### Myosotis Messenger



## FORGET-ME-NOT

Edmund Niles Huyck Preserve & Biological Research Station P.O. Box 189, Rensselaerville, NY 12147 Tel/Fax: (518) 797-3440

www.huyckpreserve.org

Volume 26, Number 3

## What Good This Forest?

A forester can tell you the monetary value of your woods by measuring the trees diameter and noting the species. He'll give you dollar value per board foot. But what is the value of the forest if you do not cut it down.

There is the value the habitat forests provide for all the other living creatures. The foxes, porcupine, opossum, fisher, beaver, vireos, thrasher, turkey, woodpeckers, wood turtles, garter snakes, red-backed salamanders, yellow spotted salamanders, centipedes, millipedes, spiders...

Forests clean water. While most people have heard this stated, few know what the mechanism is or realize the magnitude of the effect. The process is called evapo-transpiration, a combination of evaporation and transpiration. Rainfall evaporates off of the surfaces of leaves, branches and bark. Transpiration is controlled by the leaves. The vascular tissue in a tree is made up of hollow cells called tracheid cells. Dead tracheid cells attached end to end and allow for the transport of water from the roots to the leaves. The tallest tree is the Australian mountain ash that reaches heights of 435 feet. Yet the tree does not use energy to move the water up. The water flow is

regulated by the opening and closing of stomates, small pores in the leaves. When the stomates are open water evaporates from the leaf. The water molecules form a continuous column within the tracheid tubes and water molecules adhere to one another. When one molecule evaporates at the top, a new molecule is pulled into the root.

In terms of mass, the greatest biological process is transpiration. About 5 X 10<sup>16</sup> kg/yr of water are transpired by plants. John Stewart Collins in *The Visions of Glory* said: "under good cultivation an acre can produce 7 tons of dry substance. On these terms we can calculate that a given acre will easily evaporate about 3500 tons of water. The rainfall down is about 60 in/yr in tropical rain forest. The rainfall up (transpiration) amounts to 40 in/yr."

The 2000 acres of trees on the Huyck Preserve can transpire 7,000,000 tons of water. It is now well known that trees make rain. When trees are removed, rainfall decreases.

Evapo-transpiration in the temperate forest of the Huyck Preserve varies depending on how wet the forest is. A dry forest can evapo-transpirate the first

full inch of rain so no runoff occurs. As the forest becomes wet evapotranspiration is reduced to 60-70 percent of rainfall.

Tree roots are selective in what they absorb. They take up only the things they require for growth maintenance and

reproduction. Thus while rainfall may be contaminated with many manmade chemicals they are not taken up by the tree. Thus when water is evaporated from the stomates, it is pure, clean water. Trees do produce some organic compounds that



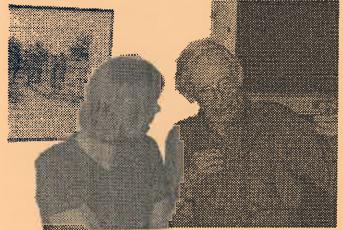
Andrea Sulzer, in the Woods, COM.EN.ART 1996

also evaporate but by and large trees are like a huge distillation apparatus. Forests of trees not only make it rain but they make rain clean. How much is clean water worth? This is one value of a forest that is difficult to put a dollar value on. The Catskills provide water to New York City with an estimated value of one trillion dollars.

Richard L. Wyman

Manibu Saito, P. cincreus, COMEN. ART 1996

## A Tribute To The Founder Of Modern Ecology, Eugene P. Odum



Marilyn Wyman and Eugene Odum, Science Symposim 2000. Painting by Martha Odum in backround.

the work of an ecologist being to observe and catalog species.

Eugene Pleasants Odum was born on Sept. 17, 1913 in Chapel Hill, N.C., where his father was a professor of sociology at the University of North Carolina and his mother was an urban planner. He received his bachelor's and master's degrees from the University of North Carolina and his doctorate from the University of Illinois.

