



# FORGET - ME - NOT

## Myosotis Messenger

Edmund Niles Huyck Preserve  
P.O. Box 189, Rensselaerville, NY 12147  
(518) 797-3440

### THE DAM AND THE BEES

By Laura Stephenson Carter

Lifeguarding took on new meaning recently when a scientist came to the rescue of some rare bees that had built their nests too close to the Lake Myosotis Dam. While not about to drown, the bees were in danger of losing their homes to the construction crews that began work on the Dam last fall. Dr. Jerome G. Rozen, Jr., an entomologist at the American Museum of Natural History and a member of the Edmund Niles Huyck Preserve Board of Directors, sounded the alarm, and now engineers have roped off the area to protect these ground nesting bees.

It was July 1978 that Rozen and Ned Robert Jacobson, an undergraduate at Rutgers University, discovered the rare bee species--*Macropis nuda*--near the Ordway House on Pond Hill Road. While nests of another *Macropis* species had been located in Russia in the 1920s, the Huyck Preserve site was the first one found in North America. Two years later, several entomologists from Cornell University discovered about fifty *M. nuda* nests near the Lake Myosotis Dam, which is now the only known nesting site for these bees.

#### Solitary Bees

While people may think that all bees live in hives or in social colonies, where queens lay the eggs, and worker bees care for the offspring and defend the nest, the majority of the 21,000 known species of bees are solitary. Each female, working alone, builds her own nest (in the ground, in the case of *Macropis*) and provides food for her

offspring. Unlike honeybees who feed their young as they develop, solitary bees do not even lay their eggs until after they have packed the brood cells with all the food the larvae will need to grow into adults.

#### Building Tiny Tunnels

In the spring, adult *Macropis nuda* emerge from the ground nests. First the males appear, feed on pollen from nearby flowers, then mate with the females when they emerge a few days later. After mating, each female searches for a good place to build her nest, usually in a partly shaded area on a gently sloping surface. She begins digging a tunnel about 3 mm wide, chewing and loosening the soil with her mandibles, scooping up small loads of soil with her forelegs and backing up the tunnel to deposit each load at the entrance.

When she has dug down about 4 or 5 cm, she constructs a small brood chamber (cell) close to the main burrow. She waterproofs the cell by smearing the inside with oil she has collected from yellow fringed loosestrife (*Lysimachia ciliata*) growing nearby. Specialized leg hairs soak up the oil like a sponge. Next she collects pollen from the same flowers--this takes several trips--and when she has enough, she fashions it into a tiny pollen-oil loaf and deposits a sausage-shaped translucent egg on it. She seals the cell entrance with a soil plug, returns to the main tunnel and repeats the process until she has built five to ten cells clustered like grapes around the main burrow.

In a few days, each egg develops into a larva which, over the next two weeks, devours the whole pollen loaf. Then the larva spins a silk cocoon, using special glands in its mouth parts. The back three quarters of the cocoon is a parchment-like fiber, while the front is soft and spongy and less dense, probably so oxygen and carbon dioxide can be exchanged during the larva's development.

The bee larva, completely fed and quiescent, spends the winter in the cocoon until the following spring, when perhaps the warm soil temperatures and sunlight trigger the next phase of development. First the larva sheds its skin and then the pupa (the same life stage as the chrysalis of the butterfly) appears. The pupal stage lasts several weeks and develops into an adult which chews its way through the cell closure and climbs up the burrow, out into the sunlight. The cycle begins again.

#### Cuckoo Bees

Rozen's work with solitary bees has taken him all over the world--the Southwestern United States, Chile, Argentina, Europe, Morocco, Egypt, South Africa, Namibia, and Pakistan. He also studies cuckoo bees, parasitic insects that sneak their own eggs into the brood cells of solitary bees. Rozen has discovered that these parasitic bees, of which there are many species, have devised all kinds of tactics to survive. The intruder female waits until the host female is away from her nest, then  
(Continued on page 5)



## Small Observations & Big Ideas

By Richard L. Wyman, Executive Director

On May 4, about 1000 one-to-two-foot long white suckers swam out of Lake Myosotis, up Ten Mile Creek where they courted and spawned. The eggs hatched within ten days, the larvae began to grow, and soon they began entering the lake gradually. Another life giving event. How could such a behavior pattern have come to be?

