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New Jersey

Outdoors

Spring 1999 • \$4.25



Hooking 'Eyes
Walleyes, That Is

Spectacular Single
Species Gardens

On the Trail with
Man's Best Friend



See page 63
for details on
the 1998-1999

New Jersey
Outdoors

Photo Contest!



See page 63
for details on
the 1998-1999

New Jersey *Outdoors*

Photo Contest!



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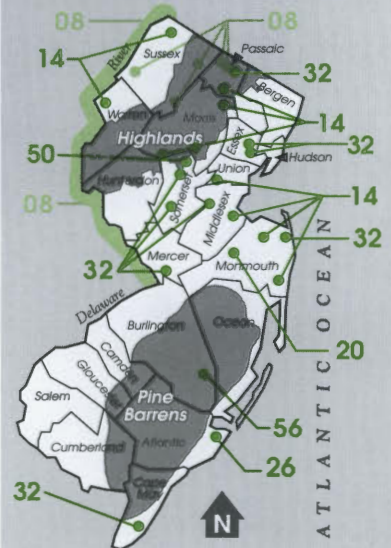
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It's found in only four states other than New Jersey, and our population is the largest stronghold for the species. Learn about this tiny, vibrantly colored amphibian, which is more frequently heard than seen.

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A beaver takes a break from its construction activities to munch on a tasty morsel. Learn how, for better or worse, these critters leave their mark on the environment in *Leave It to the Beaver* on page 42. © Michael S. Miller

Inside Front Cover

Liz Cappelletti, of Somerset, shows off the beauty she hooked on her first trout angling venture. She caught the brook trout on the Musconetcong River. © Tom Pagliaroli

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The tiny, but strikingly marked Pine Barrens treefrog is more often heard than seen. © 1999 Irene Bowers

Back Cover

Reenactors proudly sport their unit's designation. Find out why people from all walks of life spend long, hot summer days in woolen garb on New Jersey's battlefields in *They Live History* on page 20. © Fred Cantor

New Jersey State Library

From the Governor



Christine Todd Whitman,
Governor

An ancient Native American proverb says we do not inherit the earth from our parents, we borrow it from our children. That's the philosophy behind both our commitment to preserve one million acres of open space and all we do to keep New Jersey clean and green.

Helping to protect and preserve the environment is something that everyone can do to ensure that future generations continue to enjoy clean air and water and plenty of unspoiled land. Simple actions such as recycling or properly disposing of hazardous wastes like oil or paint make a big difference.

Last fall, New Jersey voters overwhelmingly approved a ballot question to save one million acres of farmland and green parks for future generations to enjoy. I have directed the Council on New Jersey Outdoors to document and track the state's progress in preserving land. Our efforts will be displayed on signs in prominent locations and on the state's web page (www.state.nj.us).

Let's all do our fair share to keep New Jersey green. Let's keep the garden in the Garden State.



From the Commissioner



Robert C. Shinn, Jr.,
Commissioner

Although we constantly strive for scientific and technological progress, we sometimes still find ourselves at the mercy of Mother Nature. Below average precipitation toward the end of 1998 decreased stream flows and reservoir levels. And, even though this past January was one of the wettest on record, our land always is vulnerable to the ravages of fire.

This issue of *New Jersey Outdoors* provides (on pages 4 and 5) some timely information about the threat of forest fires to residential communities in wildland areas. It is important to know what steps to take to prevent these wildfires from destroying our homes and other structures. Many of the tips apply to urban and suburban homes as well, so regardless of where you live you can benefit by following these precautionary measures.

Practicing water conservation is always important. We need to ensure that there's a sufficient water supply for essential uses, from drinking to firefighting. While we will never completely control the elements, we can alleviate some of the problems they cause by conserving our water supply and preventing fires.



NJO Mailbox

Preserve Open Space

I have been a loyal reader of *New Jersey Outdoors* for over 40 years. I fish, take nature photos, hike and enjoy our natural surroundings all over the state. I am an ardent follower of the conservation ethic.

(Lately) it seems that development comes first, the environment second. This is not acceptable in a state where too much of the land is already taken up in office buildings and housing tracts. We need to set aside land for our children's children.

D. Harrison
Belleville

Editor's Note: Fortunately, Governor Whitman and the majority of New Jerseyans agree with you. Thanks to voters' overwhelming support for her public open space initiative, New Jersey will establish a stable funding source of \$98 million annually to enable the state to preserve a million acres of open space and farmland. This initiative, coupled with the requirement that state agencies work toward implementing development and conservation according to the State Plan (a blueprint for economic growth and development, balanced with conservation and environmental protection needs) will ensure that our grandchildren can enjoy New Jersey's natural resources just as you've been doing for years.

True Magic

We loved especially the paperweight story (**Delicacy and Detail: The Paperweight Magic of Paul Stankard**, Winter 1999) this time.

Sonia and John Force
Flemington

Thanks for the great publication. I particularly enjoyed the article highlighting the glass work of Paul Stankard. Where is his work for sale?

Francis DeRoos
Cherry Hill

Editor's Note: Readers interested in viewing or purchasing Paul Stankard's work may call his studio at 609/468-6348.

Geography 101

I really enjoy your magazine, but I was surprised to learn in **Discovering Yesterday's Front Line** (Winter 1999) that you placed the Battle of Fallen Timbers in Tiffin, Ohio. The battle took place in Maumee, Ohio, which is on the Maumee River, just south of Toledo. The brief battle pitted the army of Gen. "Mad" Anthony Wayne against a band of Native American tribes. The American victory opened up the areas of Ohio, Detroit and a part of Indiana. The National Park Service has called the battlefield nationally significant.

Dorothea Barker
Bowling Green, OH

Editor's Note: You're absolutely correct — the Battle of Fallen Timbers took place in Maumee. G. Michael Pratt, Ph.D., of Heidelberg College, excavated the battle's site. The college is located in Tiffin, which led to the keyboard confusion.

Tunas on Display

Just read your article on tuna (Fall 1998). It was very good. As a side note, the New Jersey State Aquarium presently has on display yellowfin tuna and little tunny. Both species were collected last summer on our new research boat, *Pelagica*. This makes the New Jersey State Aquarium only the second aquarium in the country—and the only one on the East Coast—to display these species. The two yellowfin and four little tunny were added to our 760,000-gallon ocean tank, where they joined, among other animals, a school of six bonito.

Robert Fournier
Director of Husbandry
New Jersey State Aquarium Camden

Editor's Note: If you can't make an on-site visit right now, try a Web site visit. The aquarium's URL is www.njaquarium.org/

State of New Jersey
Christine Todd Whitman
Governor



Department of Environmental Protection

Robert C. Shinn, Jr.
Commissioner

Peter Page
Director of Communications

Hope Gruzlovic
Chief, Office of Publications

New Jersey Outdoors

Spring 1999, Vol. 26, No. 2

This publication is dedicated to promoting and encouraging the wise management and conservation of our natural, cultural and recreational resources by fostering a greater appreciation of those resources, and providing our residents with the information necessary to help the Department protect, preserve and enhance them.

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Visit us at:
www.state.nj.us/dep/njo

Poet's Historic Home Restored

The modest New Jersey dwelling of the internationally known poet Walt Whitman, author of such famous works as *Leaves of Grass*, underwent a complete restoration in 1998.

Using period photographs, writings of Whitman's contemporaries and an analysis of the historic structure as guides, the Department of Environmental Protection's Division of Parks and Forestry initiated an extensive renovation of the National Historic Landmark, which provides an intimate glimpse into both the life and times of the 19th-century bard.

The two-story row house, located at 328 Mickle Boulevard in the city of Camden, slowly regained its original look as everything was restored or reproduced, from the exterior paint to the carpets, hand-made wallpaper and historic lighting fixtures. Structural improvements included shoring the foundation and repairing plaster and interior features.

Original furnishings and personal belongs of Whitman, such as old letters and photographs, have been preserved and are on display as part of the house museum collection. Visitors can see Whitman's favorite chair and the bed in which he died.

Whitman resided in Camden during the last 19 years of his life. The Mickle Street house was the only property he ever owned and he lived there from 1884 until his death in 1892.

Upon Whitman's death, the property was given to his brother, George, who rented the house to tenants. The house was purchased by the city of Camden in 1920 and was preserved as a memorial to the poet. Financial difficulties that were adversely affecting the preservation of the historic landmark led to the transfer of ownership to the state in 1947.

Funding for the extensive restoration efforts was provided through a New Jersey Historic Trust grant totaling \$391,600. The Division of Parks and Forestry contributed an additional \$439,000 from Green Acres bond funding.

The Walt Whitman House is open to the public Wednesdays through Sundays. For specific times and more information, call or write: Walt Whitman House, 328 Mickle Boulevard, Camden, NJ 08103, 609/964-5383. Groups and individuals are encouraged to telephone to confirm hours or schedule a tour.

New Jersey's rich cultural heritage is well represented in its 56 state historic sites. Recognizing the historic, recreational and economic importance of these sites, the Department of Environmental Protection's Division of Parks and Forestry has invested almost 25 million dollars over the past five years on their stabilization, restoration and interpretation.

Protect Your Home from Wildfire

Land use pressures, improved transportation, more leisure time and an increased desire for a more rural lifestyle have resulted in a proliferation of residential subdivisions and developments in wildland areas that are subject to forest fire hazards.

The potential for wildfire disaster in New Jersey has been dramatically illustrated by the large conflagrations that have occurred several times since 1930. One of the more notable fires occurred on the weekend of April 20-21, 1963, when wildfires charred 183,000 acres of land, destroyed 186 homes and 197 buildings, and caused seven deaths. More recently, a 1995 wildfire burned 19,225 acres in Ocean County and, during the summer drought of 1997, an 800-acre fire damaged 52 homes and threatened more than 300 homes in Berkeley Township.

The placement of residential communities within forested areas is a problem not only in New Jersey, but nationally as well. Wildfires burning into developments have taken an increased toll on improved property. Several fires have reached disastrous proportions, destroying homes and taking lives.

Each year, New Jersey Forest Fire Service firefighters and equipment respond to more than 1,600 wildfires. When a wild-

In Memoriam



His voice mesmerized. It was deep, yet soft; calm, yet authoritative. He was, for more than a dozen years, the New Jersey Department of Environmental Protection's spokesman — "the voice" of DEP.

Jim Staples, a big, bearded bear of a man, breathed his last on December 31, 1998. He was 73.

His reportorial involvement in the Great Swamp controversy in the early 1960s engendered his conservationist leanings and resulted in his becoming one of the first journalists to focus on environmental issues. A highly intelligent man, he still was able to convey

technical and scientific information in easily understandable terms.

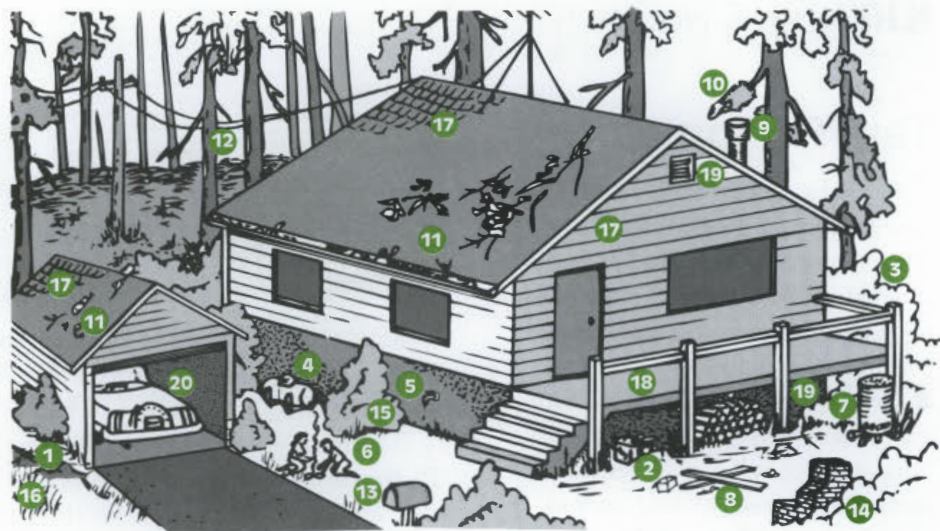
In both vocation and avocation, he centered on the public. As a reporter and, later, as DEP's voice, he informed and educated. As a photographic artist, his stunning black and white images of nature offered viewers a new perspective on, and appreciation for, the world around them.

Whether as a reporter, spokesman, photographer, mentor or friend, Jim touched the hearts and minds of many New Jerseyans. "The voice" may have been silenced, but his memory and impact endure.

fire breaks out, it is quite different from a city fire, where discovery and response are usually quick. The light construction of many homes, the use of flammable building material and the extremely flammable forest cover adjacent to the homes create a difficult situation for firefighters battling the fire. The lack of a central water supply and the inaccessibility of firefighting equipment and manpower add to the problem.

