

Join Marilyn Lyell and Marybeth Hunte, NBS Parent Volunteers as they teach both children and parents about nature in the Spring season. Hikes, crafts, stories, and a snack will all be included in these popular classes. Registration by session only. Children must be at least three years old to participate. Both parent and child should dress warmly.

Late Spring Session for both

Nature Hours/Fledglings

April 27/29: Bugs Abound

May 4/6: Bridges to Cross

May 11/13: Senses of Spring

May 18/20: Buzzing with Bees

Fee: \$20 (\$15 NBS members)

Class size: 10 child/parent pairs for

Preschoolers with Parents

Class size: 8 children for **Fledglings**.



For children in grades K-4
NATURE CLUB

Saturdays 9:30 am - 12:30 pm

May 7, 14, 21 & 28

Nature loving children in grades K-4 are invited to spend Saturday mornings hiking on the Sanctuary trails, playing games and doing crafts. A different nature related theme will be explored each week and a high energy, low sugar snack will be provided to all. A minimum number of six children will be needed to run this course. Themes explored this month will be "Seeds, Glorious Seeds", "Frogs in My Pond", "Things We Can Plant", and "Rockin' around Hanging Rock". See you at the club! Fee: \$48 (\$40 NBS members). Class size: 10

For children in grades 2-5

FROM BUFFLEHEADS TO WAXWINGS: BEGINNING BIRDING FOR CHILDREN

Saturday afternoons May 7, 21, and
June 4 2-4 pm

This program invites children into the world of Aves, otherwise known as Birds. Lisa Pritchard, former NBS Education Coordinator will teach participants about bird adaptations using the Sanctuary's museum specimens, how to identify birds at the feeder, ocean, field, and forest, and how to keep a journal of interesting bird lore and sightings. All classes will have some indoor and outdoor learning time. Participants should bring binoculars, colored pencils in a case, and a backpack to carry gear. An easy to follow children's field guide and journal is included in class materials. Wear shoes for hiking and dress for the weather. Fee: \$36 (\$30 NBS members). Class size: 8.

For children in grades K-12
**SPRING EVENTS IN THE
CHILDREN'S GARDEN**
Wednesdays April 13, May 11, and
June 8 3:30-4:30 pm

The Children's Garden is getting started late this year, due to the wintery weather. We will be welcoming newcomers who would like to join us for our Spring sessions- even if you miss one! Sharon Culberson and Lisa Pritchard will be helping kids plan, plant and harvest veggies and flowers from this special place. Come join the fun! Parents are also welcome to take part with their child. Garden Club Members are invited back in the Fall to continue with the Harvest and cleaning up of the garden beds. Fee: \$8 (includes the making of a garden t-shirt).

For children in grades K-4
HUMMINGBIRD HABITATS
Wednesday, June 8 4-5 pm

Plant a garden and make a birdfeeder for the Ruby throated Hummingbird, our one local species of "hummer". Red, purple, and yellow flowering plants will be planted in the Sanctuary's Hummingbird garden. A simple birdfeeder to take home and directions for your own home "hummer" garden will be passed out. Children entering grades K-4 are welcome to participate. Fee: \$7 (\$5 NBS members). Class size: 10

**To register, please use
form on page 13**



Seasonal Specials for Kids

For children entering grades 5-8...
HUNT RIVER CANOE TRIPS
Wednesdays July 13 or August 10
9 am-3 pm

No previous canoeing experience is necessary for this trip down the gently flowing Hunt River. The Hunt River flows through the Davisville refuge which is owned and managed by the Rhode Island Audubon Society and was listed as a significant natural area of R.I. in 1971. Hap Morgan and Larry Taft will lead these trips, paying close attention to improving canoeing skills as well as observing wildlife from a canoe. Canoes, paddles and life vests will be supplied. Just bring your lunch, dress for the weather and wear shoes or sneakers you won't mind getting wet. Fee: \$40 (\$35 NBS members). Class size: 20.



For children in grades 2-4
DOWN TO EARTH DAY
Hike to Sachuest Point
Saturday, June 4
(Rain date June 11)
9:30-2:00 - Parents pick children up at
Sachuest point parking lot

Hardy, high-energy, down-to-earth kids are invited to take a hike! Teacher/Naturalist Karin Lucci will lead a fun hike from the Norman Bird Sanctuary to Sachuest Point with stops along the way for lunch and exploration. Hikers are asked to bring a backpack with a bag lunch, and to wear shoes and clothes that you won't mind getting a little sandy, wet or dirty. We plan to leave NBS at 9:30 am and parents should pick up hikers at the Sachuest Point parking lot at 2:00 pm. Fee: \$18 (\$14 NBS members) Class size: 10