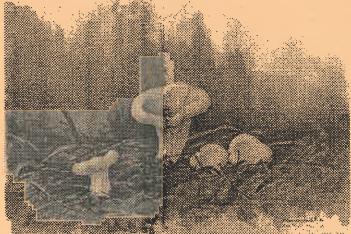
After graduation, Odum took a job for one year at the Edmund Niles Huyck Preserve as the resident naturalist. Newly married to landscape artist Martha Ann Huff, he described his time here as "a yearlong honeymoon." As his wife painted the surrounding countryside, he cataloged the amphibians, birds and tree species on the Preserve.

Dr. Odum spent nearly all of his professional career at the University of Georgia, where he joined the faculty in 1940 as a professor of zoology. When he first joined the faculty at Georgia, he proposed that ecology should be part of the core curriculum for science students, a proposal which was not well received.

"They looked at me and laughed," he said in an interview with Natural

History. "They thought that ecology was just going out and finding animals and describing and collecting them."

Realizing that no general book about ecology existed, Odum set out to write such a book. The result was the widely used textbook, "Fundamentals of Ecology," first published in 1953 by W.B. Saunders and subsequently published in a dozen



Manibu Saito, Mushrooms, COM. EN. ART 1996

by W.B. Saunders and subsequently published in a dozen languages. At the time of his death, Dr. Odum was working on a revised edition. An established writer in the science field, Odum also wrote for the general public, including "Ecological Vignettes: Ecological Approaches to Dealing with Human Predicaments."

In 1951, the Atomic Energy Commission accepted a

In 1951, the Atomic Energy Commission accepted a proposal by Dr. Odum and the University of Georgia to study the environmental impact of nuclear weapons production at the Savannah River Plant, now called the Savannah River Site, covering an area of 310 square miles. The initial effort involving Dr. Odum, a handful of graduate students and a \$10,000 government grant evolved into the Savannah River Ecology Laboratory, which today has about 150 employees and an annual budget of more than \$12 million. More than 10,000 studies have been published on work done at the laboratory.

Dr. Odum went on to establish two other major research

Eugene P. Odum, widely considered the father of ecosystem ecology, who founded and for many years directed one of the world's largest outdoor scientific preserves, died at his home in Athens, Ga., August 10, 2002 at age 88.

While Dr. Odum did not invent the discipline of ecology, he theorized that ecology was not a branch of anything, but an integrated discipline that brought all of the sciences together. He saw the Earth as a series of interlocking environmental communities, or ecosystems, each of which embraced "a unique strategy of development."

The term ecology comes from the Greek "oikos," and literally means the study of home or habitation, coined by the

German biologist Ernst Haekel. In the early part of the 20th century, ecology was largely seen as a subdivision of biology, with



Susan Hayhurst, COM.EN.ART 2002

institutes at Georgia: the Institute of Ecology and the marine Science Institute on Sapelo Island.

In 2001, Dr. Eugene Odum was the keynote speaker at the E.N. Huyck Preserve's annual Science Symposium. It was a tremendous honor for the Preserve to host a scientist of such note as Odum, not once, but twice, in his lifetime. His memory of the Preserve was that it had not changed much in the past seventy years and continued to be a beautiful and valuable place.

The legacy of Dr. Eugene Odum will continue long into the future with the establishment of The Distinguished Scholars Fund, to encourage future scientists of high caliber to visit and study at the Preserve. Odum not only endorsed the philosophy of the fund, but gave generously as a founder to allow scientists of the future an opportunity to make their own mark on the world.

Rick Wyman had the opportunity to spend two days with Gene, as he liked to be called. He left Rick with two thoughts that he shares with you here. Gene still maintained an active interest in educating people about how to understand human activity in an ecological way. His most recent thinking about obtaining funding for this kind of work was to focus attention on the relationship between ecosystem health and human health. A healthy ecosystem supports healthy people. Second, like most practicing ecologists, Gene was well aware of the problems humankind are causing to the Earth (over population, loss of biodiversity, climate change). When asked what he thought could be done to convince people that we need to change our behavior he said that he thought we would need a very large scale ecological disaster before anything much would happen. Something like a huge hurricane that never ends? Rick asked. Yes, he said.

Deb Monteith and Richard L. Wyman

## Huyck Preserve Research Grants

This year the Huyck Preserve's Scientific Advisory Committee awarded seven grants to eight researchers. I briefly describe their projects here.