If you live within a forest or wildland residential area, you should take preventative actions now to protect your home. The following steps could help prevent your home from becoming a wildfire statistic.

1. Put fireplace and stove ashes in a covered metal container. Do not dump ashes in the woods or on leaves or dry grass.
2. Do not store flammable materials near or under your house foundation. Stack firewood at least 30 feet from all buildings. Keep all flammable liquids in safety cans.
3. Establish and maintain defensible space of not less than 30 feet around all structures by selectively removing and thinning trees, brush and ground cover and any dead plant material. Defensible space is the room firefighters need in the event they must protect the structure during a wildfire.
4. Make sure propane tanks are well clear of your house and maintain defensible space around the tank.
5. Have firefighting equipment on hand. Keep a shovel, rake, bucket, extension ladder and 100 feet of garden hose with nozzle available for emergency use.
6. Keep matches and lighters away from children. Teach them how to report an emergency. To report a wildfire, call 9-1-1 or contact your local forest firewarden.
7. The burning of debris and trash is illegal in New Jersey. All campfires in forested areas require a permit from the Forest Fire Service.
8. Clean up debris around your property.
9. Install an approved spark arrester on your chimney flue or stovepipe.
10. Remove dead limbs from trees adjacent to or overhanging your home. Keep lower tree branches at least 10 feet from chimney or stove outlets.
11. Clean roof surfaces and gutters regularly of accumulated leaves, needles and twigs.



12. Have the local power company clear branches from electric lines. Electric and telephone lines should be placed underground wherever possible.

13. House numbers should be visible from the roadway. If your home is not visible from a road, ensure that the driveway is clearly labeled with the sign showing the occupant's name and house number.

14. The area around barbecues should be cleared to mineral soil for a radius of 10 feet in all directions.

15. Landscape plantings should be non-resinous (no laurel, rhododendrons or flammable evergreens) and well watered.

16. Green lawns that are well watered and mowed regularly make good defensible space.

17. The exterior of all structures, including the roof and siding, should be constructed of fire retardant or fire resistant materials. Avoid cedar shake roofing and siding.

18. Porches, balconies, decks and gables should be constructed of fire resistant or fire retardant materials.

19. Porch, foundation, eaves and attic openings should be screened to prevent sparks from entering.

20. Plan a safe escape route for you and your family before you are confronted with a wildfire. Park your car facing out in case of a wildfire emergency.

Noteworthy Web Sites

The Delaware River and its tributaries offer recreational opportunities as well as potable water. If you're interested in water quality and quantity, go to <http://www.state.nj.us/drbc> and check out the Web site of the Delaware River Basin Commission, which manages this critical resource. The site also features a new "Drought Center" section, to keep you current on the situation.

Keep your eye on Fun and Adventure in NJ <http://funandadventure.com/> Once completed, the site will serve as a tremendous resource for anyone looking for things to do in New Jersey, covering land, air, and water activities for both spectators and participants.

The Jersey Paddler Online <http://www.jerseypaddler.com/> provides information on all aspects of paddlesports — from equipment and lessons to events and resources.

Reader Andy Warren suggested that shore lovers surf over to www.lbionline.com to find out what's happening on Jersey's Long Beach Island.

More Wildfire Information

To review fire safety tips or submit questions, go to the Firewise Web site at <http://www.firewise.org>

For a free brochure, entitled *Protecting Your Home from Wildfire*, or for more information on forest fire management in New Jersey, please call 609/292-2977 or write to the New Jersey Forest Fire Service, P.O. Box 404, Trenton, NJ 08625.

Terrific Tomes

Several excellent books about New Jersey's great outdoors and related activities have been published recently. So whether you're looking for a gift or want to update your own collection, check out the following guides.

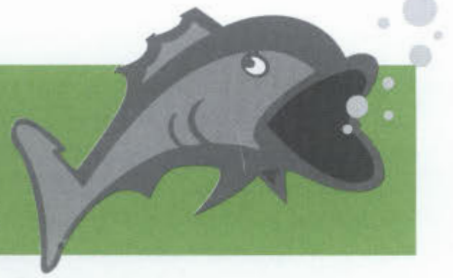
■ **New Jersey Walk Book** This 320-page hiker's bible, published by the New York-New Jersey Trail Conference, is a companion volume to the *New York Walk Book*. It's filled with detailed trail descriptions and color maps, as well as history, hiking tips, geology and vintage sketches covering almost 1,000 miles of hiking trails in New Jersey's Ramapos, Wyankokies, Kittatinies, Highlands, Watchungs, Pine Barrens and more. To order, send a check for \$18.95 (\$15.95 plus \$3 postage) to: NY-NJ Trail Conference, 232 Madison Avenue, #802, New York, NY 10016-2901.

■ **Nature Walks in New Jersey** Glenn Scherer wrote this guide to the "best trails from the Highlands to Cape May," published by Appalachian Mountain Club Books. Available in bookstores for \$12.95, this 248-page paperback provides plenty of information about 46 scenic walks, and includes nature essays, photos, maps and a chart of trail highlights.

■ **Discovering and Exploring New Jersey's Fishing Streams and the Delaware River** This guide for all seasons, written by some of best-known writers/anglers in the state (many of whom have been featured in the pages of *New Jersey Outdoors*) and edited and published by the magazine's editor laureate, Steve Perrone, holds a wealth of information on where, when and how to catch shad, walleye, trout, muskies, bass and other favorites. The 164-page book is carried by most major sporting goods stores. It also can be purchased for \$15.28 (including tax and postage) by calling 609/783-1271.

■ **Sentinels of the Shore: A Guide to the Lighthouses and Lightships of New Jersey** Bill Gately, a director of the New Jersey Lighthouse Society, authored this gem —

Governor's 7th Annual Surf Fishing Tournament a Success



More than 1,000 participants took part in the Governor's 7th Annual Surf Fishing Tournament on Sunday, October 4, at Island Beach State Park. Despite the wind, rain and cool temperature, participants took full advantage of a day outdoors with family and friends.

The event was sponsored by the New Jersey Department of Environmental Protection's Division of Fish, Game and Wildlife and Division of Parks and Forestry, the New Jersey Federation of Sportsmen's Clubs, the Jersey Coast Anglers Association and the New Jersey Beach Buggy Association.

"I would like to thank the many sponsors, prize donators and participants who have helped make the surf tournament a success for the past seven years," said Fish, Game and Wildlife Director Bob McDowell. "Their cumulative efforts have helped raise nearly \$50,000 for the construction of a beach access ramp and specialized wheelchairs for the disabled and elderly."

Albacore, striped bass, blackfish, bluefish, red drum, fluke, kingfish and weakfish were eligible for entry in the tournament. Of these, albacore, bluefish, fluke, striped bass and blackfish were the species submitted.

Overall length determined the grand prize winner as well as place winners for each of the species categories. There were children, teen and adult categories for many of the species submitted, including sub-categories for male and female. In addition and new this year, were categories for fly-fishing and Becoming an Outdoors-Woman (for students of the surf fishing workshop held on Saturday, Oct. 3). The inclusion of second and third place winners was dependent upon the number of entries submitted in each species category.

The grand prize went to Peggy Peterson of Toms River for a 34-1/2" bluefish. She received the Governor's Trophy along with a variety of prizes. Additionally, her name will be engraved on the Governor's Cup, which will be permanently displayed at Island Beach State Park. She is the first female participant to win the tournament.

The winners, listed by category, were:

Becoming an Outdoors-Woman

■ **First Place** — Carol Hossler, of Wantage; 22" bluefish

Fly Fishing

■ **First Place** — Don Langan, of Island Heights; 29-1/2" albacore

Fluke (Child, Female)

■ **First Place** — Vanessa Altimari (age 5), of Tabernacle; 15-1/2" fluke

■ **Second Place** — Rachel Jochem (age 10), of Tabernacle; 15-1/4" fluke

the first book to document all 49 of the past and present lightstations along New Jersey's coastline. The hardcover book includes 40 color photographs and a foldout map, and serves as a guidebook, a history and a reference. Published by Down the Shore Publishing, it can be obtained for \$12.95 from many bookstores and gift shops.

■ **Trees of New Jersey and the Mid-Atlantic States** Published by the New Jersey Department of Environmental

Protection's Division of Parks and Forestry, this beautifully illustrated 112-page field guide describes 146 frequently encountered species. It also includes maps, forestry program information and contacts, and interesting facts about trees and forestry. To purchase a copy, send a check for \$10, made payable to **NJ Forest Service**, to: Forest Resource Education Center, 370 East Veterans Highway, Jackson, NJ 08527.

Shown here is a comparison of Poland's land mass to New Jersey's (at right).



Fluke (Child, Male)

- First Place — Mark Caruso Jr. (age 6), of Bloomfield; 19-1/2" fluke
- Second Place — Joseph Peppin (age 12), of Beachwood; 17-3/4" fluke
- Third Place — Fred Piell III (age 12), of Morrisville (PA); 17" fluke

Fluke (Teen, Male)

- First Place — Jose Jorquez (age 16), of Collingwood; 21-1/2" fluke
- Second Place — Tom Tiseo (age 13), of Bloomfield; 16" fluke

Fluke (Adult, Male)

- First Place — Gary Simone Sr., of Toms River; 18-1/2" fluke (caught at 6:35 a.m.)
- Second Place — Otto Anderson, of Burlington; 18-1/2" fluke (caught at 9:26 a.m.)
- Third Place — Tom King, of Manahawkin; 18" fluke

Blackfish (Adult, Female)

- First Place — Arlene Parrino, of Middletown; 17-1/2" blackfish

Blackfish (Adult, Male)

- First Place — Claus Faller, of Beachwood; 22-1/2" blackfish
- Second Place — Howard Kennet, of Jackson; 17" blackfish (caught at 10:14 a.m.)
- Third Place — Tom DiAlfonso, of Somerville; 17" blackfish (caught at 10:34 a.m.)

Striped Bass (Adult, Male)

- First Place — Jake Jakob, of Hartsville (PA); 31" striped bass
- Second Place — Gary Jones, of Smithville; 29-1/4" striped bass

Albacore (Child, Male)

- First Place — Bill Fox (age 12), of Toms River; 25-1/2" albacore

Albacore (Teen, Male)

- First Place — Sean Camp (age 14), Gloucester; 21" albacore

Albacore (Adult, Female)

- First Place — Jennifer DiLorenzo, of Monmouth Beach; 24-1/2" albacore

Albacore (Adult, Male)

- First Place — Anthony Califano, of Philadelphia (PA); 29-1/4" albacore
- Second Place — Bob Leitner Jr., of Vernon; 28-1/2" albacore
- Third Place — Dominic Scalzo, of Belford; 28" albacore

Bluefish (Child, Female)

- First Place — Samantha Salato (age 11), of Toms River; 12-1/8" bluefish

Bluefish (Child, Male)

- First Place — Vincent DiMarco (age 7), of Jamesburg; 21-1/2" bluefish
- Second Place — Richard Simone (age 10), of Toms River; 21" bluefish
- Third Place — Marc Pietrow (age 9), of Trenton; 19-3/4" bluefish

Bluefish (Teen, Male)

- First Place — Ronald Butkiewicz (age 17), of Plainfield; 22-3/8" bluefish
- Second Place — Chris Pierson (age 13), of Brick; 16-3/4" bluefish

Bluefish (Adult, Male)

- First Place — Elmer Wills Jr., Southhampton; 33-1/2" bluefish
- Second Place — Bill Marcus, of Berkeley Heights; 28-1/2" bluefish
- Third Place — Dominick Savasta Jr., of Tuckerton; 28" bluefish

Bluefish (Adult, Female)

- First Place/Winner of the 1998 Governor's Cup — Peggy Peterson, of Toms River; 34-1/2" bluefish
- Second Place — Cindy Jablonski, of Levittown (PA); 26" bluefish
- Third Place — Sharon Becker, of Little Egg Harbor; 19" bluefish

Correction

In *Discovering Yesterday's Front Line* (Winter 1999), the picture of the Sons of Liberty button was incorrectly attributed. It actually was provided courtesy of Ed Billings and Dan Sivilich. Our apologies to Ed and Dan.

Staś Wnukowski traveled to Cape May from Augustow, Poland, to experience the annual migration of shorebirds. The spawning Atlantic horseshoe crabs, which provide a vital food source for the birds, moved him to record their journey. While we don't usually publish poetry in *New Jersey Outdoors*, we thought you'd enjoy this contribution from another visitor to our shores.

The Horseshoe Crab Fuel Stop

*The drive of life
pushes them on
across the ocean floor
they roam
growing
knowing
that soon
they must leave,
climb beyond their wet home
into the heat
the liquidless environment.*

*Scattered along the shoreline
squawking birds sense
the tank-like structures
slowly marching
to the cadence of survival
depositing in their tracks
countless caviar
for the birds to feast
and their species' survival.*

Web Extra...

