JOHN'S BEE'S

Beekeeper John Sullivan is a familiar face here at the Bird Sanctuary. Somewhere above 80 years of age he has been tending bee hives and the public's bee related problems here at the Norman Bird Sanctuary for close to twenty years. Those who know him know that he is well informed on many subjects. On these pages we we've restricted our questions to the topic of bees and hives.

How long have you been keeping bees, John?

I started keeping bees when I was 10 years old. I kept my bees in laundry soap boxes, 16x12x8 or 9 inches. A hive too light last through the winter, I took what honey had; I would have to smother the bees to get it. Hives that felt heavy enough to make it through the winter safely; I kept. The ones that felt like a solid block of oak; that was my honey crop. Right now I have 50 hives, I have difficulty keeping up, but this year I have someone to help me.

What keeps bringing you back to beekeeping?

My first reason for keeping bees was because I like honey. We had a big family and honey was expensive. The only way I was going to get honey was if I produced my own. What keeps me at it? They say you get bitten by the bug or, in this case, stung by the bee once, and that's it.

How is honey made?

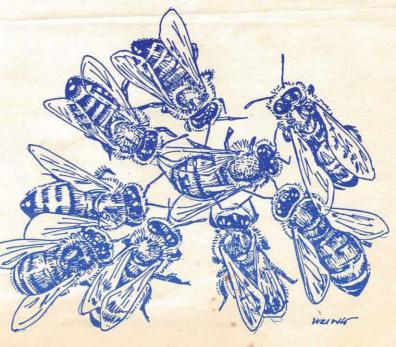
The bee gathers nectar and has to manufacture it into honey. Nectar is about 70% water when the bee gathers it. The bee has to evaporate the excess water out of it as well as process it, to turn it into honey. Finished honey shouldn't be more than 17-17½% er, otherwise it will ferment. So bees to ventilate the hive all the time. They maintain a temperature of approximately 93°. They fan their wings and drive air into the hive usually from one side of the entrance, and pull it out from the other.

Spring, 1985

Then there are bees placed throughout the hive to keep the air moving. Where the nectar is being stored they spread themselves onto the comb and fan air directly onto the nectar. In Newport County, where the humidity is so high, the evaporation takes longer so the bees work much harder.

Does Aquidneck Island produce some good honey?

Oh yes! The honey produced here is very good, and there is a great variety. You see we don't have many crops big enough to produce specific types of honey, with the exception of buckwheat. When the nurseries harvest their young trees they plow up the ground, manure it and plant buckwheat to build up the soil. Buckwheat is a good soil builder because it produces a tremendous root system. It produces a lot of honey and pollen too. The honey is the darkest honey known around here, about the color of blackstrap molasses. All the darker honeys tend to be stronger flavored and thicker. For me, the very light honey



Bees, cont.

-clover- is only good in coffee or tea. I like a little flavor. Black locust on the other hand, is a tree which produces honey white like water, colorless. People see that and they don't think of honey so it's used for blending. It's also used pure in exhibits and honey shows.

There is a popular song about tupelo honey. We have a lot of tupelo trees in the Sanctuary. Are they good honey trees?

Now tupelo trees are male and female trees. The female blossom is insignificant, but the male flower blossoms into a thick rosette. The bees love that pollen. When the male tupelo tree is in bloom it's just like there was a swarm of bees in it. Down South it's a very important bee tree.

What do the bees do with the pollen, John?

Pollen is the protein food, honey is the carbohydrate. The bee larvae are fed a mixture of pollen, water and honey. Actually the nurse bees consume these three things and manufacture it into two foods; beebread and royal jelly. These are regurgitated into the cells of developing bees. The worker bee is fed a little royal jelly for the first few days of life then it is fed nothing but royal jelly. The drones are raised just on beebread. No royal jelly for them.

What about beeswax John, Where does that come from?

From honey. The bees making beeswax, gorge themselves with honey then rest to the side of the hive. The wax appears on little pockets on the underside of the abdomen and it comes out a scale. It's liquid until the air hits it. The bee digs the wax scale out of its pockets with little hooks on its second pair of legs and with some help from the front legs moves it to her mouth parts where it can be softened and made pliable so it can be worked onto the comb. It then turns and butts the wax with its head so it won't fall out of the cell. Another bee then comes in and with its head shapes the wax into the six sided cell.

Many of us have a kind of built in fear of all insects, especially those with stingers. We try to get our summer campers to get over their fear and to see the importance of insects like bees. Can you comment on that?