Female mallards choose males they like, courtship and copulation follow as do egg laying and parental care of ducklings. The ducklings will grow up and fly south for the winter and return next year to renew the cycle. How could such behavior have come to be?

Trees with their branches laden with leaves, loosely anchored in sodden soil, are toppled by strong winds, leaving gaps in the forest canopy. Seeds buried in the newly upturned soil sprout and grow to fill the holes. A fertilized seed may grow into a

magnificent oak more than a hundred feet tall. Each fall, its leaves will drift to the ground and thousands of tiny organisms gobble up this "litter" and recycle the nutrients. In so doing, they help the tree stay healthy so it can give us the oxygen we breathe. How could this behavior have come to be?

In 1859, Charles Darwin published his *Origin of Species* and changed forever the way we view life. For about 3.5 billion years, life of one sort or another has populated the Earth and evolution has given rise to some 10 to 30 million species that exist today.

Bit by bit our studies unravel the mysteries of life, examine the myriad interactions, and teach us of the balance that is nature. We find that animals behave as if they could think (perhaps they do) and that they "know" which behaviors will ensure their survival. After all, natural selection has favored the

creatures that behave "just so" and they produce offspring that behave the same way. Deviants are weeded out because they either do not produce offspring or produce ones not quite so efficient. The duck that "knows" how to migrate south and back, produces next year's ducklings; the ones that don't know, don't.

Over the eons, ecosystems were built up with these behaving parts to produce functioning communities of plants, animals, and microorganisms that make our life possible. Our small observations of these behaving parts reward us with knowledge to cure disease, to protect the ozone layer, to stave off the Greenhouse effect, to feed ourselves, and to warm our hearts.

Now we are taking apart the system through the extinction of its behaving parts. How many can we lose before the life giving force ebbs? We don't know, yet.

## VINCE SCHAEFER

Dr. Vincent Schaefer, who passed away at the age of 87 last year, was one of the Huyck Preserve's strongest and most faithful supporters since the 1950s, first serving on the Scientific Advisory Committee, and, later, on the Board of Directors. He helped the Preserve expand its research program, furnish its research labs, acquire scientific equipment, and give students opportunities to carry out field research.

Schaefer, considered the father of modern-day cloud physics, is best known for his discovery in 1946 that the dry ice seeding of supercooled clouds could lead to the production of snow and rain. In his twenty years at the General Electric Company Research Lab in Schenectady, NY, he worked closely with Nobel Laureate Irving Langmuir on numerous projects including the invention of the high-efficiency artificial fog smoke screen generator widely used during World War II.

### Self-Made Scientist

Vince Schaefer was a self-made scientist who had no formal college education. He had even dropped out of high school at the age of fifteen and went to work for G.E. to help support his family. His research on the icing of airplane wings and his fascination with snow, set the stage for his cloud seeding discovery. He and Langmuir were trying to figure out why airplanes iced up whenever they flew through supercooled clouds. The moisture in supercooled clouds, from which snowflakes come, stays liquid even at temperatures below freezing, unless something happens to cause the moisture to turn into snowflakes or frozen droplets that might coat airplane wings.

In one experiment, Schaefer created an artificial cloud by breathing into a freezer lined with black velvet and illuminated by a beam of light. The tiny cloud of water droplets, clearly visible against the black background, stayed liquid even though the temperature was only minus 23 degrees Centigrade. He dusted the

cloud with everything he could think of, including talcum powder, to induce snowflakes to form, but nothing happened. Then one hot July day, he threw some dry ice (carbon dioxide at minus 70 degrees Centigrade) into the freezer to help it stay cold. Suddenly the tiny cloud turned into little ice crystals--Schaefer had created a miniature snowstorm! A few months later, he created a real snow storm by seeding clouds with carbon dioxide from an airplane flying over Mount Greylock, Massachusetts.