Miriam Brandt and Susanne Foitzik, both from Regensburg University, Germany, worked with slave-making ants that they discovered on the Preserve. The slave-making ant species Protomognathus americanus and its host Leptothorax longispinosus have provided the first evidence for the existence of a co-evolutionary arms race between a social parasite and its host. Protomognathus americanus is an obligatory slavemaker: A newly emerged queen invades a colony of the host (usually a species of Leptothorax) and kills or drives off the residential queen. Adult workers then appropriate the brood. When the host workers emerge they adopt the parasitic queen, raise her offspring and engage in all colony tasks including nest maintenance, defense and foraging. Slavemaker "workers" which emerge the following summer are incapable of normal work and fulfill only one task: supplying the queen with new slaves. On the Huyck Preserve slavemakers occur in high densities which should put selection

pressure on the hosts to evolve means of escaping the effects of the slave-makers. Miriam and Susanne collected ants on the Preserve this summer and will be conducting behavioral experiments in Germany to see what kinds of behavior the host and slave-makers use against one another.

Jill DeVito, University of Texas at Arlington, returned to the Preserve to continue her work on the behavior of tadpoles of the American toad (*Bufo americanus*). Tadpoles of the species form dense aggregation just before the metamorphose. It is thought that these aggregations confuse predators such as garter snakes. Also the tadpoles appear to be able to synchronize their development so that they metamorphose together. This may be an attempt to overwhelm the predators with too much prey to be eaten. Jill conducted experiments testing these hypotheses this summer. She also worked with Jesse Meik (also from the University of Texas) on spider physiology, which I will describe below.

Elyse Glover (SUNY-Albany) finished her master's research on house wrens (*Traglodytes aedon*) here this spring and summer. She wanted to determine if house wrens could detect and perhaps expel eggs of the brood parasite brown headed cowbirds (*Molothrus aten*). Apparently house wrens in the tropics do recognize and reject brood parasite eggs there. She conducted experiments with artificial brown headed cowbird eggs and found that house wrens here fail to recognize the eggs. Cowbirds rarely parasite house wrens in this region.

Ryan Herlands (Vanderbilt University, Tennessee) continued his work on the possible speciation in the leaf beetle Neoclamisus bebbianae. These beetles make their homes on the leaves of red maple, alder and willow. The plants produce chemicals in their leaves when they are attacked and each plant species produces different sets of chemical defenses. Thus the beetles living on different plant species must evolve different counter measures to allow them to exist on the leaves. This has the potential to cause the beetles to speciate, that is form new species with different physiologies. Adult behavior may change as well as prevent the newly formed species from interbreeding with one another. Ryan conducted preliminary experiments this summer to test these hypotheses.

James McCormick (SUNY-Albany) was completing work for a master degree. He worked with blue jays (Cyanocitta eristata) because they are the principle seed dispenser for the American beech (Fagus grandifolia). Beech now have beech bark disease that is killing many of the trees on the Preserve. Sexually reproduced seeds carried away by blue jays and planted by the birds in red pine plantations may represent a potential escape from the disease. James mapped young beech trees growing in pine plantations to determine if lower infection rates occurred in blue jay planted trees.

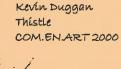
Jesse Meik (with Jill DeVito) conducted experiments to determine the physiological tolerance of three species of streamside *Lycosid* spiders. These three species appear to have partitioned the moisture gradient that exists beside streams so that one species occupied the wetter portion, one species occupied soil of intermediate moisture and one the

drier soil. They conducted behavioral experiments to see if spiders used soil moisture as a cue. They also determined whether the different species of spiders had desiccation tolerances that corresponded to the habitat type they occupied.

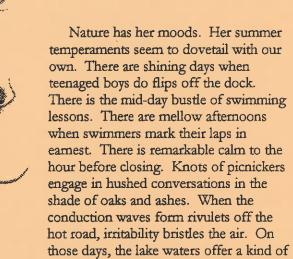
James Runkle (Wright State University, Ohio) returned to the Preserve for the fourth time since 1978. He started permanent study plots in a hemlock (Tsuga canadensis) at the

north end of Lincoln Pond in 1978 and has returned once every eight years to resurvey the trees on his 2-hectare plot. Jim determines the growth rate, mortality rate, and changes in size distribution, and species composition. Because of his work here and in other old-growth forests, he is now recognized as THE authority on the dynamics of old-growth deciduous forests.