The New Jersey Division of Parks and Forestry just debuted its Web site — and it's dynamite! In addition to general information about the division, there are maps, a guide to parks by activity and descriptions of each state park, forest, recreation area, marina and historic site. Before you plan your next vacation or outdoors activity, check out www.state.nj.us/dep/forestry/parknj/divhome.htm

Straight Between the 'Eyes!



Story and photos © by Tom Pagliaroli

Nerve-racking or nerve-wracking (*nurv rak-ing*) adj: 1) extremely trying on the nerves; 2) walleye fishing in New Jersey.

The collective gnashing of teeth really must have been raising a racket because the two guys trolling about 75 yards port suddenly slowed, stopped and then tilted the outboard, probably figuring the unit blew a connecting rod or piston.

Observing our self-flagellations, the duo correctly surmised that we must have been trying to coax the attention of at least one of Hopatcong's recalcitrant walleyes. The universal palms-up and shake of the head from the bowrider indicated that their presentations had been equally unconvincing.

"I thought you said these things were easy to catch," grouched companion Mario Rossi, a merciless reiver of both moving and still waters. This was his first crack at the most vaunted member of the perch family, and he wasn't doing much cracking. Neither was I. A burbled "Jeez" was the best I could muster in the building drizzle.

We knew the fish were literally underneath and to the sides of our position. The screen told us so. What's more, Rossi had rolled one at the surface that took advantage of a faulty hookset to avoid the net and a livewell holding cell. This visual reaffirmation only served to make our collective lack of acumen even more glaring.

I thought they were easy to catch. After all, "Fillet-and-Release" had been personal mantra on other venues as the fish always came fast and furious. Ontario's Stormer Lake, Minnesota's Mille Lacs, Wisconsin's St. Louis River (part of Lake Superior) and Pennsy's Erie always yielded walleyes at withering paces and proved the ultimate confidence builders. Sure, guides were employed, but so what? Get a few techniques down, the reasoning went, and you're pretty much set on any water.

The saliva glands pumped like an artesian well at the prospect of poking Jersey 'eyes . . .

That particular day two years ago, it was Hopatcong's 'eyes that did all the poking, deflating the bloated angling ego while instilling a newfound respect for this most enigmatic and capricious New Jersey freshwater game fish.

Indeed, the walleye has eclipsed the hybrid striped bass and northern pike as the Garden State's most popular "exotic" if for no other reason than it proves vexing to catch with any degree of consistency but can deliver both numbers and size should its quirks be figured out.

And while New Jersey will not host a



Professional Walleye Trail tournament anytime soon, it does boast a number of waters with healthy and expanding walleye populations.

Why the Walleye

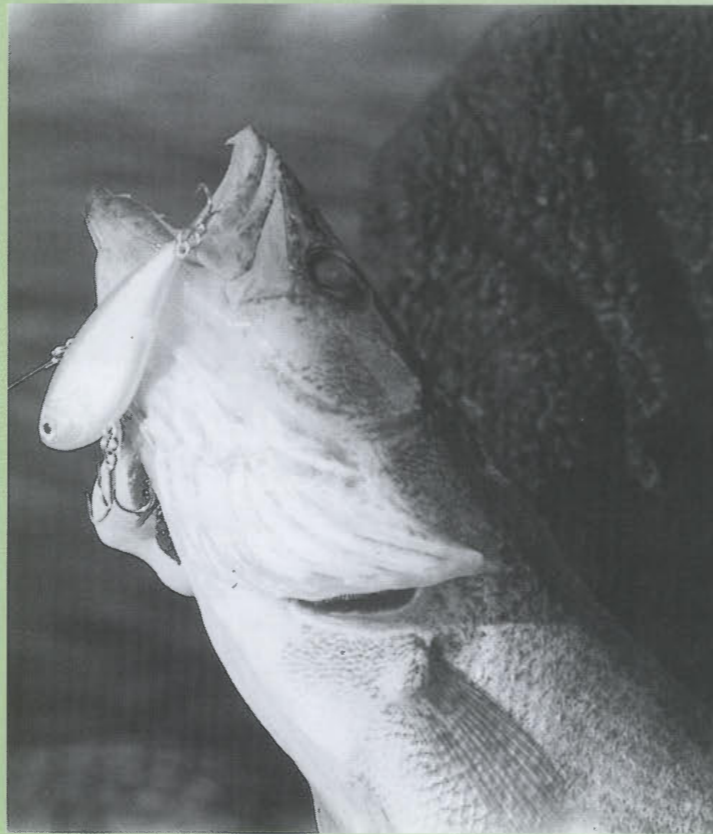
In the mid 1980s, the Division of Fish, Game and Wildlife began investigating the walleye potential of select Garden State lakes and impoundments. There was a constantly improving walleye fishery in the Delaware River, stretching from Trenton north to the Delaware Water Gap, and token populations had been established over previous decades via club and division liberations, as well as some natural reproduction, in Lake Hopatcong, Greenwood Lake and Big Swartswood Lake.

Planned as the state's premier walleye impoundment was the 505-acre Monksville Reservoir in Passaic County, scheduled to open in the spring of 1988. This U-shaped water body had both the division and fishermen excited because of the quality of the habitat and the fact that fisheries biologists could "start fresh" and monitor its progress on a species-by-species basis.

"A combination of many factors convinced us that the walleye had a bright future here in New Jersey," says principal fisheries biologist Bob Papson, who directs the Bureau of Freshwater Fisheries' aggressive warm water management program. "Improving water quality, projected advancements in hatching and rearing techniques at the Hayford facility in Hackettstown, the targeting and inclusion of new waters that met the pre-established habitat criteria and — this is important — angler interest and input, were a few of the catalysts in the decision to invest heavily in walleye establishment and expansion."

Papson's enthusiasm was palpable, as he is an avid angler with an affinity for the species and is no slouch when it comes to putting 'eye fillets in the frying pan.

After intensive studies and consultation, a massive, long-term stocking pro-



Lots of lures will work, but handle landed 'eyes with care when removing the hook.

gram for Monksville was implemented in 1988 that initially consisted exclusively of fry (less than an inch). That first year, 600,000 were released, followed in '89 by 1,200,000 fry, 54,486 pond fingerlings (1- to 2-inch) and 1,900 advanced (more than 4-inch) fingerlings. In 1990, the count included 30,790 pond fingerlings.

No fisheries project is without its growing pains. It was determined that walleye survival in the reservoir increased dramatically if the stocked fish were at pond fingerling, intermediate (2-1/4-inch) fingerling and/or advanced fingerling lengths. Fry proved too prone to predation, and the stocking of this size ceased after the '89 liberation.

Since then, Monksville has been the recipient of more than one million walleye fingerlings of various lengths, with these liberations augmented by thousands of 4- to 10-inch fish, courtesy of the Monksville Sportsmen's Association.

Monksville was not alone in the

bureau's walleye juggernaut. In 1991, Lake Hopatcong received state-reared 'eyes, with both Greenwood and Big Swartswood added to the roster in '93. Canistear Reservoir in the Newark Watershed was stocked in 1994, with the Delaware River included in '95.

The Knee Deep Club of Lake Hopatcong sweetened the walleye pot on New Jersey's largest lake, stocking in excess of 35,000 6-inch-plus fish through '98.

As of 1999, those waters on the walleye-stocking roster include Monksville Reservoir, the Delaware River, Big Swartswood Lake, Lake Hopatcong, Greenwood Lake and Canistear Reservoir. (Canistear did not receive 'eyes in 1998 because of a proposed water level reduction for dam repairs.)

For the first few years of the program, fertilized eggs were procured from out-of-state sources. However, as increasing numbers of gravid females and sexually mature males began appearing in popula-



Here's one angler who took the time to learn walleye ways and tactics.

tion surveys, bureau biologists have been able to establish a "home supply" of eggs which are fertilized, hatched and reared to pre-determined stockable lengths at the Hayford Hatchery. As such, the bureau is now walleye self-sufficient.

Several other lakes and impoundments are currently being considered for walleye introduction, the main habitat requirements being a size of at least 250 acres, relatively cool (55- to 70-degree) temperatures, moderate turbidity, a mean depth of at least 15 feet and a fairly clean, rocky bottom on at least 50 percent of the substratum.

About the Walleye

This largest member of the perch clan is capable of attaining weights of 25 pounds and is rivaled only by its European kin, the absolutely ferocious zander, for size honors. A scant few ounces separate the two.

The Garden State record stands at a very respectable 13 lb., 9 oz. and is right up there with the traditional "Eastern" 'eye states of Pennsylvania, New York and, stretching a bit, Ohio and Indiana.

This visually stunning game fish features a tapered, though muscular and thick-shouldered, physique. Its scaled sides are a combination of bronze, gold and olive/brown with an ivory belly and a milky white tip on the lower portion of its forked tail. The fore section of the split and spiny dorsal fin is mottled and streaked, and the angular, smallish mouth is studded with flesh-shredding teeth.

The most distinguishing physical characteristic, though, is the set of oversized opaque and almost grotesque eyeballs that reflect light in a chilling, Norman Bates-like way. Such "bulbs" allow the walleye to feed efficiently under the shroud of darkness or in the murkiest of environs, as the optics gather any and all available light and enable this first level predator to home in on and hit forage that is handicapped by turbid, low visibility conditions.

Late winter/early spring spawners, Jer-

Walleye Stocking

The total numbers of walleyes stocked by the Division of Fish, Game & Wildlife from 1988-98 are:

- Monksville Reservoir (Passaic County) - 2,101,274
- Lake Hopatcong (Morris and Sussex counties) - 1,005,605
- Greenwood Lake (Passaic County) - 787,101
- Delaware River - 169,262
- Big Swartswood Lake (Sussex County) - 160,361
- Canistear Reservoir (Newark Watershed, Sussex County) - 51,058

sey 'eyes get amorous from mid-February through early April, depositing and fertilizing eggs over any existing weeds in 4 to 8 feet of water. Upon hatching and dispersal, the fry are instantly targeted by yellow perch, white perch, sunfish, rock bass, crappies, shiners and even herring, remaining a favored forage into the autumn period.

A schooling species, walleyes attain a semblance of safety and bullying in numbers once they exceed 2 inches in length, when they are actively feeding on aquatic nymphs, recently hatched crayfish, fathead minnows and the fry of yellow perch, white perch, sunfish, rock bass, crappies, shiners and herring. How the tables have turned!

Feeding intensifies exponentially immediately after the spawn, and nothing that swims is safe from the bite of a hungry 'eye. Of particular note is the *danse macabre* entwining the walleye and yellow perch. These two of the same family depend, and thrive upon, the ingestion of the other and surpass even the cannibalistic tendencies of the salmonid and esocid tribes. Perch feed manically on young walleyes, and the latter, if present, return the favor the following spring. It's a healthy environ that supports both, but without a budding 'eye population, said venue will invariably be overrun with stunted yellow perch.

The walleye, generally considered the laziest of predators because of its "wait 'n' whack" *modus operandi*, will get seasonally energetic and storm into the shallows (4 to 5 feet) in pursuit of young perch and crayfish during the spring in a no-holds-barred gorge-fest as the strengthening sun activates the prey species.

The seismic carnage over, they will drift back and situate over the deeper sandbars, bordering mud flats and the edges of suddenly revitalized weed beds. Herring, if present, will become the primary forage with the advent of the summer season, and walleyes will retain this focus into the autumn period.

A bottom-hugging, "clean water"

Handle with Care

Exercise caution when handling a walleye, as it is armed to inflict damage on contact. First and foremost is the maw. This gamefish sports the dentation of a tyrannosaur and will shred to ribbons the thumb of the angler who, in a moment of confusion, applies the bass-standard lip grip. The main dorsal fin is armed with flesh-piercing spines, and the stiletto-like opercula on the gill covers are flashpoints of pain. I was unfortunate enough to have one of these slide under the fingernail just as the walleye gave a twist, and I established a new Monksville record for vertical lift. Carry a small squeeze bottle of Isopropyl alcohol and douse the wound should the walleye stab you. Going barbless will minimize the need to handle the fish for any length of time and will make hook removal a lot easier. A net should be used to bring the fish aboard or ashore.

game fish, the walleye — while eventually gravitating to the deeper weed lines as the waters warm — prefers gravel, sand and rock bottoms above all else and will set up in such a position until feeding patterns mandate. In a river environment, they will seek the rockiest or most pebble or gravel-strewn bottom areas, especially those sloping or dropping immediately to deeper, darker reaches.