### Atmospheric Research

While still at G.E., Schaefer was involved with *Project Cirrus*, a government-sponsored cloud research program that included pioneering cloud seeding experiments. He left G.E. in 1954 to become the Director of Research of the Munitalp (spell it backwards!) Foundation, continuing his work in atmospheric studies. And in 1960, he helped found and later became the director of the Atmospheric Sciences Research Center (ASRC), of the State University of New York, Albany. The ASRC is recognized worldwide for its work in atmospheric sciences, including studies of fog and acid precipitation, lightning, cloud physics, solar energy, and bubbles.

In 1959, Schaefer joined the Huyck Preserve's Scientific Advisory Committee and became one of its most active members, according to Robert Dagleish, former Executive Director of the Huyck Preserve. Schaefer urged the Board to offer more than one research fellowship a year, and today, the Preserve funds several research projects annually and provides housing and lab space to other scientists.

### An Inspiration

Schaefer also loved to encourage young people's interest in science, and, in 1959, he founded the Natural Sciences Institute (NSI) to give high school students a chance to experience the

excitement of scientific discovery outside the classroom. Over the next ten years, some 500 students took part in the NSI adventure at several sites throughout the country, including the Huyck Preserve (1965-1968). The Huyck students lived in the Mill House, attended morning lectures at the Rensselaerville Institute (then called the Institute on Man and Science), and worked on their own research projects in the afternoons. Schaefer was proud of his NSI students and kept in touch with a number of them. "Many of them cited the NSI Program as the stimulus which interested them in a science career," Schaefer said (personal correspondence, 1/16/92).

In 1981, Schaefer was elected to the Edmund Niles Huyck Preserve Board of Directors, served as Vice President from 1982 to 1985, and was made an honorary director in 1985. In 1983, he arranged an indefinite loan of a meteorological station from the State University of New York, Albany. He also helped furnish the Eldridge Research Center with lab equipment, cabinets, and benches no longer needed by the state teacher's college (before it became SUNY-Albany).

In addition to his work at the Huyck Preserve, he was an honorary trustee for the Rensselaerville Institute, a trustee at the Mohonk Preserve (New Paltz, NY), involved in the preservation of Dutch Barns, and proposed the Long Path of New York to go from near New York City to the Whiteface Mountains in the Adirondacks. The Trail recently reached Thatcher Park, near Rensselaerville.

Vince Schaefer was and continues to be an inspiration to people young and old. We miss you Vince.

Laura Stephenson Carter



### Annual Science Symposium

Saturday July 23, 10am-2pm.  
Eldridge Research Center  
Pond Hill Road

Researchers will discuss their work and you'll have plenty of opportunities for questions. Join us for this thoroughly enjoyable day including an alfresco lunch by the pond with the researchers, staff, and members of the Board of Directors and the Scientific Advisory committee. Free.

### Environmental Follies Variety Show

Directed by Richard Creamer (ITAD)

Saturday, July 2, 1994  
Conkling Hall  
Methodist Hill Road  
Rensselaerville, NY  
4:00 pm - 6:00 pm

E.N. Huyck Preserve actors guild will present a fundraising variety show with skits, songs, comedy and more. What a great way to start the long weekend! Wine and hors d'oeuvres reception/intermission. Donations at the door.

### Beach Party Fundraiser

Join us at Lake Myosotis for a day of sun and fun on  
Saturday, August 27th,  
1:00 pm to 5:00 pm.

(Raindate Sunday, August 28).  
Swimming, Games,  
Food, Canoeing, and more.  
Cost: donations and food.



## AVALANCHE

By Kevin Omland

Jan. 8, Lincoln Pond Cottage. Eight inches of snow fell last night giving us a total of two feet so far. Snowshoeing would be fun, so I invite Isabella Scheiber (Huyck researcher studying duck parental care) and her roommate, Sharon, to join me in a trek along a creek that runs through the Preserve.

I give them a head start and soon I am following their winding and looping trail through the woods. There is nothing like the sight of that simple but comically haphazard highway, curving around trees, over rocks and under branches. As I hurry to catch up, I am tempted improve on that haphazardness, to take shortcuts across the unbroken snow. But in snowshoeing, it's best (and less tiring) to follow the leader's tracks, so I do.