Well, it should be said that anybody who knows they are allergic to bees should not think of keeping them. Even if you are not allergic, it is possible to become allergic, so no one should be careless about getting stung. It should also be said that bees don't generally sting unless they have good reason to be angry. I've seen children and adults throwing stones at swarms and hives in walls of old houses because they didn't understand this. And bees of course are much more important as a pollinator of crops than as producers of honey, pollen or wax. Many of our food crops are pollinated by bees. Our agricultural crops of food and fiber amount to between 4 billion and 8 billion dollars. The best thing you can do if you're interested in learning about bees and beekeeping is to join the R.I.Beekeepers Association. They teach an excellent course in beginning beekeeping. Write to;

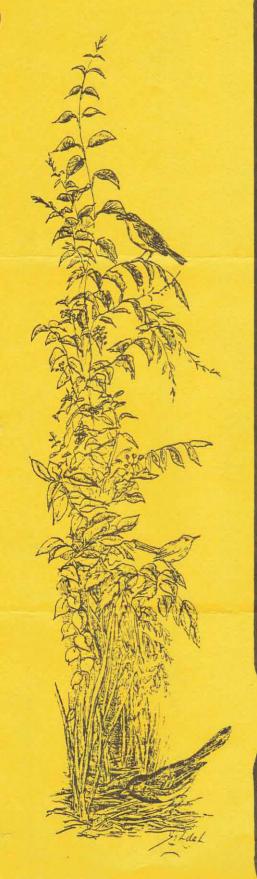
> Elizabeth Latham, Secretary Pole 36 Hopkins Avenue Johnston, R.I. 02919



John Sullivan with a few tools of the trade by the Norman Bird Sanctuary's demonstration hive in the orchard.

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

Trustees: Louis Lorillard, RI Hospital Trust National Paddisory Committee: George Warren - Chair, Christine Callahan, Patricia Corgan, Norman Hall, Frances Holmes, William Horton, Virginia Laughlin, Charles Levy, Barry Murphy, Harriet Phelps, Virginia Purviance, Peter Randall, William Rogers, Barbara Sturtevant, Hope Van Beuren Co-Directors: Deborah Clark, Timothy Traver Norman Bird Sanctuary, 583 Third Beach Road, Middletown, Khode Island 02840, Telephone: 401/846-2577.





BIRDS and BREAKFAST at the

Norman Bird Sanctuary

A spring morning of guided walks, slides and bird exhibits followed by a home cooked breakfast.

May 19, 1985

Walks will leave from the barn continuously throughout the morning, beginning at 6:30. Breakfast seatings at 7:30, 8:30, and 9:30.

BIRDS AND BREAKFAST MENU

Eggs Florentine

Eggs and Sausage Casserole

Eggs Creole

Homebaked Muffins, Rolls, Breads, Coffeecakes

Sausage

Pancakes

Juices

Fruit Salad

Coffee and a Variety of Teas

FOR INFORMATION CALL 846-2577

All proceeds from Birds And Breakfast will go toward the creation of a trailside natural history museum in the Norman Bird Sanctuary's barn. These funds will be matched on a one to one basis by the Rhode Island Foundation.

Additional contributions toward this

project are welcomed.



DEBMIL NO: 43
NEMBORT, R.I. 02810

DIA9

NON-PROFIT ORG. U. S. POSTAGE NORMAN BIRD SANCTUARY
THIRD BEACH ROAD
MIDDLETOWN, R.I. 02840



Ticket Reservations
Please send me adult tickets an child tickets to Birds and Breakfast Adults \$5.00 Children \$3.00 My preferred breakfast seating is:
7:308:309:30 (1st & 2nd choice) I am unable to attend, but I would like to contribute to the creation of the Sanc-
tuary's trailside natural history museum. Name
AddressAmount Enclosed \$

Summer Challenge

Open to boys and girls entering grades 5 - 7 next fall.

SCHEDULE

You may enroll for a single week or for any combination of A, B, or C weeks We do not recommend repeating the same session twice.

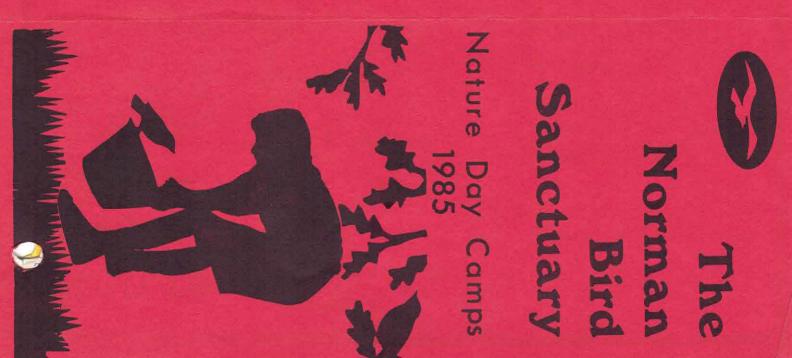
Session A	Session B
July 1 - 5 July 22 - 26 August 12 - 16	July 8 - 12 July 29 - August 2 August 19 - 23
Session C	
July 15 - 20 August 5 - 10 August 26 - 31	Summer Challenge runs from 1:00