Walleye Ways and Tactics

An active nocturnal predator, the 'eye illustrates a morbid predilection for the dark, most actively feeding as darkness progresses and continuing through the evening. Nighttime is the prime time for walleyes, as their optic apparatus makes it easy to locate and track prospective victims. To be sure, seeking walleyes when the sky is clear and the sun is high and bright is akin to chasing shadows in the dark. If angling opportunities are limited to daytime periods, heavily overcast conditions are preferred, with a light rain even better.

This is the case even when the venue is shrouded in ice, with walleyes activating as the glare from the surface shroud shrinks, rarely inhaling a bait or jig should the sunlight be pervasive.

Despite its relative predictability insofar as movements and preying is concerned, the walleye's reputation as a tough bite on Jersey waters precedes it. You simply cannot appreciate the walleye's intimidation factor unless you've been witness to the emotional apocalypse suffered by even the most accomplished anglers at the mention of its name. Two acquaintances in particular come to mind. One is a whiz with the fly rod, easily catching low-flow brown trout on #26 midges; the other is a tournament competitor who is amazingly adept at extracting limits of largemouth from near-freezing waters. Both swear off walleyes, claiming that they're just too difficult to figure out. Go figure! Indeed, save for the hernia-generating muskellunge and its tiger kin, 'eyes may well be the toughest fish to catch in Garden State freshwater venues.

Papson is blunt in his assessment of why Garden State anglers are not hooking 'eyes to the degree that they should, despite access to prime walleye waters.

"Sure, walleyes can be really temperamental, especially if they get pressured," he says, "but the fact of the matter is that most fishermen are reluctant to learn new tactics and put in the time for a new

species. What works for bass or trout doesn't necessarily work for walleyes. You have to put the time on the water and experiment. That's the only way you're going to hit on what works."

Light to medium spinning tackle will give the walleye a chance to show its mettle and, despite claims to the contrary, it can put up a pretty good tussle. One may have to go to slightly heavier tackle as conditions dictate, but by keeping it relatively light, the experience is significantly enhanced.

Post spawn (springtime) walleyes are very aggressive and will migrate *en masse* into the shallows to feed but still relate somewhat to structure. Points jutting from the shoreline in particular are hotspots as they usually are surrounded by flats with deeper water only a few flicks of the tail away. Shortline trolling a 4- to 6-inch slim-profile plug such as Yozuri Crystal Minnow or Storm Thunderstik in hot tiger or fire tiger pat-

terns (which loosely resemble the color of a yellow perch) on the edges of the shallows will elicit crunching assaults from the normally soft-biting walleyes. Casting a stop-go-stop-go (retrieving a suspending crankbait) also is very effective.

Plastics play a role in the springtime scheme of things. The 2-inch and 3-inch curly tail grub rigged on a 1/8-oz. to 1/4-oz. round or darter head jig and bounced slowly through the shallows and along the upside edges of drop-offs will draw the attention of both cruising and stationary 'eyes. Optimum tail colors include chartreuse, chartreuse/silver flake, yellow and black. Heads can be white, black, yellow or chartreuse. You may want to sweeten the offering by adding a fathead minnow over the grub should the 'eyes be nipping and bumping, but not inhaling, the lure. Of particular interest are the spider grubs, such as Kalin's Mop Top. The tentacles at the head of the grub wiggle and quiver at the slightest twitch of

the rod tip and, coupled with the twisting action of the tail, will oftentimes be that little extra that makes a hesitant walleye make the commitment.

Live bait proves the true widow-maker during the spring and, quite frankly, is a ball to utilize in its simplicity. Livelining shiners or, as they become available, herring, either with a split shot as ballast or on a light (1/8-oz.) slip sinker rig is to bang the walleye dinner bell. Ditto the undulating, seductive invitation of a meaty, slimy leech. 'Eyes will zero in immediately on leeches, and this extending suck machine can be worked either on a jighead, under a slip bobber or with a single split shot crimped 12 to 16 inches up the line. The bait is nicked lightly through the skin at the head. A light wire hook will allow the leech to move freely and will also keep it alive longer. Unlike a shiner or herring, a leech is one incredibly resilient strand of slime and will keep snakin' and squirmin' even after getting nailed two or three times. It takes more than a single bite for a leech to give up the ghost!

One thing to keep in mind when using bait is that 'eyes are notorious nibblers. To set the hook at the first indication of contact will invariably pull the bait from the fish's lips. A 5- to 10-count is recommended, as this gives the quarry an opportunity to take it all in, so to speak.

Walleyes will move into deeper water with the onset of the summer swelter and now fill feed almost exclusively under the cover of darkness or heavily overcast skies. They will gravitate to the downside edges of drop-offs and humps and also will frequent the deeper weedlines. Slow trolling is most effective now, either long line or short line, with minnow-shaped plugs and rattling-type crankbaits getting the nod.

Leeches and herring under a slip float also are very effective from early summer into fall.

For a brief period during the autumn season, usually from late September through October, the walleyes once again will stage raids into the shallows in

'Eyes love a leech! This resilient strand of slime will often produce when the bite is tough. It's very effective during the spring and summer months.



Walleyes Also Swim Here

Walleye can be found in several river systems (or portions thereof) in the central and northern tier counties. These include:

- The Millstone River in Manville (Somerset County) from its confluence with the Raritan upriver to Blackwells Mills;
- The Raritan River (Somerset/Middlesex counties) from its confluence with the Millstone downriver to Johnson Park in New Brunswick; and
- The Delaware and Raritan Canal from Trenton (Mercer County) upriver to Bound Brook (Middlesex County).

a prelude to winter's lean times. Spring-time tactics also work at this turn of the calendar page, and by the time the Thanksgiving weekend has arrived, the 'eyes have retreated to the depths and will be located anywhere from 25 to 45 feet down, either suspending or holding close to bottom. Downrigger trolling with plugs is the name of the game for any degree of success, although deep jigging with a leadhead (chartreuse) tipped with a small shiner also will take those fish situated off humps and along the deeper reaches of mud flats, receding weedlines/beds or gravel bars.

Walleyes are active under the opaque mantles and are a favorite quarry of the hardwater fishing set. They tend to be more nomadic than during the transition period between open water and ice-up and can be found in depths from as shallow as 12 feet to as deep as 45 feet as they chase down schools of shiners and minnows. Mid-afternoon through evening

Walleye Recipes

The Author's Favorites

Simple is the way to go with the walleye fillets, as it is a piscene crime to disguise the sweet tasting meat with a hodgepodge of sauces or heavy, breaded coatings. Two quick favorites include:

BLT Walleye

Slow fry from half to three quarters of a pound of bacon until well done. Remove from pan and set aside. Turn up the heat slightly. Dip walleye fillets in water, dust lightly with flour and then place in frying pan. Press firmly with spatula for 30 seconds, and then allow to cook for another two minutes. Turn fillets and repeat. Place on rye or whole-wheat toast and cover with lettuce, tomato, bacon and a dash or two of tartar sauce. Serve with coleslaw or potato salad.

Walleye 7-Up

Empty a bag of Wise potato chips in a brown bag, roll the top and then crush the chips until they are almost a powder. Soak walleye fillets for a minute or two in a bowl of warm 7-Up. Let the excess drip off, then put the fillets — one at a time — in brown bag with chip dust. Shake until evenly coated, then place in a deep pan containing enough hot (about 350°) oil to cover fillets. Let cook for a minute or two and turn once. Serve with a tossed green salad.

and again an hour before daylight until an hour or so after sunrise are peak walleye-catching times. From mid-morning until mid-afternoon they usually suspend over and alongside structure. Jigging with fathead-tipped spoons such as the Mepps Syclops and Swedish Pimple or Rapala Ice Minnow will take ice-locked walleyes, as will a shiner-baited tip-up or a shiner exercised under a Thill balsa float. This super-sensitive indicator will serve notice if a curious walleye even breathes on the bait, and this is vital when dangling for hardwater 'eyes.

When all is said and done, however, it is the incredible edibility of the walleye that makes it so popular. Hey, eating is always the best part! Even fishermen who have never caught one are well aware that the walleye tastes great. No matter how it is prepared, the 'eye is without peer on the plate. From deep-pan fried shore lunch fillets to a thick, creamy chowder to a delicately baked roll-up

stuffed with saffron rice and shrimp, the firm, white-meated walleye will please the most discriminating palate.

The daily limit of walleyes is three, with a minimum length of 18 inches. The 1999 season on lakes and impoundments runs from January 1 through February 28, and then closes to protect the fish during the critical early spring spawning period. It reopens May 1. Delaware River 'eyes are open to search and capture on a year-round basis, with the minimum length and creel limits the same as in still waters.

For further information on New Jersey's walleye project and future programs, contact principal fisheries biologist Bob Papon at 908/236-2116 — but don't expect him to give up any of his 'eye-catching secrets.

*Tom Pagliaroli's articles and photos appear in state, regional and national magazines. His recent contributions to **New Jersey Outdoors** include articles on bobwhite quail and seaduck hunting.*



Denali waited all year for the snow, which made the hike at Norvin Green State Forest especially beautiful. Joe Lee, pictured here with her, had to bundle up, but the husky felt right at home in the cold.

Hiking Goes to the Dogs

by Sandra Koehler

The feeling of wind on your face, the freedom of being outdoors, the arrays of strange smells—and a good tree to relieve yourself on.

Well, that's probably what your dog enjoys when you take him or her for a hike in the wilderness. But in order for Fido to enjoy the pure pleasure of being with "mom" or "dad" in the great outdoors, you have to make basic preparations and know dog-hiking etiquette and emergency procedures so that you, too, can enjoy the experience.

Before contemplating a trip, you need to be sure your dog is physically prepared. It should be examined by a veterinarian to make sure there are no problems, and should be current on all vaccinations, especially rabies. You also may want to consider having it inoculated against Lyme disease, particularly for spring and fall hikes.



Let the Training Begin

Ann Roberts, of Somerville, says she and her husband started their Samoyeds, Tasha and Blitz, with 30-minute walks through their neighborhood and at local parks every day. She gradually increased the duration to an hour and introduced them to dog packs.

A dog pack, a backpack designed for dogs, can be found at outdoor stores and through pet product suppliers. The packs come in various sizes and colors and have two saddlebags that hang on either side of the dog's back.

Three times a week, Tasha and Blitz walked around with empty packs to get used to the idea, says Roberts. Then she gradually increased the weight to a maximum load of 15 pounds.

Is that too much? As a general rule, experts advise humans not to carry more than a third of their body weight. A 15-pound pack represented less than a third of their weight for Tasha, at 50 pounds, and Blitz, 55 pounds. Richard Lerner states in his book, *Hiking With Your Dog*, that well-conditioned sled dogs can carry 50 percent of their weight — but points out that most dogs are not this fit.

The pack's load should be evenly distributed and should include treats (or dog food for camping trips) and plenty of water, which should be offered to your dog. Cheryl S. Smith, author of *On the Trail with Your Canine Companion: Getting the Most Out of Hiking and Camping with Your Dog*, advises packing an extra collar with identification and a leash in case the first ones are lost or broken.

An Ounce of Prevention

Whether you or your dog carries it, you also should bring a first-aid kit for yourself and your canine companion, Smith recommends. Most of the items can be shared. Neosporin, for example, is safe for dogs, she says, adding that the only dog-specific item you may want to add to the kit is ear wash. Lerner also advises packing a dog muzzle because a dog in pain — even yours — can be unpredictable and unintentionally harm others.

Roberts, office manager and former veterinary technician at Kingston Animal Hospital, says buffered aspirin can be given for dogs' aches and pains. She says Benadryl also is a good remedy for dogs with bug bites or other irritations. You should, however, check with your dog's veterinarian before a trip on what types of drugs, if any, should be administered in an emergency.

Owners also should be aware that smaller breeds are sensitive to extreme weather conditions, particularly the cold, says Sharon Coughlin, who often leads hikes with her golden retriever, Casey, for the Outdoor Club of South Jersey. Shorthaired dogs with light coats are susceptible to sunburn.

People should be as prepared for a possible emergency concerning their dog as they would be for themselves, Smith says. In her book, she outlines potential trail hazards such as poisonous plants, how to avoid them and how to treat an exposed dog. She also suggests locating a veterinarian or animal clinic close to your intended destination.

Sporting a dog pack on this Jockey Hollow hike helped Denali (left) to get used to the idea of carrying her own food and water on longer trips. Logan (center) preferred to check out the cabins, while Mitzie (right) looks for a spot of shade and a cold drink of water.



© JOE LEE



© SANDRA KOEHLER

Joe Lee walks Denali (left) and Logan (right) around the neighborhood, gradually increasing the distance, to prepare them for hikes in the wilderness.

Match the Trail to the Dog

Coughlin — who began taking Casey for half-mile walks when he was just a puppy — advises taking your dogs on hikes that suit his breed, age and physical ability. Casey has hiked as far as 30 miles, says Coughlin, but because he is 11 years old now, he averages about 10 miles each trip.