I soon catch up and we make our way up a shallow sloping valley through open hardwoods. We take turns leading, first on one bank, then the other, sometimes up the creek itself. The ice and snow occasionally settle, with an unsettling "uff." We hurry over those sections staying closer to the bank.

Gradually the valley narrows to a ravine. The walls become steeper and higher, and huge dark hemlocks hang over the southern bank. I've only been to this wild and dark grotto-like ravine once before. Though there are no trails into this beautiful and quiet place, it is easily accessible in winter, over the ice of the stream, and through the deep snows which smooth the terrain over downed trees. Water rushes beneath the ice under our feet as we climb small waterfalls. One cascade makes a strange incessant hissing. We marvel at deer tracks ascending straight up the steepest part of the embankment. Our approach may have startled them.

As I clamber up over one waterfall leading into a new section of the gorge, the snow around me suddenly settles and the whole bank above me gives way. I hear a muffled "ooff" as the fault line breaks, and in five seconds a forty-foot section of the slope has been cleared of

new snow. Isabella says this is just like the avalanches back in her home town in the Bavarian Alps, only smaller.

The sun hardened crust on the north slope is now exposed and the snow above the jagged fault line is still held by trees and rocks. We are ecstatic. That simple movement--a classic slab avalanche--had been beautiful, and it has created new shapes for us to admire.

Now we are in the deepest section of the gorge. We walk below a thirty-foot cliff, and notice several holes where a mink or a raccoon could have made itself very comfortable. A sheet of blue ice hangs from one end where the stream has broken to the surface in a cold gray pool. We pull and prod each other over a ten-foot series of terraced waterfalls, and again I hear "ooff" and, out of the corner of my eye, see the snow begin to move. I rush to get out of the way as the whole snowbank slides onto the creek. The fault line goes right to the top this time, thirty to forty feet above us, and winds along the top of the gorge for well over a hundred feet--quite a chain reaction. We are frightened, relieved to be safe, and ecstatic to have seen another avalanche.

After climbing several more waterfalls, we reach the plateau and head east along the south bank. By now the sun has set, darkness is descending rapidly and stars are beginning to appear. Suddenly, a jet roars overhead, intruding on our mini-wilderness. It's time to head home.

We slide back into the ravine, carrying a ton of snow with us as we plunge over a rough section. At the bottom, I turn around just in time to see Isabella drop over what turns out to be a small cliff. Together we encourage Sharon, warning her to beware of the "bump." We shake off the snow and then wind our way through the darkness, following our old trail back to Lincoln Pond Cottage

### Swim Lessons

Summer's coming and you know what that means... Gardening, barbecues, and watching our kids metamorphose from humanoid to ichthyoid. 1994 Family Members (\$40 level) can enroll their children in the swimming program at Lake Myosotis Beach for free. Barbara Bolster-Barrett is organizing the program this year and six weeks of lessons are scheduled on Mondays, Wednesdays, and Fridays commencing July 6. Call the Preserve to register (797-3440).

### Visitor's Center

Visitor's Center behind the Mill House is open. Huyck Preserve tee shirts and sweat shirts, caps, mugs, identification books for birds and other wildlife, butterfly nets, birdhouse kits, and more are available for purchase.

We need volunteers to staff the center on weekends. If you can help please call Carolyn at 518-797-3440.



## 1994 EDMUND NILES HUYCK PRESERVE RESEARCH GRANTS

Binbin Shao, a doctoral student in the Department of Biological Sciences, State University of New York at Albany, returns to the Preserve to continue her research on the breeding behavior of golden shiners and pumpkinseed sunfish. Golden shiners do not build nests or care for their young, but, instead, spawn in nests of several sunfish species. While foreign eggs may pose a threat to some species (the foreign young could devour the host young, for instance), Shao's research suggests that the pumpkinseed sunfish may actually do better with golden shiners in the nest. This summer she will try to learn why.