Richard L. Wyman







benediction. On other days, it is just the lake and I. Sleepy, drizzly days, when I read, work on projects or watch birds. Stirring days when I need a jacket against cold, choppy winds. My favorites, of these down times, are stormy days.

The lake is situated on a small plateau near but not at, the apex of Pond Hill. It was impounded from the bed of the Ten-Mile Creek in the early 19th century to facilitate the many mills downstream. Thus, there is the subtle indentation of a valley. And, of course, over one hundred acres are cleared of their woodland cover. This expanse of high, open tract makes Lake Myosotis an ideal spot from which to watch weather track. There is an unobstructed view of each cardinal

The sky above Lake Myosotis is nature's oil palette. Often, we don't notice the clear skies that denote fair weather. These blues seem more neutral--almost a blank canvas. We note Baroque cumulous clouds or particularly sweeping "mare's tails." But fair skies don't seem noteworthy until autumn, when they brush against the complementary fire of the Sugar maples. When inclement weather is building, however, blue, gray and purple hues amalgamate. As thunderheads become more and more saturated, they become imbued with fervent color. Dove gray transforms into steel gray, which in turn deepens into a dull battleship hue. In that moment before laden sky opens, the clouds are livid—Aubergine, with a hint of silver. They almost hum.

I've come to associate this purple cast with electricity—with sudden, violent impending change. The more the air crackles, the louder the thunder reverberates, the more brilliant the lightening flash-the more the firmament is tinged with violet. No one is immune to these forces. The fine hairs on our arms stand on end. Horses paw the ground. Timid dogs cower, whimpering with each clap of thunder. Some folks quake with apprehension. Some feel energized! We get a charge with each burst of negative ions. At those times, we feel like howling, celebrating—embracing the wildness within!

Something is in the air. And it is unstoppable. I hear it coming.

Lake Myosotis storms sound unlike any others. It is not the same sound as when a storm moves through town, or even rural land. Most thunderstorms that strike Lake Myosotis track in from the northwest, an area that is virtually all re-growth forest. (The bulk of this land corresponds to the Lake Myosotis watershed, some of which is protected by the Huyck Preserve.) When the rainstorm moves in, the percussion is muffled. There is a soft and subtle drumming that grows upon your consciousness as the rain moves through the woods finally reaching the lake's edge. Then, water hits water. Suddenly, it is loud. There is only the sound of white noise, which ebbs and surges-a sound of shear power.

But wait! There is one final sensory element. In that split second between when the bruised thundercloud opens and the gentle roar of rain insinuates its way into mindfulness, the air changes inexorably. It is cooler, damper and palpably different than it was the moment before. And it has this distinctive smell. It is the crisp and utterly indescribable smell of impending

I watch the spectacle unfold. It isn't only sound that peaks then lulls; it is the rain itself. During particularly violent storms, the rain comes down in sheets that undulate across the water's surface. Waves of rain dance the length of Lake Myosotis, like a ballet troop works a stage.

All our senses tell us that thunderstorms reach a crescendo then

fade, and then build once more. This is exactly what happens when a cluster storm develops. Moist heated air molecules collide against an incoming cold front. Heat rises, so this curtain of warm air ascends into increasingly colder air, where it is cooled rapidly. Water vapor is released from these air molecules via condensation. This vapor is heavier than the surrounding atmosphere, and thus comes down as rain. This rain brings "downdrafts" of cooler air, which pushes up more very warm air into the frigid heart of the storm cloud. The salvo begins anew.

Each storm is subtly different—variations on a theme. Sometimes, rain pelts straight down. It strikes with such force that it froths the water. Sometimes, rain slants down in a hundred thousand tiny needles. During some storms, fog rises above the water's surface in wispy patches. During others, the texture of the lake itself appears changed. It seems comprised more of mercury than water.