“You have to know your limitations as pet owner and the limitations of your dog,” Coughlin says.

Cheesequake State Park in Middlesex County and the sandy trails of Allaire State Park in Monmouth County can be enjoyed by dogs of any size. But steeper, rockier trails — such as those found at Pyramid Mountain in Morris County, Norvin Green State Forest in Passaic County and High Point State Park in Sussex County — are more suitable for the larger breeds.

While hiking in places like the Pine Barrens, which can get very hot during the summer, Coughlin says owners should know the signs of heat stroke — excessive and rapid panting, hot skin, a dazed look and a staggering gait. If your dog appears to be overheating, Smith advises stopping in the shade, resting and wetting your dog’s head and feet before slowly hiking out. Coughlin also recommends early morning or late afternoon excursions during hot days and bringing along ice cubes (if you can keep them cold) to cool off your dog.

In the winter, she advises owners to check their dog’s pads and clear them of any ice and snow. Insulated booties are available in dog-supply stores for canines who are especially sensitive to the cold.

Ready, Set, Go

After three months of training, says Roberts, Tasha and Blitz were ready for their first backpacking trip. The canine pair initially had some trouble maneuvering up one trail during their trip to Worthington State Forest, so Roberts and her husband guided them up an alternate path.

Although some hikers complain that dogs scare away wildlife, Roberts says she was a little happy that her Samoyeds kept a roaming bear a safe distance away. The dogs barked when they saw the bear, which quickly crossed the trail ahead of them, but didn’t disappear. “He stopped and turned around like, ‘what are these creatures?’” recalls Roberts.

That was nearly five years ago, and now the dogs accompany them on hikes at least once a month and on one or two camping trips a year. “It seemed kind of natural to take the dogs,” says Roberts.

Testing the Trails

Who better to evaluate the trails than the dogs themselves? Well, they couldn’t speak in words, but their wagging tails and grinning faces (yes, dogs can grin) told us when they were having fun.

We alternated taking four dogs on different hikes in various weather conditions. Denali, a 2-year-old Siberian husky, lives to hike anywhere, any distance, in any weather. Rocks and uphill didn’t slow her down and no matter how often she played in water or snow, she would always try to pull us off the trail for another romp.

Logan, also a 2-year-old Sibe-

rian husky, is a new addition to our household. He just started hiking with us in March, but had no trouble keeping up with Denali.

Lady, a 6-year-old standard poodle borrowed from my parents, proved that you don’t have to be a husky or a golden retriever to enjoy snowy trails, rock-strewn paths and chilly streams — in moderation.

Mitzie, a six-and-a-half-year-old Lhasa Apso (also borrowed), gave us insight into how little dogs fare in the outdoors. We had to take more breaks, much to the chagrin of the huskies, but she was a trooper and scaled rocks like a miniature mountain goat. Mitzie did not come along on our winter hikes, but did accompany us during the other three seasons.

■ **Jockey Hollow**
(Morristown National Historic Park, Morris County)

The path is packed dirt, mostly flat with some gently rolling sections — a great introduction to hiking for both you and your dog. There are a few logs that the dogs enjoyed jumping over and some places to maneuver through rocks. There are a few streams to cross, but the dogs were disappointed that many of the smaller ones had dried up in the warm weather. For September, it felt more like a summer afternoon, which forced frequent water stops. Mitzie kept up the entire way, but started to fatigue near the end, after about four miles of walking.

The dogs didn’t care much about this, but Jockey Hollow is where the main part of Gen. George Washington’s troops spent a bitter winter from 1779 to 1780. Logan and Denali, however, did enjoy sniffing around the cabins—where

Washington’s soldiers stayed.

■ **Watchung Reservation**
(Union County)

A very scenic hike any time of the year, there are cliff faces and streams to admire and the mostly rolling terrain is suitable for all types of dogs — as long as you monitor the distance for the smaller breeds. If you have a small dog, you might want to take advantage of the reservation’s smooth trail by the lake; it offers its own beautiful scenery.

It would be wise to avoid some of the dirt trails after a substantial rainfall because some areas become mud bogs. Logan and Denali loved it, but we didn’t enjoy getting the mud out of their thick fur.

Be very careful with your dog in Watchung, because a highway borders one side of the park and busy roads bisect some trails. Keep dogs on a leash, not

“Miss Manners” on the Trail

But not all hikers welcome dogs on the trail.

“Sometimes the woods can represent a spiritual healing — it’s quiet, reflective,” says Anne Lutkenhouse, projects director for the New York-New Jersey Trail Conference that maintains more than 400 miles of trails in New Jersey alone. “Dogs may intrude for some people on that. Loud dogs may cause people to resent dogs. Not everybody likes to be met by a dog, even when it’s on a leash.”

Lutkenhouse advises people to always keep their dog leashed, under control and out of other hikers’ way. If someone’s interested (in your dog), they’ll make the overture,” she says.

Coughlin says people should use common sense. Make sure your dog is well-trained, behaves on a leash, and doesn’t bark excessively before you take your first hike or camping trip.

Well before your first trip — preferably when your dog is still a puppy — enroll it in an obedience class, suggests Emily Bershad, executive committee member of the American Dog Owner’s Association. The dog will receive training and will socialize with other people and dogs in the class. Bershad, who lives in Freehold, says she makes sure she walks her dog past schools and other public places to expose him to people, particularly children.

Coughlin occasionally allows some people to bring their dogs on hikes with the club as long as they are leashed and well-trained, but not all club leaders feel that way. She says some won’t allow dogs on group hikes because of past problems.

Pack a Poop Scoop

Picking up after your dog will also ensure a better reception for hiking canines.

“You don’t want to see that kind of remains, whether it’s human or animal,” says Lutkenhouse.

Bershad says she takes plastic bags during neighborhood walks, but that could get messy on long hikes or backpacking trips. Lutkenhouse suggests the “scoop and bag” method while hiking in busy public parks. In a more remote setting, she says digging a hole to bury the remains is more acceptable.

Barry Leilich, of the State Park Service, says circumstances — such as the type of trail you’re on and the length of time you’ll be hiking — should determine how you ultimately dispose of the

only because it is required, but also because a dog off-leash could suddenly find itself in the middle of a road.

■ Hartshorne Woods (Morrmouth County)

A long gravel road that slightly climbs and a few paved paths are great for beginners and smaller dogs. Then you can graduate to the single-track dirt trails that wind around logs and stumps and over hills. The woods are especially pretty in summer and fall; if you’re lucky, you may get the chance to see some deer — or even a fox.

A word of warning, though: This park is open to cyclists and equestrians, and some of the narrower trails have blind curves.

■ Hacklebarney State Park (Chester / Gladstone, Morris County)

A three-mile summertime hike was made bearable by a

brief detour at the stream. Denali immediately jumped into the 2-foot-deep water, but was annoyed that her human companions would not let her swim near a scenic waterfall. We had to navigate around large rocks to get to the stream and then back up to the trail. Mitzie just followed Logan between the rocks — he walked over them — and occasionally would leap from one rock to another.

The path ranged from dirt to mixed gravel for most of the way. A section of a path along the stream was a challenge for Mitzie, who had to make her way through tightly packed rocks. By the time we got to a long uphill at the end of our loop, she was pretty tired. We rested for about 10 minutes and then slowly made our way up, with Logan giving her an encouraging back-

ward glance from time to time.

■ Worthington State Forest / Mount Tammany (Warren County)

The beginning of the trail along the stream in the park is suitable for most any breed, but there are steep hills and rocks farther along. For that reason, we took only the larger dogs. One of those trips included a march up Mount Tammany for a spectacular view. Denali and Lady were along for a trip in early spring; they had an easier time hiking the almost constant uphill than we out-of-shape humans did! Make sure you have your dog’s leash securely in hand when you get to the top because there are some dangerous drop-offs.

■ Norvin Green State Forest (Wanaque, Passaic County)

This park is much like Worthington in that there are



Denali wants to give “Daddy” (Joe Lee) a kiss for bringing her out on a winter hike at Norvin Green State Forest in Passaic County.

some steep, rocky sections and the reward of a great view from atop some of the peaks. One of the trails we took during the winter required frequent stream crossings. In most places, there are rocks you can step on to get across. Denali and Lady had no trouble keeping to the rocks and out of the water except for one time when Denali jumped in on purpose.

If you do go in the winter, especially if there is deep snow, be careful with your dog’s paws. The huskies have no trouble in this area, but Lady would get very cold if she tramped in the snow too long. Also, paws are more likely to get cut on sharp rocks in the cold weather, and there are plenty of sharp rocks in this park.



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Above — Joe Lee, Logan (left) and Denali (right) rest a moment on top of a rock, a common feature at Cradle Rock in Princeton. The area is littered with large boulders, which is why it is favored more by people who climb than those who hike with their dogs. Smaller dogs will have a lot of trouble here.

Above, right — Mitzie rests in the author's lap after climbing down a rocky slope to a lovely waterfall at Hacklebarney State Park. The huskies navigated the trail with ease.



© JOE LEE

waste, but you always should remove it from state park trails. The state has no jurisdiction over county or local parks, says Leilich, so call ahead for each park's rules and regulations.

Know the Rules

Dogs must be on a leash no longer than six feet, but heeding this rule does not guarantee dogs universal access. They are not allowed on beaches designated for swimming, says Leilich, but that doesn't mean they can't go in the park. For example, people can take their dogs to Island Beach State Park as long as they do not go in the swimming area from Memorial Day through Labor Day, when it is designated as a bathing beach.

Dogs are not allowed to stay overnight in a cabin, lean-to, or camp area in state parks, says Leilich, so some dog owners either look for private campgrounds, which do not always provide a wilderness setting, or camp out-of-state.

The New Jersey regulation was implemented in 1974 because some owners would leave dogs unattended in the campsite and they would bark, annoying other campers.

"Sometimes they don't leave the pets with water or they don't leave food," says Leilich. "Sometimes the dogs are just noisy. It's not that we don't appreciate pets. We can't enforce care. We can only say yes or no (to dogs overnight)."

In other states, such as New York, some state parks do allow dogs overnight. Ironically, there are parks in Maryland that have camping areas designated for hikers with pets and you can't camp there unless you have one, Leilich says.

*Sandra Koehler, who hikes frequently with her huskies, Denali and Logan, recently moved to Milltown. Her first article for **New Jersey Outdoors**, "Surviving the Wilderness," appeared in the Winter 1999 issue.*

Resources

■ **The American Dog Owners Association** has promoted responsible dog ownership since 1970. For information about the organization, visit its Web site at www.global2000.net/adoa/index.html; call 518/477-8469; fax 518/477-834; or write to American Dog Owners Association, Inc., 1654 Columbia Turnpike, Castleton, New York 12033.

■ **The National Dog Owners Association**, a volunteer-based, not-for-profit association is forming. For information, check out its Web site (www.dogowners.org/public/files/index.html) or write to National Dog Owners

Association, PO Box 8166, Reston, VA 20195.

■ **The Outdoor Club of South Jersey** conducts outdoor activities including hiking, backpacking, cycling, canoeing and cross-country skiing. Individual membership is \$8; a family membership is \$10. Members receive listings of scheduled hikes, which usually say whether the leader accepts dogs. You also can call the hotline for impromptu activities (609/427-7777) and check out the club's growing Web site at www.voicenet.com/~ubert4/ocsj.

■ **Eileen Barish's *Vacationing with Your Pet*** (\$19.95) includes more than 23,000

listings of hotels, motels and inns that allow pets as well as traveling tips, trip preparation and pet first-aid.

■ ***On the Trail with Your Canine Companion: Getting the Most Out of Hiking and Camping with Your Dog*** (\$14.95), by Cheryl S. Smith, includes hiking and camping tips, trail etiquette, animal first-aid and precautions, and training suggestions. It also contains a helpful directory of each state's tourism and state parks offices as well as listings of animal organizations and suggested readings.

■ ***Hiking with Your Dog*** (\$4.95), by Richard Lerner, D.V.M., discusses when to bring your dog and when to

leave it home, what to bring, and handling medical emergencies.

■ ***Fifty Hikes in New Jersey*** (\$13), by Bruce Scofield, Stella J. Green and H. Neil Zimmerman, details hikes, walks and backpacking trails from the Kittatinnies to Cape May. The book describes the hike and notable features of each area and provides total distance, estimated hiking time and a difficulty rating.

■ Call 800/843-6420 or 609/984-0370 for a directory of New Jersey's state parks, forests and recreation areas, a calendar of events, or brochures for specific areas.



Jeff and Melinda Koehler and Lady test the stability of the 200-ton Tripod Rock at Pyramid Mountain. The rock is perhaps the most massive perched boulder of its kind in the Northeast.

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They Live History

Everything about the camp is so authentic, you might think you've gone back in time (right).

Born in England, Paul Astle is proud of his roots. Here he poses in the British camp (opposite page, top).