Maria Vagvolgi, an adjunct professor of biology at Georgian Court College, Lakewood, New Jersey, has been studying land snails since 1992 at the Preserve and is about to begin a two-year study to determine their roles in the forest food web. She will also be collecting and studying freshwater snails from Lake Myosotis, Lincoln Pond, Ten Mile Creek, and Hagaman Creek.

Chad Hershock, a 1994 graduate with a bachelor's degree in biology from Pennsylvania State University (University Park, PA) is returning for a second summer at the Huyck Preserve to study salamander community dynamics and how acid soil may affect them.

Isabella Scheiber, a graduate student in the Department of Biology, State University of New York at Albany, is continuing her investigation into the adaptive significance of brood amalgamation (the mixing of offspring from different broods) in captive mallard ducks. Pre- and post-hatch brood amalgamation has been reported in twenty-eight waterfowl species, but scientists have never studied this breeding ecology in depth.

Kevin Omland's research on the evolution of male plumage in mallard ducks deals with what scientists call the

hottest topic in behavioral ecology today--female choice. Omland, a doctoral student in the Department of Biology, State University of New York at Albany, has modified the appearance of mallard males in a variety of ways and so far has found that the changes have little affect on female choice. (See article on page 6.)

James Runkle, a professor in the Department of Biological Sciences at Wright State University (Dayton, Ohio), will be resurveying a forest plot he sampled in 1978 and 1986 to determine what vegetative changes have occurred.

Such long term research is vital to gaining a clear understanding of ecosystem dynamics.

George Robinson is investigating the general relationship between land-use history and the rate and direction of forest succession. Robinson, an assistant professor in the Department of Biology, State University of New York at Albany, anticipates that his findings will provide insight into how land use affects the potential for forest regeneration.

Tom Alworth, the Preserve's Research Assistant and Grounds Supervisor, is researching house wren nest building behavior. Wrens build nests in natural cavities, like hollow tree limbs, or in nest boxes like the ones Tom uses in his study. Each male builds a foundation of sticks and twigs, filling the nestbox almost up to the entrance hole, and then the female builds a soft nest of grasses, rootlets and feathers on top of the foundation. Alworth is attempting to determine why the males build the stick foundations--are females attracted to the males who stuff nestboxes with the most sticks? Or do the sticks represent a way that males claim their territories? Alworth has recently learned that the females play a greater role in nest building than he once thought.

(Bees Continued from page 1)

sneaks in to lay her own egg. Some species even conceal their eggs within the cell wall, others tuck them so far back in the cell that the host female is likely to overlook them.

With most species, the parasitic larva, when it hatches, is equipped with extremely long, sharp, pointed mandibles and specialized sensory tubercles enabling it to search out and kill the host egg or young larva. The parasitic larva then changes to a more normal type bee larva and consumes the provisions meant for the host young.

The parasitic bees Rozen would expect to attack the *Macropis nuda* nests are very rare and have not been found in the United States in the last 50 years. Should he discover them on the Huyck Preserve, however, you can be sure he would be more than willing to rescue them.

### Nature Study Program

(July 5 through August 11)

Jessie Huyck Nature Center on Lake Myosotis

10 am until noon

**Tuesdays:** Children who have completed kindergarten through second grades

**Wednesdays:** Children ages 3-5, who have not completed kindergarten

**Thursdays:** Children who have completed third through sixth grades.

*There is no fee for Family Members (\$40 level). The fee for non-members is \$25. Call the Preserve to register (797-3440).*





## STILL LOOKING FOR THE PERFECT MATE

By Kevin Omland

The ugly ducks you see at the Huyck Preserve's Bull Frog Camp aren't the characters in a Hans Christian Andersen fairy tale. They are part of my research project on the evolution of bright plumage in mallard ducks. For three years, I have been studying how female mallards choose their mates: are they attracted by the male's colorful plumage, fancy feathers, or something more subtle but unmeasurable? Males of many species of birds, mammals, fish, insects, and other animals have evolved flashy ornaments or colors designed to attract females for mating purposes. But it's beginning to look as if the male mallards may not even need their dramatic and colorful plumage to attract their mates.