Merri Nelson, Blue Heron, detail COM.EN.ART 1999

One storm stands out in my memory. I am holed up in the lifeguard's shack watching the different hues and textures of the thunderstorm swirl around me. On the dock is our Herring Gull. He has a mate and Lake Myosotis seems to be his little piece of serendipity. They return every year, and have for a while. The air, the lake, and the rain all appear as constantly shifting shades of gray. The gull floats up to the dock like a small, serene boat—the only patch of white in a gray sea. He hops on top of the structure, plants his tiny legs on this floating real estate, and stands very straight. Rain pelts the small creature with a thousand needles, yet he seems to relish the moment. He is resolute. In that hour, on that August day, this common bird became positively regal.

What is it about thunderstorms that have us in their thrall? The answer is as slippery as rain itself. But I think I have an idea. They link us to something primal. They mirror the rise and fall of our own passions. They offer catharsis—a blessed purge of heat, frustration and negativity. They tell us it's okay to express our wild side. And they show us that we can weather the storm.

Barbara Bolster Barrett

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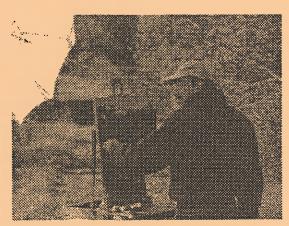
## Plein Air Landscaped in Oil

## An Artist's Retreat & Workshop to be held at Preserve

October 25-27, 2002

Landscape painter, naturalist and author/illustrator of the Golden Field Guide Eastern Birds, Jim Coe presents this exciting three-day oil painting workshop as a residential or day experience.

All Workshop participants should plan to bring oil paints, three canvas



Jim Coe painting a Landscape in the field.

boards or canvases, brushes, solvent, and a portable easel. A detailed list of recommended pigments, canvas sizes and brushes will be sent upon registration.

For more information and a brochure on the workshop, please contact the Preserve Office at 797-3440.

WORKSHOP SCHEDULE

Friday, October 25

7/30-9 P.M.: Registration and openiation.

#### Saturday, October 26

8 A.M.: Continental Breakfast.

9 A.M.-12:50 P.M.: Morning Session.

1230 - 130 P.M. Lunch.

1:30 -5 P.M.: Afternoon Session.

5 + 6 P.M. Open time and tour of the facilities.

6 P.M.: Diriner.

7:30 - 9 P.M.: Evening Program.

#### Sunday, October 27

8 A.M.: Commental Breakfast.

9 A.M. 12 P.M.: Morning Session.

How wood-life sharpens the senses, giving a new power to the eye, the ear, the nose!

In the Hemlocks

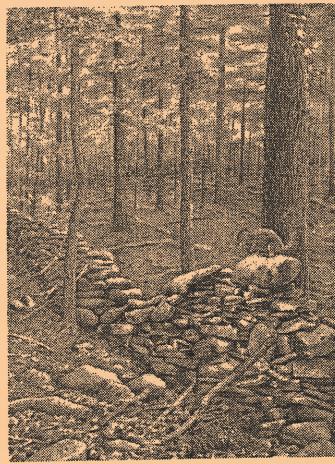


Illustration: Stone Wall, Margy O'Brien, COM, EN, ART 1999

Join us for a talk on the life and writings of noted regional naturalist and essayist.

# John Burroughs

by author and scholar Charlotte Zoë Walker

October 19, 2002 2:00 PM

The Edmund Niles Huyck Preserve Eldridge Research Center Pond Hill Road, Rensselaerville, NY

Reception to follow, featuring works by COM.EN.ART natural history artists-in-residence

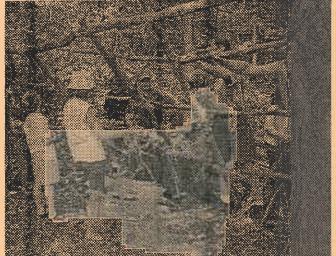
This program, which is free and open to the public, is supported in part by the New York Council for the Humanities.