The Battle of Monmouth is New Jersey's largest annual reenactment (opposite page, bottom).



© EMANUEL LEKAS

by Art Lackner

They're teachers, computer programmers, homemakers and doctors — a complete cross section of modern American life. But when serving with their units at a military reenactment, they're the foot soldiers, craftsmen and camp followers of a bygone era.

Military reenactors share a special bond. They love their woolen clothes, even on the hottest of days. They love sleeping in tents, with just a few inches of straw to soften the ground. They love preparing traditional meals and cooking them on open fires. And they love being together, and doing things right.

From the weapons in their hands to the food in their bellies, military reenactors insist on authenticity. On reenactment weekends, when they square off as "enemies" in a bulletless battle, everything is as historically accurate as humanly possible. And shame on the man, woman or child wearing rubber-soled shoes or a modern hat. One of the reenactor's favorite terms, *farbie*, is used to identify something that's not quite right. As in "Far be it from me to criticize your breeches, sir, but . . ."

The largest military reenactment in New Jersey takes place each year on the last weekend in June, when participants gather at Monmouth Battlefield State Park to recreate one of the Revolutionary War's most significant engagements, the Battle of Monmouth. Civil War reenactments also are popular, but since no Civil War battles were fought in New Jersey, these gatherings are not quite as prevalent here.

Diane Senechal, a computer systems designer, has been participating in Revolutionary War reenactments for about 15 years. Her husband, who started more than 20 years ago, got her hooked. Together they serve in the 2nd New Jersey Barber's Light Infantry unit. In the Continental Army camp during last June's reenactment, she and the other women present did most of the cooking, knitting and other chores traditionally considered women's work.

Why does she attend reenactments up to a dozen times a year? "There's a shared love of history," she says, "and we've developed wonderful friendships. Plus it's a great educational experience for the children we bring. The kids grow up in the units."

Senechal also appreciates the 18th century civility. "There's a sense of gentility here," she says, "men walking by will tip their hats. Everyone is polite. No matter what you do in real life, here everyone is on an even level." During the Battle of Monmouth reenactment, the Burlington resident serves as a "Molly Pitcher," one of the women immortalized by Mary Hays during the real battle.

About 300 yards to the south, British reenactors and their Hessian allies set up camp. Paul Astle, from Mamaroneck, New York, posed smartly for photographers in his bright red uniform. Astle's family moved to America from England 25 years ago, when he was 7 years old. Why is he a reenactor?

"I have a passionate love for the 18th century," says Astle, who has managed to retain his British accent after all these

years. He serves with the 23rd Regiment of Foot Royal Welsh Fusiliers, an elite force in colonial times — and, he adds proudly, still active in the British Army today. Astle attends seven or eight reenactments per year. From Quebec, Canada, to Williamsburg, Virginia, local reenactors cover much ground to attend their special weekends together.

A Bit of History

Fought on June 28, 1778, the Battle of Monmouth was a statistical draw. Yet, it was a great morale booster for Washington's troops, who proved they could stand toe-to-toe with the English regulars, look them in the eye and not blink.

It all started when British troops occupying Philadelphia, fearful of a



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Washington decided to follow the enemy and make their journey as miserable as possible.

French naval blockade, decided to abandon that city and head back to their stronghold, New York. Some left by ship, but the bulk of the British army (approximately 20,000 men), with camp followers and wagonloads of provisions, started out on a long march through New Jersey.

For General George Washington and his forces, who had just spent a harsh winter at Valley Forge but a productive spring getting healthy and sharpening their military skills, the news of the British move was a great shot in the arm. Washington decided to follow the enemy and make their journey as miserable as possible.

Eight days after leaving Philadelphia, the British, under the command of General Henry Clinton, reached

Freehold, not far from transport ships on Sandy Hook that would sail them to New York. But Washington's army — 13,500 strong — was now approaching Englishtown, just a few miles to the north. And Washington was not about to let the British waltz on to Sandy Hook without a fight.

The towns of Freehold (Monmouth Courthouse, back then) and Englishtown were considerably less populated in 1778 than they are today. The land between the two towns, where the battle was fought, was dotted with farms. According to Garry Stone, Ph.D., a historic preservation specialist for the New Jersey Division of Parks and Forestry, Englishtown consisted of a small group of homes — six to eight — and several blue collar businesses. The

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residents were predominantly of Scottish descent, and mainly Presbyterian. Most were Whigs (pro-revolution).

Freehold was a bit larger and wealthier, with the courthouse as its centerpiece. Freehold was mixed politically, with the wealthier citizens attending the Church of England and remaining loyal to the crown. "Just like today," says Stone, "those with power and wealth resisted change, while those without were all for it."

In the early morning of June 28, Washington ordered General Charles Lee, who had earlier disagreed with Washington's desire to pursue the British across New Jersey, to attack the British from the rear. Taking nearly half of Washington's army, Lee set out to engage the enemy. As he waited, Washington heard distant cannon shots and the crackle of small arms. He was jubilant. But as quickly as the commotion had begun, the farmland between Freehold and Englishtown fell silent again.

Puzzled, Washington advanced, and soon met Lee's whole regiment in retreat. When he encountered Lee, Washington was livid. "What is the meaning of this, sir? I desire to know the meaning of this disorder and confusion!"

Lee responded: "The American troops would not stand the British bayonets."

"You damned poltroon," shouted Washington, "you never tried them!" According to General Charles Scott, another officer on the scene, Washington swore that day "till the leaves shook on the trees."

Taking charge, Washington regrouped his confused and frightened troops and pressed them into battle. It was so hot and humid that many of Washington's men, being pushed toward the British at maximum speed, dropped to the ground and did not rise. The temperature that day is said to have reached 100 degrees. Wearing heavy wool uniforms, carrying full packs of provisions and ammunition, and lugging weapons, the soldiers on both sides were no match for Mother Nature.

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Enter Molly Pitcher

Watching the battle reenactment last year, spectators expressed amazement that our ancestors could endure that intense heat and humidity under battle conditions. Many spectators looked overheated just watching. And the temperature last June 28 was relatively cool!

The soldiers who survived the real Battle of Monmouth could thank the "Molly Pitchers" for keeping them on their feet. Many married soldiers in the Continental Army brought their wives along as they traveled. At the Battle of Monmouth, these women brought pitcher after pitcher of water from local brooks to the fighting men. Without their efforts, many more soldiers would have fallen with heat stroke.

Mary Hays, a gunner's wife with the 4th Pennsylvania Artillery Regiment, gained fame as part of this group. Eyewitnesses say that when her husband became overcome with heat, Mary stepped in to attend his piece for the remainder of the battle. They say she performed her duties as well as any trained artilleryman.

According to a narrative attributed to soldier Joseph P. Martin, "... a cannon

Reenactors march in formation (opposite page).

A reenactor (above) fires a cannon.

Diane Senechal (below), a *Molly Pitcher* from Burlington, takes a short break from meal preparation duties.



© ART LACKNER

Washington and his troops tended to their wounds, settled in for the night, and anticipated another round of bloodshed the next day.

shot from the enemy passed directly between her legs without doing any other damage than carrying away all the lower part of her petticoat. Looking at it with apparent unconcern, she observed that it was lucky it did not pass a little higher, for in that case it might have carried away something else, and continued her occupation.”

After the war, Mary Hays settled in Carlisle, Pennsylvania. In 1822, the Pennsylvania Legislature gave her a pension in recognition of her heroism.

The battle raged throughout the day, with bloody clashes followed by a two-and-a-half-hour artillery duel. While the bulk of the battle took place on land now preserved by the park, skirmishes were fought over a much wider area. “People were dying

as far away as Colts Neck,” says Stone.

As night fell on central New Jersey, the long battle came to an end. Battles in the 18th century were generally daylight affairs, so Washington and his troops tended to their wounds, settled in for the night, and anticipated another round of bloodshed the next day.

But General Clinton had other plans. His orders were to get his army to Sandy Hook intact, not see it decimated along the way. He had no intention of losing more men and supplies the next day. So Clinton and his troops, quiet as church mice, resumed their march at 11 p.m. and disappeared into the night.

Not until morning did the Americans discover what had happened. Uncharacteristically, Washington decided not to pursue right away, but instead gave his men a well-deserved rest. Soon the bruised British Army reached Sandy Hook and sailed away to New York.

Reports of final casualties vary widely, but it is generally believed that British and Hessian dead, wounded and missing totaled around 350. American losses were somewhat less. And the weather took quite a toll — as many men dropped from heat stroke as from wounds.

Washington always felt cheated about Monmouth, believing Lee’s artificially orchestrated retreat cost him the day. After a period of bickering back and forth, Lee finally demanded a court martial to clear the air. The court found him guilty on three counts — disobedience in not attacking the enemy, misbehavior before the enemy, and ordering a disorderly retreat — and suspended him from command for 12 months. Actually, Congress never gave Lee another command and dropped him completely in 1780.

Many historians now believe Lee was treated too harshly; that his behavior at Monmouth was due not to treachery or

In keeping with the reenactment, these women prepare a meal as it would have been done more than 200 years ago.



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cowardice but to a simple error in judgment. In any event, the once rag-tag Continental forces had fought the best of the British army to a draw, despite whatever Lee had done wrong, and American confidence soared. Wrote another American general on the scene, Anthony Wayne, "Tell the Philadelphia ladies that the heavenly sweet pretty redcoats, the accomplished gentlemen of the guards and grenadiers, have humbled themselves on the fields of Monmouth."

Living History

Last June's Battle of Monmouth reenactment proved to be a great educational experience for the hundreds of spectators on hand. Reenactors presented the battle as it appeared 220 years earlier, on the same ground, with muskets blazing and cannons booming. Without the gore and terror of actual combat, it's quite a show indeed.

Teacher Chuck Young, 49, brought his West Belmar Cub Scout pack out for a living history lesson. "We think this is a marvelous activity for our pack," he says. "You can read about this in a book, but here it comes alive."

Cub Scout Jonathan Laing, 9, learned from a reenactor about an unstoppable killer on colonial battlefields, gangrene. "When a musket ball was shot into someone, first they turned yellow, then green, then black, then they died," Jonathan says. "They died even if the bullet was taken out."

For Mark English, a 36-year-old reenactor from Kingston, New York, preserving history is what it's all about. Serving as one of General Washington's bodyguards, English enjoys exploring museums and passing on what he's learned. "I like to educate the public," he says, "plus I enjoy the battles!"

The Park

Monmouth Battlefield State Park sits on 2,000 acres of fields, farmland, brooks, hedgerows and woods, a landscape reminiscent of the area in the 18th century. It features more than 25 miles of hiking and horseback riding trails of various lengths. The visitor's center, atop Combs Hill near the entrance, includes an interpretive display area and artifacts recovered from the battlefield. Picnic tables shaded by old trees are available nearby. Interpre-



tive tours and schedule information are available at the visitor's center. A short drive from the visitor's center, the John Craig House (located to the north on Route 522) is a refurbished 18th century farmhouse that served as a field hospital for both sides during the battle.

The park's entrance is on Route 33, just west of Freehold. The site is open from dawn to dusk. Call ahead (732/462-9616) for visitor's center hours.

This year's reenactment is scheduled for June 26 and 27, the 221st anniversary of the big battle. So I'll see you there. I'll be the guy in the farbie clothes.

*Art Lackner is a freelance writer and photographer from Eatontown. His articles and photos have appeared in **New Jersey Outdoors** on several occasions.*

Fire and smoke erupt (left) from reenactors' rifles.

History buff Mark English (above), when not serving as one of General Washington's bodyguards, enjoys educating the public.

The Birds of BRIGGA



Photo essay © by Walt Marz



BRIGANTINE



A 1,400-acre division of the Edwin B. Forsythe National Wildlife Refuge since 1984, the area still known to many as “Brigantine” is listed as one of the top spots in the country to see and photograph migratory water birds.

Brigantine’s eight-mile-long, self-guided Wildlife Drive is a gem. Most of it is one-way, with shallow bays and tidal marshes laced with creeks and mosquito

A barn swallow (opposite page)

Snow geese on the wing (left)



ditches on one side and a fresh and a brackish water pool and flora on the other. The loop finishes off through fields and woodlands. It is a “stop and go” deal. The average time it

takes me to complete the loop is three-and-a-half hours.

About half the time I’m using my vehicle as a blind, shooting from the window with the aid of a “beanbag” rest to

A snowy egret
(opposite page)

Early morning at
Brigantine (below)





steady the camera. When I can, I'm outside of the car, shooting from a tripod. I generally have two cameras set up and loaded with slide film — usually 100 and 200 ASA. One is fitted

with a 70-210 mm zoom lens; the other, with a 400 mm telephoto plus a converter to give me 600 mm.