Over the past three winters I have conducted twenty or so different experiments. Typically, I place a female mallard duck in the middle compartment of my special test pen. Then I place a normal male in one of the side compartments, and an "altered" male in the other side. I observe the female's behavior for an hour, watching to see which side she spends most of her time on, and which male she courts.

### Females unimpressed

But no matter how dramatic the changes to the male ducks--whether their curled tail feathers have been simply snipped off, their bill colors altered, green head feathers removed--it doesn't seem to matter to the females. In fact, this year, I took the drastic step of shaving off the green head feathers, white neck ring, and the maroon breast coloration. But even that didn't seem to make a difference. The females were just as likely to mate with these dull gray males as with the more colorful ones.

So that still leaves the question why do male mallards have bright plumage? One possible answer is suggested by the other half of my thesis research which is on the ducks' phylogeny or evolutionary family tree. In a paper soon to be published in the journal Systematic Biology, I have shown that two published

data sets on ducks, one based on anatomical features and the other on new molecular data on their DNA, agree almost exactly on what the duck family tree should look like. Both indicate that there are several sub-groups of dabbling ducks, including the mallards, the shovelers, and the pintails.

### Dull relatives

Within each of these groups, there is an interesting pattern. For example, the Northern mallard is found throughout the Northern hemisphere and the males are colorful. Twelve species closely related to the mallard that live in South America, Africa, and the Pacific Islands, have males with dull brown female-like feathers. The American black duck, endemic to the northeast, also has dull feathered males. Each of these thirteen relatives have presumably descended directly from the mallard. Several hundred thousand years ago, when a few mallards got lost on migration and ended up in Hawaii, or South Africa, or a glacially isolated section of the Northeast, they stayed there and began breeding. In these small founder populations, it seems likely that all thirteen of the daughter species lost the bright male plumage. This pattern has always puzzled ornithologists, but it makes more sense in light of my experiments. If bright plumage really does not increase a male's chances of attracting a mate, then it makes sense that species would lose this feature.

The mallard has a huge population worldwide--over 10 million individuals breed throughout North America, Europe, and Asia. Such a huge species has a great deal of evolutionary inertia, and it may be difficult for the species to lose bright plumage, especially if it is not very costly in terms of attracting predators, etc. However, when small founding populations break off, they may be freed from this inertia and during a rapid spurt of evolution lose their bright plumage. So the bright mallard plumage may be left over from long ago when it was

useful for mate attraction.

Meanwhile, my studies continue. Now, as I observe the ducks in their holding pens, I am scoring differences in the males' natural plumage. Perhaps the females in the holding pens are choosing the brightest males, but I have not analyzed this data yet. I have noticed some surprising behaviors, however. While many migrant birds, like ducks, are monogamous in the wild, captive flocks may not be. In my flock, for example, there are several "stud-ducks" that seem to be paired with three or four females. Similarly, there are a few females that have two or more males following them around. One female has had a different mate for every month since December. I guess she's still trying to figure out what makes the perfect mate. That makes two of us.

## Boat Needed

Three years ago our aluminum john-boat disappeared from the beach and we need a replacement for the 1994 season. The Preserve has been using Marilyn Wyman's personal boat since then, but it's heavy and old. If anyone would like to loan or donate an aluminum john-boat to the Preserve, we would greatly appreciate it. Call Carolyn at 518-797-3440.

## 1994 SCHEDULE OF HUYCK HIKES<sup>1</sup> & OTHER ACTIVITIES

If females select the best mate to insure proliferation of the species, why does the female black duck select a Mallard mate over a male of her own species? What could be the benefit of mixing offspring in the Mallard population rather than the genetic mother raising her own brood? What can the Blue Spotted Salamander teach us about acid rain? Huyck Hikes are opportunities for you to accompany researchers to their study sites and learn how scientists untangle these and other mysteries of nature. You'll discover answers to your questions and then you'll discover new questions. Won't you join us for these stimulating and entertaining activities?