For Families... For Fun

SPRING NIGHT HIKE FOR ADULTS AND FAMILIES
Friday, May 27, 7:30 pm

Please come and enjoy a guided spring Night Hike along Sanctuary trails. We will look and listen for spring peepers and other night creatures. We will also check out the spring constellations. The Sanctuary is only open at night for special programs so don't miss a great opportunity to find out what goes bump, splash and swoosh in the night at NBS! Fee \$9 (\$6 NBS members) adults, \$4 (\$3 NBS members) children. Class size: 10

**WHALE WATCH
WITH THE CENTER FOR COASTAL STUDIES
ABOARD THE DOLPHIN FLEET**
Sat. June 11 8:30 am
Meet at NBS if you would like to carpool

Please join us as we board a vessel from the Dolphin Fleet working in cooperation with the Center for Coastal Studies. Scientists on board these vessels will be studying the migration of the Humpback, Minke, Right, and Finback whales as they swim northward during this season. We may be lucky enough to see them "spy hop", "breach", or just glide in and out of the waves nearby. The sanctuary carpool will leave for the Cape well in advance of the boat boarding time, in case of heavy traffic, or if participants would like to eat lunch. (Newport-Provincetown is approximately 3 hours). The four hour boat trip will depart at 1:30 pm (Boarding time is 1:00), and return at approximately 5 pm. Participants should dress for the weather, in layers. Food is not included in the fee, but may be brought from home, bought on board the boat, or in Provincetown before or afterward. Binoculars, sunscreen, and cameras are recommended. The trip will be cancelled if the weather is strongly inclement, and the fee for the trip will be refunded. Children are welcome, but must be accompanied by an adult. Pre-registration and pre-payment are required by May 21. Fee: \$ 22 (\$18 NBS members) adults

\$ 17 (\$15 NBS members) children ages 6-12
\$ 9 (\$ 6 NBS members) children under 6

**THE FASCINATION OF
DRAGONFLIES AND
DAMSELFLIES**
Wednesday, July 20 7 pm

These winged creatures amaze us every Summer as they dip and dart in and over the pond. Learn about their behavior, their biology, and some of their haunts with Ginger Carpenter, Director of Science and Stewardship at the Nature Conservancy's Rhode Island Field Office. A "Dragonfly Specialist" of 13 years, Ginger will introduce us to these incredible insects through a colorful slide presentation. You'll never look at these creatures through the same eyes again! Also on hand will be Ginger's book, Dragonflies and Damselflies of Cape Cod (species in R.I. are the same), the only guide in our area. Copies of this field guide will be available for sale through the Barn Owl Shop. Fee: \$4 (\$2 NBS members)



New Sanctuary Members since 1/94

We thank you for your support

STUDENT

Lori Engustian
Sean Fitzgerald
Doris Groner

INDIVIDUAL

Lizzy Brown
Lurleen Dillman
Richard Grosvenor
Bruce Howe
Leslie Lindeman
Ray Payson
Mark J. Simmons
Terry Tefft
Gretchen Wagenbach

FAMILY

Mr. & Mrs. Glen Bacon
Jeff Barber
Betty Beason
Mr. & Mrs. Bruce S. Benkhart
Ms. Emily Zurlnick & Mr. Alan Bishop
L. Bonier
Roger P. Braman
Jan Branco
The Carellas Family
Mr. & Mrs. John Coletti
Mr. & Mrs. Fred Dallinger
Mr. & Mrs. Dennis Dougherty
The Durand Family
Dr. & Mrs. Steven Freedman
Mr. & Mrs. Richard Friday
Mr. & Mrs. Mark Helmkamp
Dr. & Mrs. Herstoff
Mr. & Mrs. Barry Kevin
Mary Ann Kossak
Mr. & Mrs. Michael Maddox
Mr. and Mrs. Jeffrey Martin
Mr. and Mrs. Charles J. Moore
Mr. & Mrs. Ralph Perry
Mr. & Mrs. Jim Shannon
Mr. & Mrs. William Shore
Mr. & Mrs. Ronald Stearns
Patrick Swistak
Kathleen Weinheimer
Mr. & Mrs. Harold Weymouth
Jed Wilcox

CONTRIBUTING

Mr. & Mrs. Christopher Haynes

Milestones

This winter, the Sanctuary lost a great friend with the passing of Millie House. Millie was a wildflower expert and advocate, often leading Sanctuary walks in the Fall. She taught us a great deal about the beauty and importance of native species. She will be greatly missed.