Even if you are not an avid birder or into nature photography, it is

a great place to enjoy nature, as well as two things I can't capture on film — the smells and sounds of salt marshes.



A yellow crowned night heron (opposite page)

A pair of pintails (left)

A killdeer (above)





Everything's Coming Up Roses

A visitor strolls through the Lambertus C. Bobbink Memorial Rose Garden in Monmouth County's Thompson Park (inset) admiring fabulous roses like the one shown here.

. . . and Irises, Azaleas and More

by Arline Zatz

"Then bursts the song from every leafy glade." —Oliver Wendell Holmes, *Spring*

Taking a leisurely stroll through a garden is the best prescription for erasing everyday stress while awakening all the senses — for who can resist admiring butterflies flitting from one flower to another, checking the hour of the day on a sundial, or watching a young fern unfurl?

During the Victorian era, flowers — believed to have a language of their own — were frequently used to relay messages. For example, a red rose signified love; hydrangeas were sent as a thank you for understanding; and presenting a tulip meant that person was considered the perfect lover! Although flowers, trees and shrubs are planted mainly for their beauty nowadays, viewing exceptional plantings not only emits a feeling of perfect harmony, but also is food for the soul.

Most of the gardens described in this article feature a vast array of diversified plantings, but each is noted for a particular species of plantings that is spectacular. Each also has a unique personality and, as a bonus, some offer picnic areas and easy walking trails. So, choose one or more, feel free to kick off your shoes, feel the cool grass between your toes, and have a great horticultural adventure!

Note: *It's always best to call before starting out since hours are subject to change. Wear comfortable shoes, a hat, sunglasses, and sun block; take a snack and plenty of water. To enhance any garden*



ROSE © ARLINE ZATZ • INSET © JOEL L. ZATZ



The dark bark of the cherry tree (above) sets off its beautiful blossoms.

Thousands of azalea blossoms like the one pictured here brighten Mother's Day for visitors to Hamilton's Sayen Park (above, right).

The 3,000 cherry trees that burst into flower each April in Newark's Branch Brook Park are an awesome sight (opposite page).

Vivid tulips surround a tree in Tenafly's Davis Johnson Park (below).



outing, optional items include a magnifying glass for a super close-up of flowers and insects; binoculars for spotting birds and butterflies; a camera, tripod, and lots of film; and identification books for flowers, trees, wildflowers, birds, butterflies, shrubs and rocks, depending on your interests.

Branch Brook Park

One of the state's best-kept secrets is Branch Brook Park, the nation's oldest and largest urban park. Designed by Frederick Law Olmsted in 1895, it contains the largest collection of flowering cherry trees in the world. During the first three weeks in April, the northern section of the park is awesome, for that's the time that 3,000 knurled trees of 28 varieties burst into bloom. Philanthropist Caroline Bamberger Fuld donated the first 1,800 in 1928 in memory of her husband.

Among the single-flowered varieties are the early flowering Higan cherry, identified by five petals and pink blossoms and the Sargent cherry, one of the largest of the flowering cherries, which sports deep pink blossoms. Other single-flowered beauties are the Yoshino cherry, with fragrant, pale pink blossoms, and the weeping Higan cherry, with distinctive hanging branches and deep pink flowers.

Branch Brook's semi-double varieties, sporting six or more petals, include the Autumnalis, with a white, almond-scented flower, the white-blossomed Shirotae and the Amanogowa, a lovely tree with light pink blossoms. Double-flowering varieties are stunning, espe-

cially the Fugenzo, with reddish-pink blossoms early in the season, and the Shirofugen, which has large white blossoms that turn pink before they fade.

Cherry trees, cultivated in Japan since the 7th century, were so revered for their blossoms that for many centuries only the Japanese emperor and his court were allowed to view them. Perhaps, because the bloom is so short-lived, it is a reminder of how precious, and short, life is.

Don't miss the park's annual cherry blossom festival, which is held in April.

Davis Johnson Memorial Park and Gardens

Thousands of daffodils, tulips and grape hyacinths grace this 7.5-acre park each spring, but the highlight each June and July is the hundreds of roses on display within the Jack Lissemore Rose Garden. Named for a local resident who patented the Ronda rose, this small, attractive garden contains hybrid teas, floribundas, grandifloras and spreading varieties and displays the annual rose winners chosen by the American Rose Society. After admiring the roses, pack a picnic lunch to enjoy under one of the park's elegant beeches — copper, three-colored, yellow, weeping or European — or simply stroll among the tall tulip trees, maples, firs and rare dwarf conifers.

Lambertus C. Bobbink Memorial Rose Garden

Everything's been coming up roses in this delightful garden since 1977. A me-



Peonies and lilacs aren't all you can see at Skylands, the state's official botanical garden. Here, a visitor admires that bright yellow harbinger of spring, forsythia (below).

morial plaque at its entrance reads, "For the enjoyment of all those who love roses," and, indeed, you'll have a joyful experience admiring all the varieties. Tags indicate the name and year each received an All-America Rose Selection award. Examples include White Dawn (1949), a large flowered climber that's lavish during spring and fall; Tiffany (1955), a hybrid tea rose with large pink

flowers and a fruity fragrance; Voodoo (1986), a hybrid tea with heavily perfumed flowers in a multitude of colors; and St. Patrick (1996) a stunning yellow hybrid tea rose with a hint of green.

The shaded gazebo is a great place to rest or photograph the roses, or you can sprawl out on the vast lawn surrounding the garden, donated by George and Dorothea Bobbink White to honor her





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© ARLINE ZATZ

Visitors and butterflies alike enjoy the variety of ferns that abound in the Leonard J. Buck Garden's F. Gordon Foster Hardy Fern Collection Garden (left).

deceased father. Peak bloom is during June, July and August, but some varieties flower through October. If park naturalist Steve Dickinson is present, he's always happy to answer questions about the roses. After, tour the adjacent Visitor Center; it's housed in the former mansion built by William Payne Thompson in 1893.

Leaming's Run Gardens and Colonial Farm

Spread over 20 acres are 27 individual gardens, designed and planted by Jack Aprill. A mile-long meandering path joins the themed gardens. Aprill aptly describes his work of art as "an island of peace in South Jersey." One of the prettiest of those devoted to a single species planting is the Hibiscus Garden. Here, scattered around the edge of the Reflection Pond, are a tremendous number of outstanding examples of the Southern Belle hibiscus, planted more than 20 years ago. Aprill says this particular species thrives in the southern part of the state. This perennial favorite, which blooms from July through early September, never fails to amaze visitors with its 11-inch-wide red, pink and white flowers that bloom on stalks reaching as high as six feet. Interestingly, the hibiscus only produces one flower per day.

Originally from Africa, the hibiscus — its name appropriately derived from the ancient Greek word for "marshmallow" — was introduced to England in the late sixteenth century. In the South Sea Islands, when a young girl placed a red

hibiscus blossom behind her left ear, it meant she wanted a lover, but if it was placed behind her right ear, everyone knew she already had one. The blossoms often are used for making tea, and the stem fibers have been used to make cloth.

Leonard J. Buck Garden

Using natural rock platforms and unusual outcroppings, Leonard J. Buck succeeded in creating hundreds of pockets and beds for the plants he had collected in his worldwide travels. The garden that carries his name is one of the premier rock gardens in the eastern United States. Feel free to meander anywhere; you'll find ponds, creeks, meadows and bridges. Bird-watch and smell the flowers, but don't leave without seeing the F. Gordon Foster Hardy Fern Collection Garden, located on the southern slope behind the Visitor Center.

Although ferns do not bear flowers, their delicate lace-like patterned leaves are beautiful. It's as interesting to watch the growth progress, as the frond-like leaves unwind and expand and seem to reach out to touch the sky, as it is to examine the button-like spore sacs on the underside of the leaves. The larger ferns, found in the damp and acid area near Moggy Brook, include the ostrich, cinnamon, interrupted and royal ferns.

Further along the sloped path are many varieties of giant shield-ferns. With fronds forming crown-like tufts, these often exceed five feet in height. Others varieties include the maidenhair fern with

its soft, pretty, ginkgo-like leaves, and the evergreen Christmas ferns, displaying variable leaf patterns and shades of green. Near the top of the slope are little-known species, such as the tiny rusty *Woodsia*, often found on rock ledges in northern New Jersey as well as Alaska's volcanic slopes. Part of the collection contains exotic ferns. Don't worry which is which; signs indicate the variety.

Presby Memorial Iris Garden

Although you'll find irises blooming from mid-May through October, peak bloom — when nearly 70,000 tall bearded irises put on an unbelievable show — occurs during the last two weeks in May through early June. Believed to contain the largest collection of its type in the country, this two-acre garden is a National Historic Landmark site. Laid out in 1927 as a memorial to the late Frank H. Presby, founder of the American Iris Society, it also is home to the bearded Florentine iris, a beauty dating back to the 1500s. Metal markers indicate the variety, hybridizer's name, and year registered with the American Iris Society.

Admired the world over for its beauty and curative powers, the iris has been treasured for centuries. According to legend, Iris, the goddess of the rainbow, transported messages of love from heaven to earth using a rainbow as a bridge; Greek men planted the iris on graves of their beloved women as a tribute to the goddess. Medicinally, in both Elizabethan England and

An artist immortalizes the beauty of irises in the Presby Memorial Iris Garden in Upper Montclair (right).

Visitors admire the irises that bloom along the curving paths of the Presby Memorial Iris Garden (below).

A dew-kissed bearded iris (opposite page)



© DOTTY WAXMAN

© DOTTY WAXMAN



ancient China, its rhizomes were used to make face powder, while European mothers turned the chewy rhizome into pacifiers to soothe their babies. Today, France imports tons of the plant's root from Mexico for cosmetic manufacturing, and its blossoms and roots are used for making dyes.

Rudolf W. van der Goot Rose Garden

Recognized as one of the top ten rose gardens in the nation, and sanctioned by All-America Rose Selections as one of 24 test gardens in the nation, this one-acre enclosure within Colonial Park showcases in excess of 4,000 bushes of more than 275 different species of roses. Miniature roses, adorning the base of a large fountain, are encircled by hybrid tea roses; attractive brick paths lead to lush displays of hybrid teas, grandifloras, floribundas, climbers, miniatures, shrubs and botanical roses. Many are named to honor important individuals and events, such as the Mister Lincoln, Chrysler Imperial, City of New York, Dolly Parton and Barbara Bush varieties. Peak bloom is during June and September.

Leave enough time to explore the 300-acre park. Besides an arboretum, it features a par course fitness circuit, picnic areas, playgrounds, ponds and open play fields.

Rutgers Display Gardens

In this serene atmosphere, visitors are free to roam anywhere. The gardens began in 1929 when a shrub border was planted



© DOTTY WAXMAN

for teaching and research purposes. Today, thousands of species and cultivars (*cultivated varieties*, as distinguished from natural varieties), both native and introduced, cover these lush 75 acres.

Of particular interest is the American Holly Trials Section. Considered one of the largest collections of American hollies in the world, it contains approximately 140 varieties, including those first used and hybridized by Rutgers/Cook College professor Dr. Elwin Orton in his holly-breeding research project that began in 1937 and resulted in the Jersey Knight and Jersey Princess specimens. In 1964, Orton successfully produced cultivars of Japanese holly, found in the Japanese Holly Variety Trials Section and identified by its spineless leaves.

Besides the Conservation Gardens, which feature drought tolerant plants, the display gardens contain hundreds of trees, including dogwoods, cherries, magnolias and flowering crab that are brilliant this time of year. Visitors will want to explore the short Helyar Woods Nature Trail adjacent to the gardens and view the Donald B. Lacey Annual Display Garden, which produces overwhelming color from late spring through fall when the annuals and bedding plants are in bloom.

Sayen Gardens

Breathtaking is the only word to describe this garden in springtime, when azaleas and rhododendron brought back from China, Japan, and England by the late Fred Sayen put on an unforgettable

Additional Single-Species Displays

Azaleas (late April to May)

- Washington Spring Garden, Paramus, Bergen County • 201/646-2680

Chrysanthemums (fall)

- Veterans Park Gardens, Hamilton, Mercer County • 609/581-4124

Daffodils (April)

- Reeves-Reed Arboretum, Summit, Union County • 908/273-8787
- Lewis W. Barton Arboretum and Nature Preserve, Medford, Burlington County • 609/654-3000

Forsythia (April)

- Lewis W. Barton Arboretum and Nature Preserve, Medford, Burlington County • 609/654-3000

Geraniums (summer)

- Hereford Inlet Lighthouse Gardens, North Wildwood, Cape May County • 609/522-2955

Heliotrope (summer)

- Hereford Inlet Lighthouse Gardens, North Wildwood, Cape May County • 609/522-2955

Hollyhocks (summer)

- Hereford Inlet Lighthouse Gardens, North Wildwood, Cape May County • 609/522-2955

Hydrangeas (May)

- Veterans Park Gardens, Hamilton, Mercer County • 609/581-4124

Roses, Old-fashioned (June)

- Acorn Hall Gardens, Morristown, Morris County • 973/367-3465
- Macculloch Hall Gardens, Morristown, Morris County • 973/538-2404

Rhododendrons (late April to May)

- Washington Spring Garden, Paramus, Bergen County • 201/646-2680

Salvias (July and August)

- Waterloo Village, Stanhope, Sussex County • 973/347-0900

Tulips (April and May)

- Deep Cut Gardens, Middletown Township, Monmouth County • 732/671-6050

Wildflowers (April and May)

- Tourne Park, Boonton, Morris County • 973/326-7600

show. Most of the original garden areas he planted are still intact, and contain approximately 2,000 azaleas and 1,500 rhododendrons of both hybrid and native species. The gardens, maintained in accordance with Sayen's original plan of natural landscaping, have increased in size through the years as additional varieties of azaleas, rhododendrons and other native plants were introduced.