### May

7 Tom Alworth Bird Watcher's Hike<sup>2</sup> (7:00 am)

### June

12 Tom Alworth House wren reproductive behavior  
18 Members Annual Meeting<sup>3</sup> (11:30 am)  
19 Maria Vagvolgyi Mollusks of the Huyck Preserve  
26 Richard Wyman The significance of salamanders to forest processes

### July

2 Preserve Staff Environmental Follies<sup>4</sup> (4:00 - 6:00 pm)  
3 Binbin Shao Golden shiner & pumpkinseed sunfish spawning interactions  
10 Isabella Scheiber Mallard parental care of ducklings  
17 Chadwick Hershock Competition among terrestrial salamanders  
23 Researchers 1994 Annual Science Symposium<sup>5</sup> (10:00 am)

### August

7 Kevin Omland Significance of plumage coloration in mallards  
21 James Runkle 24 years of change in old growth hemlock forest  
27 Preserve Staff Beach Party<sup>6</sup> (1:00 pm - 5:00 pm)

<sup>1</sup>All Huyck Hikes begin at 2:00 PM on Sunday at the Eldridge Research Center, Pond Hill Rd, Rensselaerville, NY.

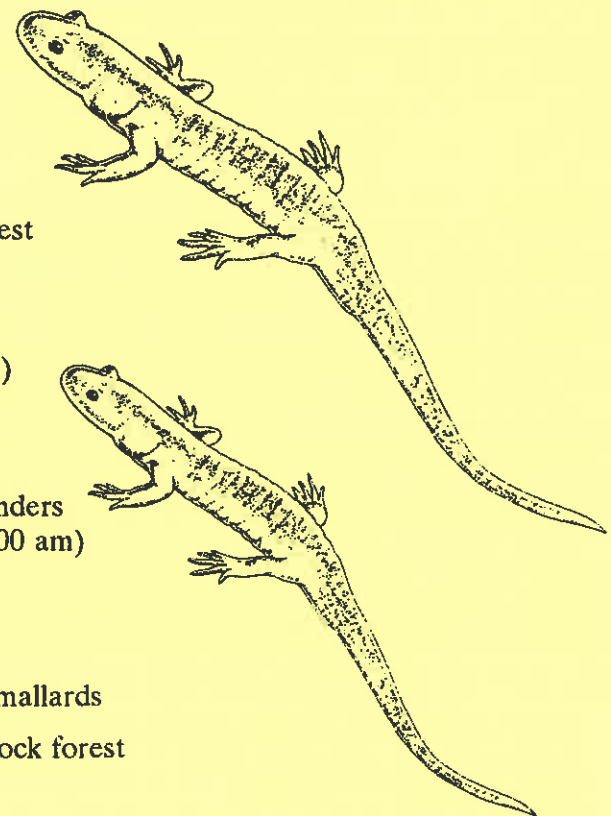
<sup>2</sup>Family Activity. Members free; Non-members \$5.00. Includes continental breakfast and amusing conversation afterward.

<sup>3</sup>The Annual Membership Meeting is from 11:30 AM to 1:00 PM (members only).

<sup>4</sup>Environmental Follies is a fundraising variety show held at Conkling Hall put on by the Huyck Preserve actor's guild. Wine and hors d'oeuvres intermission/reception. Admittance by donation.

<sup>5</sup>The Annual Science Symposium is from 10:00 AM to 2:00 PM. Lunch served.

<sup>6</sup>The Beach Party is a fundraiser held at Lake Myosotis beach. Food will be for sale.



### Staff

Dr. Richard L. Wyman, Executive Director  
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Thomas Alworth, Research Asst. & Grounds Supervisor  
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## 1994 Membership Form

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Junior/Student \$10

Individual \$30 (Senior \$20)

Family \$40 (Senior \$30)

Contributing \$100

Sustaining \$250

Patron \$500

Benefactor \$1000

Please make your fully tax deductible contribution payable to the **E.N. Huyck Preserve, Inc.** and mail to **PO Box 189, Rensselaerville, NY 12147**. Our Annual Report is on file and available through the N.Y.S. Dept. of State, Charities Registration Section, or the Preserve.

**E.N. Huyck Preserve**

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