FEES

	Sessions A or B	Session C
Sanctuary Members	\$30	\$40
Non-members	\$35	\$45

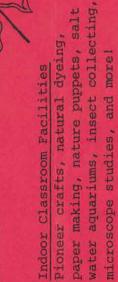
- A PERSONAL CHALLENGE Challenge your skill, your concentration, and your ability to work together with others as you face "The Wall", "Solo", "The Deadly Poisonous Peanut-Butter Pit" rock climbing and more. Learn about yourself and your relationship to the natural world.
- B THE NATURAL WORLD Explore the world of animals, plants, insects, cliffs, and the shore. Know the ways of the forest. Learn which wild plants you can eat to survive and how to prepare them in delicious ways and learn which plants to avoid!
- C OUTDOOR LIVING Learn the skills you need to live outdoors for a short time: hiking, first aid, trail food preparation, fire building, and more. Build your own hammock, then put it to the test on a Friday night camping trip on Prudence Island. Fee includes ferry, trip, food, camping fees and hammock.





lature

children, with a maximum of 10 Limited Enrollment
Each session is limited to 60 per instructor.





Adventure

then explore their natural habitats.

Learn about wild animals close up,

Live Animals

provides trust and confidence building Our adventure course activities.

Campers will learn about how they fit into our marvelous Environmental Education web of life.

fields, beach and marsh and 450 acres of ponds, forest, creatures dwelling within. and animal Nature's Classroom all the plant

SCHEDULE

9:00-12:00 Fri Regular Session: Mon -Extended Session: Mon -

#2 6# #4 July 22-26 #5 Jul 29-Aug 2 #6 Aug 5-9 Nine 1-week sessions: #1 July 1-5 #4 July #2 July 8-12 #5 Jul #3 July 15-19 #6 Aug

12-16

Aug Aug Aug

26 - 30

Extended Session \$50 \$60 Session \$30 Regular \$35 Bird Sanctuary Members Non-Members

Family Discount: 10% off total for two or more children from same family in same session (no camp July 4) 20% discount Session #1:

in education and natural sciences,

Professional Staff College trained staff, interested

are enthusiastic about working with children in the outdoors.

girls from pre-school entering 4th grade next fall. Open to boys and through those

REGISTRATION

To register, call:

846-2577

After you have registered by telephone, send this form, along with payment to:
Norman Bird Sanctuary

session your child attends, We must receive payment by two weeks prior to the first day of 02840 Third Beach Road Middletown, RI each

. 1	п.
اب	
201	
	1.5
=11	
-41	
<i>a</i>	
إينان	
-	
2	
₹	
□	
m.	
100	
a 1	
2	
4	
15	1
=	
\rightarrow	
-11	
7	
+3	
_	
	1 18
2	
2	

Joining No Sanctuary Member? Yes Child's PROGRAM

Total Enclosed

*Family membership in the Norman Bird Sanctuary is \$20 per year and includes program discounts, free admission, and the Norman Bird Flyer.

NORMAN BIRD SANCTUARY EVENTS

Bird Observation and Identification for Beginners

Three Tuesday evening classes: May 14, May 28, and June 4, 7:00 - 9:00pm. Also, three Saturday field trips: May 18, June 1, and June 8.

Birding can be a focus for outdoor activities or be a social event. It can develop into scientific study, or be just an aesthetic experience. You can watch birds from the kitchn window or you can search for the migrating varieties. This course will discuss how to enjoy birds, how to use binoculars and field guides, and how birds are grouped. Adaptations for survival, habitats, diversity, relative abundance, and bird behavior and physical sturcture will be included. Instructor: Lois Vaughan.

Lois was assistant director of Hale Reservation, a 1200 acre outdoor education center in Westwood, Ma. A graduate of Cornell, she has led field trips for Ma. Audubon, taught ornithology, and been involved in bird banding for over eight years. Fee: \$45 (\$30 NBS members).

The Ecology of Middle Ridge 26 May 1:30 pm - 3:30 Pm

The rocky ridges here are drier, more exposed to the wind, and lacking in water and soil. The plant life reflects these harsh conditions. Come for a closer look at this interesting environment and the adaptations exhibited by its plant forms. Many of the plants present on the ridges are are found nowhere else in the refuge and will be blooming at this time of year. Instructor: Tim Traver

Tim is the codirector of the Norman Bird Sanctuary.