## A Nature Study Adventure

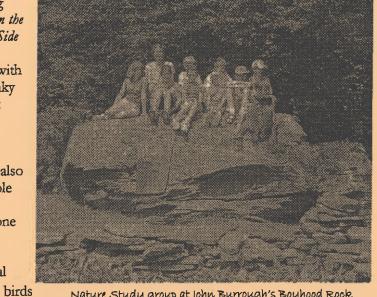
This summer, the Huyck Preserve was pleased to bring back one of our most successful Nature Study programs, On the Far Side of the Mountain. In this sequel to the acclaimed My Side of the Mountain, Jean Craighead George's youthful hero, Sam Gribley, is still living off the land in the northern Catskills, with the help of his trained Peregrine falcon, Frightful. His spunky teenaged sister, Alice, joins Sam in the near wilderness. But Alice soon gets into trouble as she goes off in search of the newly confiscated Frightful.

Craighead George's book is chock full of the flora and fauna of the northern Catskills and Helderberg region. She also delves into topographical maps, woodsman's skills and simple machines.

Each week, we engaged in "hands on" exploration of one of these areas. For example, during our first week, wildlife rehabilitator, Kelly Martin explained the characteristics of raptors to our group of 3-6th graders. They got to see several



The group constructs an Adirondack style Lean-to.



Nature Study group at John Burrough's Boyhood Rock Roxbury, NY

including owls, hawks and a Kestrel. On subsequent weeks, we built an Adirondack style shelter, dammed a section of the Ten-Mile Creek, cooked and enjoyed a wild foods luncheon, and erected a sun/stick compass, stick sun dial and constructed a Mason jar barometer.

The program culminated in a daylong field trip that approximated Alice Gribley's route as she searched for Frightful and explored waterfalls. We traveled from Roxbury, Delaware County through Rensselaerville (including the falls at the Huyck Preserve), to the Indian Ladder Escarpment at John Boyd Thacher State Park.

We enjoyed some beautiful sights and learned a lot about local places, but the highlight of our trip was a visit to essayist, John Burroughs' summer retreat, Woodchuck Lodge. Burroughs was a true naturalist—a keen observer of the plants, animals,

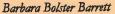
seasons and landscapes of the surrounding Catskill region. Dubbed "the bard of the bird feeder," Burroughs didn't just restrict himself to chronicling natural history—he documented a rural way of life that has sadly proven transitory. A pragmatist, Burroughs, abhorred abject sentimentality, so while he loved the land and the simple, fruitful life that could be extracted from

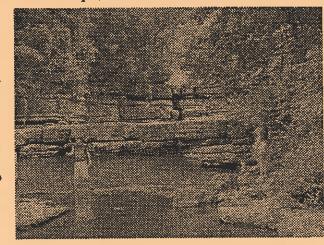
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it, he never indulged in arbitrary platitudes. Woodchuck Lodge was named after *varmints* who endangered the welfare of a farmer's precious draft horses, not after peaceful, oversized rodents!

We were indeed fortunate to have Woodchuck Lodge open for us that day. It was a treat to tour the rustic, yet surprisingly well furnished farmhouse, and to learn more about this man who epitomized a hardscrabble land and its people, yet rubbed elbows with presidents and industrialists. Our heartfelt thanks go to Dr. John Lutz, a Burroughs descendent, and plant biologist who was as pleasant and knowledgeable a guide as we could ever expect.

We were pleased with how well this program went—again! So many simple mills and machines were mentioned in Ms. Craighead George's book that we can expand this curriculum into several different directions or choose from a number of activities depending on the students interests and abilities.





By the site of an old Mill at Fox Creek Park, Berne, NY

## 2002 Summer Environmental Education Camp

Eleven middle-school students participated in the Huyck Preserve's first residential Environmental Education camp, enjoying the accommodations of the recently renovated Bullfrog Camp during the last week in August.



campers playing a game in Bulifrog Camp.

illustration, focusing on the power of observation.

Kelly Martin featured some new friends at the Wildlife Rehabilitation workshop, bringing along a host of animals to share with the students. While we learned a lot about caring for sick or injured wildlife, we also had the opportunity to see a variety of birds and mammals up close. During the week, the group cared for two porcupines that had recently been rehabilitated by Kelly, studying their food preferences, selecting an appropriate site for release and learning general care practices of wildlife. It was an exciting moment when we released them back into the wild, made only more so by the gigantic storm, which caught us on our return to the camp.