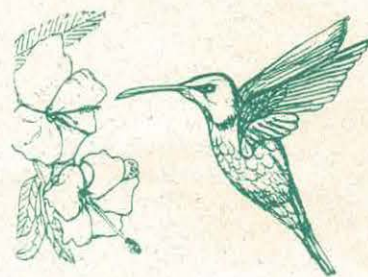
Animal Pause... Tidbits for Spring

Good Bugs: Save some moths! Give up your outdoor "Bug Zappers"! Studies indicate that these lights do not lure mosquitos. Instead, out of 3,212 insects zapped on an average night, only 3.3 percent were female mosquitos! Insects attracted to the lights include many beneficial insects such as lacewings, crane flies and pollenating moths. Mosquitos, on the other hand are attracted to the carbon dioxide emitted by humans and other animals, not ultra violet light. So, unplug those useless machines, buy some citronella patio candles, put up a bat house (bats can eat 600 insects/hour!) and stock up on your favorite bug repellent!

Injured wildlife: The Sanctuary will act as a referral and information center concerning nuisance animals or animals needing veterinary assistance. We cannot however, go out and pick-up animals on a regular basis nor can we provide veterinary care. Furthermore, with the onset of rabies in R.I., we cannot take any target animal on the premises as directed by the state i.e. raccoon, skunk, fox, or bat.

If you would like to help take care of any injured or young displaced animals, you will need a permit, lots of time to devote and proper housing facilities. Please contact DEM for guidelines on obtaining a wildlife permit. Call Lori Suprock at 789-0281.

Window fatalities: With the Spring season getting underway, many birds are setting up territories and looking for mates. With this increase in activity comes many window fatalities, as the birds see their reflection in the windows and embark on a pursuit. If a bird hits your window, it may be only stunned for ten minutes and then fly off. Worse, it may break its neck, or suffer brain damage. Death will usually be immediate, but not always. Sometimes, shock may set in. Often the shock is treatable by swiftly and carefully placing the injured bird in a small covered box and waiting an hour or two. If recovered, the bird will be able to fly off and resume its annual courtship activities. In the Sanctuary's "Barn Owl Shop", we sell "window



hawks" that adhere to a window and look like a predatory hawk. This simple device can scare songbirds away from a potential window hit. Other preventatives include placing fine netting outside your windows, or window socks or chimes that break the reflection and move intermittently.

And lastly, please help us spread the word... A "baby bird" (A fledgling) is not an orphan. Please let nature take its course, as it usually has everything under control. Call us for over-the-phone advice, if necessary before bringing the bird to us! Remember, the Sanctuary is not a rehabilitation center. Thanks and have a healthy Spring.

In the Community...

Local Land Trust Protects First Parcel

Last December, the Aquidneck Island Land Trust (which holds its meetings here at NBS) recieved a donation of land from Mr. John J. Slocum, in the form of a conservation easement, on a 5 acre parcel on Bellevue Ave. in Newport. The easement protects an historic landscape designed by Frederick Law Olmsted. Congratulations to a "sister" organization!

Earth Day Fair '94

The Norman Bird Sanctuary will be helping to celebrate Earth Day on Aquidneck Island on Saturday, April 30th in Touro Park, Newport, from noon-4 pm. There will be a variety of entertainment, food, games, and music, as well as display tables of organizations supporting this day. The fair is sponsored by the Aquidneck Island Earth Day Committee and Turning the Turtle.

Birds and Breakfast-May 15 1994

Help support our Spring fundraiser by baking some goodies to add to our buffet breakfast. If you have baked for us in past years, you are on our "baker list" and will be called on again! If you are new to the area, or have never baked and would like to, please call the Sanctuary (846-2577). We are looking for 2-4 dozen muffins, or a special coffeecake, or a quick bread of your choice to be delivered to the Sanctuary by May 14 at 5 pm (Or you can bring it with you when you come to the Breakfast-see page for details).



Spring /Early Summer Program Registration for Adults, Families, and Children's Programs

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

Name : _____ Grade : _____
 Address: _____ Age : (if child) _____
 Town : _____ Phone: Home : _____ Work : _____

Program Title	Date(s)	Program Fee
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____

TOTAL PROGRAM FEES:
TOTAL FEES ENCLOSED:

Parent Authorization Emergency Form:

For children ages 16 and under attending NBS programs for 3 hour duration or more, parents must complete the following. Two siblings can use the same form as long as there are no special needs for either child:

Child's name : _____ Parent or Guardian: _____
 Phone Number(s) where we can reach you during program hours: _____
 Neighbor or Relative: _____ Phone: _____
 Doctor: _____ Phone: _____
 Allergies/Medications/Special Needs: _____

Waiver: In the event that I cannot be reached in an emergency, I hereby give my permission to the Norman Bird Sanctuary's staff or medical personnel to take emergency measures as necessary.