Fee: \$4 (\$2 NBS members)

Pudding Stone and Other Geological Entres

9 June 1:30 - 3:30 pm

This program will focus on the landforms and rock forms of the Sanctuary. With a gentle walking tour accompanied by narrative, participants will learn of the Earth forming processes which shaped the landscape through geological time. Instructor: Norman E. Champagne

Norm is a long-time amateur geologist and friend of the Norman Bird Sanctuary. We has taught numerous workshops here and s currently teaching physical science at Tiverton Highschool.

Fee: \$4 (\$2 NBS members)

A Day in the Life of a Honey Bee Saturday morning, 8 June 10:00am - 12:00

Pry up the inner cover of an active bee hive and discover the new and remarkable world of the honey bee. See recently laid eggs of a busy queen, trace the progress of developing bee larvae, watch fully mature worker bees emerge from their cells, and see the hive work together to survive. Instructor: Henry Corr and John Sullivan

Henry is the keeper of 10 hives at the Bird Sanctuary. He has taught short courses in introductory bee keeping and is an active member of the RI Beekeepers Assoc.

member of the RI Beekeepers Assoc. John Sullivan (see newsletter).

Fee: \$4 (\$2 NBS members)

Starwatching 14 June 9:00pm

A guided journey through the heavens. Bring blankets, binoculars, and a flashlight.

Instructor: Delia Clark.

Delia is the codirector of the Norman Bird Sanctuary and is a collector of stories and myths about the stars. Fee: \$4 (\$2 NBS members)

A Day With Archeologists

Archeological Investigations in

Southeastern, New England

Saturday 13 July 9:00am- 4:00pm

Fee: \$30.00 (\$20.00 NBS member)

How does the archeologist go about studying his subject matter - in this case the prehistoric inhabitants of Southeastern New England? Peter Thorbahn and Allen Leveillee of the Public Archeological Lab will introduce participants to the tools and techniques the archeologist employees in his search for clues to the past. The Sanctuary serves as the outdoor laboratory for this program: burial sites, shell middens and other primitive features will be the focus of this groups' investigations.

Sunday Bird Walks Every Sunday, 8:00am.

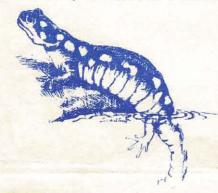
Spring birding is the most exciting of the year and Spring is a great time to start if you are a beginner. You can increase your repetoire gradually as the colorful songbirds migrate through our area. Join us! These informal walks are free and open to everyone.

WHY A BOARDWALK?

Last summer the Conservation Youth Group, eight youngsters from a federally subsidized summer employment program sponsored by New Visions and the Sanctuary, built a boardwalk. This spring and summer we plan to build two more. Though somewhat artificial looking, boardwalks serve two important functions here.

The foremost reason for a boardwalk is that it concentrates foot traffic in areas where trails are getting badly eroded and widened. Soil compaction tends to grow outward along the sides of trails as walkers seek smoother, drier treadway. These boardwalks bring the path back to the middle, giving soil and vegetation a chance to recover lost ground. Of course, another reason for the boardwalk is to keep the feet dry. Many a walker has come back with brown white socks. Quite a few of the trails here pass through wet areas. A third reason for walkways is to protect plants easily trampled and killed - mossy stream banks stay lush green and skunk cabbage patches remain unscathed.

The boardwalks have been a source of great pride for their youthful builders, who often have had little real prior building experience. This summer's projects will complete the Sanctuary's current boardwalk plans.





NORMAN BIRD SANCTUARY
THIRD BEACH ROAD
MIDDLETOWN, R. I. 02840

BIRDS AND BREAKFAST

Join us as we breakfast with the birds! This year's festivities will include guided bird and wildflower walks and a home cooked breakfast. The Sanctuary's barn will be decorated with spring flowers, artistic bird nests and a gay aerial may pole. This year's proceeds will help to fund the Sanctuary's new trailside natural history museum. Hope to see you there!

VOLUNTEER JOB OPPORTUNITIES

If you are looking for something concrete to show off for your volunteer hours, you might not be able to find a better job than volunteering in the Norman Bird Sanctuary's garden beds. No matter what color your thumb is, if you're willing to put in one hour per week (or less - we're flexible!) we can put you to good use in one of the gardens on the Sanctuary grounds.

From the picture-perfect colorful front perenniel bed to the hopelessly-in-need-of-someone-to-take-charge rear herb garden, there's plenty of work for volunteers. Garden Committee Chair, Jill Hall, will provide training and help you to establish a volunteer schedule that suits you and that is sure to help us tremendously. If you are interested in this or other enjoyable volunteer opportunities at the Norman Bird Sanctuary, please contact Delia Clark in the Sanctuary office: 846-2577.

NON-PROFIT ORG. U. S. POSTAGE PAID NEWPORT. R.I. 02840 PERMIT NO. 43