At the very informative Project Wet workshop, students learned about water, pollution and conservation from Dee Strnisa of Five Rivers and DEC. This hands-on workshop emphasized the importance of this natural resource with plenty of games and problem solving challenges throughout the day.

Huyck Preserve educator, Barbara Barrett led the scientific discovery workshop, which took the group out into the forest for some experiential research of their own. Students not only learned about the methodology of scientific research, but also about a range of topics, from salamanders to trees and beyond. In setting up an aquarium in the lab, we explored the ecosystem of the pond and the biodiversity of life, which exists there.

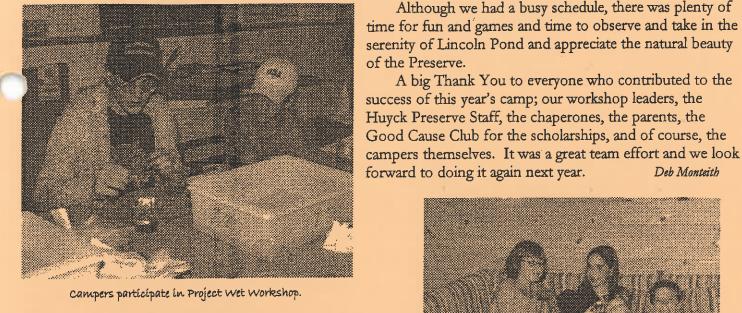
The final day of the camp included the raft building challenge and relay race on the Lake, coordinated by John McGuiness. Although a little on the chilly side, the day eventually warmed up, as did the rafters during the friendly competition. The teams designed and constructed two very different rafts, both of which proved successful in floating and maneuvering. The fun event culminated in a barbeque with our families and friends at which students presented some of the knowledge they had acquired during the week.

The hugely successful camp was non-stop excitement with a full workshop schedule during the day, and games, campfires and activities into the night. Participants had the opportunity to learn about the environment and the Huyck Preserve during the week, while developing problem solving and analytical thinking skills, via cooperation and teamwork.

After settling in, the week began with a workshop on journal writing inspired by nature. With motivation by John Burrows and Henry David Thoreau, everyone produced some fine examples of nature writing, which we developed throughout the

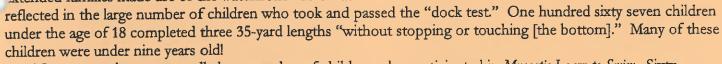
Our guest artist, Ginny Carter conducted the natural art/journal illustration workshop, teaching how illustration is used to enhance a journal. Students learned some techniques of natural history





## In the Swim at Lake Myosotis

Undoubtedly, Lake Myosotis was the "cool" place to be during this hot, dry summer season. 2002 Lake Membership was high. We had 79 pass holders including staff and their families. Many local families and summer residents brought visitors, and a good number of grandparents and their extended families made use of the waterfront. This was



There were also an unusually large number of children who participated in Myosotis Learn-to-Swim. Sixty school-aged youngsters enrolled in our program, and 25 were issued Red Cross certificates. Hot conditions and very few rainouts contributed to a successful season, as young swimmers tended to stay in the water longer.

The waterfront benefited from a fair number of improvements this year. The children's sandbox was moved to a spot under the ash trees at the south end of the beach. This shadier area is more comfortable for toddlers and

their families, it is closer to the picnic tables, and is also closer to where most patrons congregate.

Our ancient wasp infested changing shed was replaced with a brand new Cedar structure of the same design. Finally, an informational kiosk was erected adjacent to the beach parking area. Lake rules, hours of operation, the Beach membership list, and important announcements can now be reviewed from one central location.

We hope that these changes make "the beach" an even more inviting place to relax and recharge next summer.

Barbara Bolster Barrett



Late afternoon at Lake Myosotis

## Items Adrift!

A number of items have been left at Myosotis Beach including: hats; shirts; towels; and sandals. These "Lost & Found" items can be obtained at the Preserve office until November 30th, 2002.



Although we had a busy schedule, there was plenty of

A big Thank You to everyone who contributed to the

Campers relaxing back at Bullfrog Camp.

#### The Edmund Niles Huyck Preserve Post Office Box 189 Rensselaerville, NY 12147

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