Parent Signature: _____ Date: _____

NBS Membership

To become a Sanctuary member, or to renew a membership, please check the appropriate category and include membership dues in with your program registration check. Thanks for your support !

☐ New ☐ Renew
 ☐ Individual (\$20) ☐ Family (\$30) ☐ Contributing (\$35)
☐ Institution (\$100) ☐ Patron (\$100) ☐ Supporting (\$250)
☐ Sustaining (\$50) ☐ Benefactor (\$500) ☐ Student (\$10)

Name of Member: _____
 Address: _____ Town/City: _____ Zip: _____
 Phone: _____

Please make checks out to the Norman Bird Sanctuary
 Send to: 583 Third Beach Road, Middletown, R.I. 02842

TOTAL AMOUNT ENCLOSED: _____



NORMAN BIRD SANCTUARY

583 Third Beach Road
Middletown, Rhode Island 02842

Non-Profit
Organization
US Postage
PAID
Newport, RI 02840
Permit No. 1

To current resident or

The Norman Bird Flyer is published quarterly by the Friends of the Norman Bird Sanctuary, a non-profit corporation organized to support the mission of the trusts established under the Will of Mabel Norman Cerio. Our mission: to preserve the 450 acre Norman Bird Sanctuary for the protection of animals and birds and for the enjoyment of the public; to assist the Trustee(s) in the overall management and development of the Sanctuary; to conduct programs for children and adults in environmental education and natural sciences; to work with individuals and groups in the region in the preservation of natural habitats and open space.

Trustee: Rhode Island Hospital Trust National Bank
Friends of the Norman Bird Sanctuary Board of Directors
1993-94 -Betsy deLeiris- Chair, Dick Boenning- Vice Chair,
Charles K. Moore- Secretary, Paul Raducha- Treasurer,
Lauren Carson, Thomas Gunzelman, Kevin Healy, Kathy
Irving, Alan Libby, Candace Powell, Horatio Rogers,
Jocelyn Sherman, David Steele, and Christine Thomas.
Executive Director: Lawrence Taft
Office Manager: Susan VanDerhoof
Education Specialist: Hap Morgan
Teacher Naturalist: Karin Lucci
Caretaker: Matt Benson
Maintenance Assistant: Forster Peabody

Newsletter Editor: Lisa Pritchard
Graphics : Lucia deLeiris, Amy Wright, and UMD
Illustration students under the direction of Bob Barry.
Printing: PDQ on recycled paper with soy ink

Address: 583 Third Beach Rd. Middletown, R.I. 02842
Telephone: (401) 846-2577

Spring Hours: Open Tuesday-Sunday 9 am -5 pm. Closed Mondays except for holidays.
Memorial Day-Labor Day: Open every day 9 am-5 pm and Wednesday eves. until dusk.

*Please do not bring your dog, or bike on the trails.
*Recycle this newsletter-pass it on to a friend..thank you.

New Hours: NBS members are welcome to hike on the trails Wednesday eves. til dusk June 1- Aug. 31

Summer Employment Opportunity:

Youth Conservation Program: YCP participants will work with a supervisor on trail maintenance and wildlife conservation projects for four weeks. Applicants must be at least 14 years old, have an interest in natural history and be able to perform vigorous outdoor work. A small stipend is provided. Application deadline is May 18th.

Summer Volunteer Opportunity:

Teacher Naturalist Assistants: Very important "TNA"s will be needed to assist Teacher Naturalists during the 1994 summer camp season. Interested applicants should be at least 13 years old, enjoy working with small children, and love to explore nature. The camp runs from June 27 -to August 26 (includes a training week). Call or stop by to pick up an application.

For more details and applications contact the NBS office.

Nature Day Camp

With Summer just around the corner, it's time once again to begin thinking about camp for your children. Our popular Nature Day Camp is for those who love being outdoors, love having fun and love learning about nature too. We have programs for preschool right up through six grade. Please join us for a Summer full of fun and nature learning. Camp begins on Monday, June 27th. We have a few scholarships available for children of families with limited economic means. Please call the Sanctuary for more information.

Sponsor A Child

Each year, NBS members have graciously sponsored needy children who would benefit from a full week at Nature Day Camp, (grades K-4) or Explorers (grades 4-6) during the summer months. Agencies and schools, including Child and Family Services, Project Head Start, the Jamestown School and Gaudet Middle School have helped us locate these children. If you or your business wishes to be a sponsor for one, or many of these children, please enclose a check for \$100 (the member's fee) per child, and send care of NBS Summer Camp Sponsor Fund, by June 1, 1994. Your generosity will be appreciated.