This is definitely the place to be on Mother's Day; that's when the annual

azalea festival takes place. Besides feasting your eyes on the wonderful array of shrubs and flowers, and having the opportunity to walk to a pristine pond filled with water lilies or through a wooded area filled with birds and wildlife, you can enjoy crafters, entertainment and lots of good food. This lovely 30-acre site, planted with approximately 500,000 daffodils, tulips, snowdrops and other types of bulbs, is reputed to contain the largest collection of bulbs in the state.

The Rutgers Display Gardens in New Brunswick feature about 140 varieties of American holly (right).

Wisteria vines wind around Doric columns at Montclair's Van Vleck Gardens (below).

Among the 27 themed gardens at Leaming's Run in Cape May Court House is one devoted to hibiscus (opposite page).



© JOEL L. ZATZ

Skylands, the New Jersey State Botanical Garden

Designated in 1984 as New Jersey's official botanical garden, these exquisite themed gardens offering fantastic vistas — many dating from 1891 — are nestled in the Ramapo Mountains and surrounded by 5,000 acres within Ringwood State Park. The unusual sections include the Peony Garden where, under a canopy of American hemlocks, you find the shrubby, woody-stemmed tree peonies native to China. If undisturbed, peonies can live for a century or more.

The Lilac Garden on the East Lawn also is worth visiting, for this extensive collection contains more than 400 varieties of eight different species that reach peak bloom from mid-May into June. Lilacs, native to Europe and temperate Asia, are actually members of the olive family. Since Colonial times, lilacs have been popular for their delightful fragrance and ease of culture. One of the first varieties recorded in Clarence McKenzie Lewis' (an investment banker who purchased the property in 1922) plant books is the *Syringa x persica*, which he obtained in 1923. He purchased the Japanese tree lilac, the Chinese lilac and two French hybrids, Edward Anove and Mme. Alloe Chatenay, in 1928.

Before leaving, check out Crab Apple Vista, a half-mile row of more than 150 crab apple trees clothed in pink blossoms during mid May.



© ARLINE ZATZ



© JOEL L. ZATZ

Van Vleck Gardens

This five-acre site, developed over nearly a century by the late Joseph and Howard Van Vleck, is bathed in a sea of color each May and June when the wisteria, rhododendron and azalea awaken. The 60-year-old Chinese and Japanese wisteria vines adorning Doric columns on the back terrace of the Van Vleck house are difficult to tell apart until they're in bloom. The Chinese vine, bearing fragrant 8"-10" lavender blossoms in early May, and the Japanese wisteria, which boasts 18" light lavender blossoms during late May, normally produce shoots that twist in opposite directions. Knowing this tendency, Howard Van Vleck trained the two vines in opposite directions around the columns.

The sea of color along Azalea Walk is sensational, for the combination of varieties — including Orange Mollis, *Coccinea speciosa*, Indica, White Find, Blaauw's Pink, Hershey's Red, Snow, Pinkshell and Louise Gable — are dazzling against the vast green lawn. By early June, huge masses of rhododendron are ablaze. Below the back terrace, and registered with the Royal Horticulture Society, are those hybridized and propagated by Van Vleck. One type bears lemon-yellow funnel-shaped blossoms; another is deep yellow with bell-shaped blossoms.

A frequent contributor to New Jersey Outdoors, Arline Zatz is the award-winning author of several books, including the recently published New Jersey's Great Gardens, Parks and Arboretums, and her features and photographs appear in magazines and newspapers nationwide.

For More Information

■ Branch Brook Park

Mill Street, Belleville, Essex County • 973/268-3500

Open daily from dawn to dusk; free; handicapped-accessible paths; rest room

■ Davis Johnson Memorial Park and Gardens

137 Engle Street, Tenafly, Bergen County • 201/569-7275

Open daily from dawn to dusk; free; partially handicapped-accessible; rest room

■ Lambertus C. Bobbink Memorial Rose Garden

Thompson Park, 805 Newman Springs Road, Lincroft, Monmouth County • 732/842-4000

Open daily from 8 a.m. to dusk; free; handicapped-accessible; rest room; various park events

■ Leaming's Run Gardens and Colonial Farm

1845 Route 9 North, Cape May Court House, Cape May County • 609/465-5871

Open from 9:30 a.m. to 5 p.m. from May 15 to October 20; fee; handicapped accessible; rest room; water; guided tours; Hibiscus Week in July and hummingbirds in August; picnicking allowed at tables near the Visitor Center

■ Leonard J. Buck Garden

11 Layton Road, Far Hills, Somerset County • 908/234-2677

Hours vary by season; Visitor Center closed on major holidays; rest room, drinking fountain and reference library available when Visitor Center is open; donations requested

■ Presby Memorial Iris Garden

474 Upper Mountain Avenue, Upper Montclair, Essex County • 973/783-5974

Open daily from dawn to dusk; free; handicapped-accessible; annual Iris Festival

■ Rudolf W. van der Goot Rose Garden

Colonial Park, Mettler's Road, East Millstone, Somerset County • 908/234-2677 or 732/873-2459

Open daily, spring through fall, from 10 a.m. to dusk; free; barrier-free with a wheelchair ramp and guide rail in the sunken Fragrance and Sensory Garden; rest room; water; Rose Day is held in June

■ Rutgers Display Gardens

Rutgers, the State University, Ryders Lane, New Brunswick, Middlesex County • 732-932-9271

Open from 8:30 a.m. to dusk; free; partially handicapped-accessible; annual Open House in mid-summer and fall

■ Sayen Gardens

155 Hughes Drive, Hamilton, Mercer County • 609/890-3543 or 609/890-3874

Open daily from dawn to dusk; free; garden area handicapped accessible; Azalea Festival on Mother's Day weekend; ecology programs

■ Skylands, the New Jersey State Botanical Garden

Ringwood State Park, Morris Road off Sloatsburg Road, Ringwood, Passaic County • 973-962-7527 or 973-962-9534

Open daily from 8 a.m. to 8 p.m.; free, except for parking fee on summer weekends; wheelchair access limited; rest room; annual plant sale; educational programs

■ Van Vleck Gardens

21 Van Vleck Street, Montclair, Essex County • 973/744-4752 or 973/744-0837

Open daily, May 2 through October, from 1 to 5 p.m.; free; rest room; Mother's Day Celebration; spring plant sale; regularly scheduled concerts; dogs, food, and drink are not allowed; a map of the grounds is available at the rear terrace



Leave it to the Beavers

by J. Wandres

Back in the 1700s, beavers were plentiful in streams and ponds throughout New Jersey (in fact, all over North America except maybe the frozen Alaskan tundra and the broiling Mexican desert). Their beautifully soft underfur fueled such a fashion rage for coats and hats that they were hunted and trapped to near extinction in the Garden State by the 1820s.

Castor canadensis, according to the *Audubon Field Guide to North American Mammals*, is the largest of the rodent family inhabiting North America. They weigh in from 45 to 60 pounds but some have topped 100 pounds. They're from 3 to 4 feet long including their flattened, scaly tail, which they use as a rudder when swimming and to send an alarm signal by slapping it in the water.

Beavers usually mate for life and breed during January and February. By May, females deliver a litter of four to six kits who hit the water swimming within a week, are weaned within two months and usually leave home in their second year to join another colony or found their own. Several pairs may live together in one beaver colony.

Their underfur, which started the beaver coat fashion craze, is waterproof. Covering it is a layer of coarse hair, which the beavers waterproof using an oil their body produces. They are mammals and can stay under water for up to 20 minutes, thanks to their oxygen-rich blood. What is really neat is a flap of skin that seals the mouth behind their always-growing incisor teeth, which they must use constantly to keep sharp. A clear membrane closes over their eyes so they can see underwater and a valve closes in their ears to keep water out while the beavers are submerged.

Architects Par Excellence

Females are dominant in the colony and direct lodge and dam building, as well as maintenance efforts. They also are in charge of food gathering and storage. The first thing beavers do when establishing a colony is construct a dam to raise the water level. They'll use trees such as poplar, aspen, willow, birch and maple, grass and even bottles and soda cans. Pond lodges may be 30 to 40 feet in diameter at the base, resting on the bottom, even though

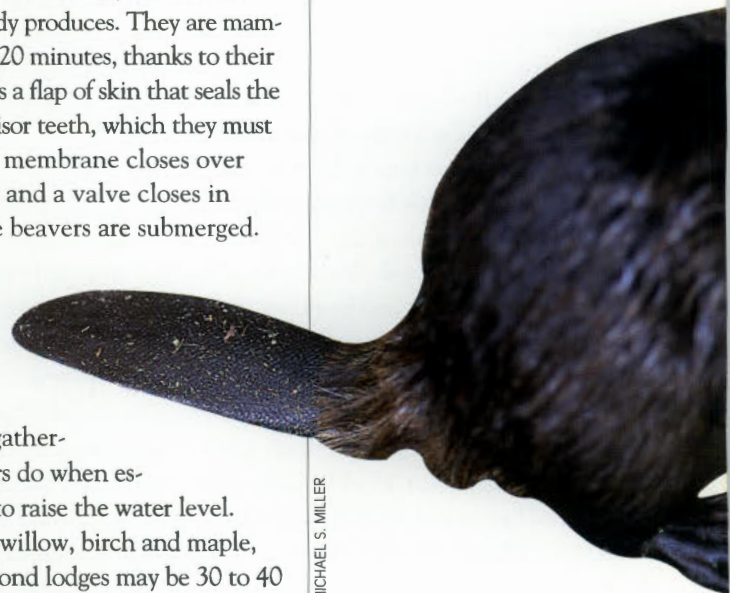


© CORNELIUS HOGENBIRK

The gnawing of a beaver turned this tree into a pretty picture (opposite page).

This tree was toppled by the teeth of a beaver (above).

It's easy to imagine the sound of the beaver's tail (right) smacking the water.



© MICHAEL S. MILLER



only a few feet can be seen above the high water mark. The entrance is underwater and the lodge floor, above the high water mark, is lined with wood chips. Beavers dig river lodges six to ten feet back under the bank, with air holes for ventilation; however, all that you will see is a heap of sticks at water's edge.

Generally, beavers establish a territory ranging from one-quarter to one-half mile from the lodge. They mark its boundaries with small mounds of dirt and grass, laced with a unique scent from a special gland. Within this area, they strip and eat bark, then cut the trees and branches into manageable lengths to use in construction. The tree stumps provide the base for food in later seasons from shoots that will grow from the stumps.

Beavers feed on the bark of poplar, alder, willow and other softwood trees. Although they don't hibernate during winter, their range is often restricted because the pond or river surface is frozen, or because of deep snow on land. They store food for winter by sticking branches into the silt-covered bottoms of the pond or stream.

Beavers are not members of the carnivorous food chain. They

are herbivores and often fall prey to larger animals.

Some common beaver/human conflicts involve cattle and grain farmers concerned that beaver-dammed highway culverts will cause road or pasture flooding. Others involve homeowners with pricey river or lake frontage, annoyed because beaver dam-raised water levels can cover over bottom-anchored docks and floats, or flood their lawns.

Move Along, Little Beaver

To get rid of the pesky varmints, most people call the New Jersey Division of Fish, Game and Wildlife. (See: *Wildlife Problems? Call Wildlife Control, New Jersey Outdoors*, Spring 1997, or call 908/735-8793). The division will send an animal control officer to verify the complaint. From July 1, 1996 to June 30, 1997, the division received 160 beaver complaints, most coming from Morris and Sussex counties. At his or her discretion, the field biologist will take care of the problem or advise the citizen on how to deal with the beavers.

Solutions can include modifying the dams that are the most



A four-legged construction worker hauls building materials to the work site (opposite page).

Although lodge entrances usually are underwater, the covered, semi-exposed entrance to this one (above), built under a mossy overhang bordering a stream, reveals one of its inhabitants.

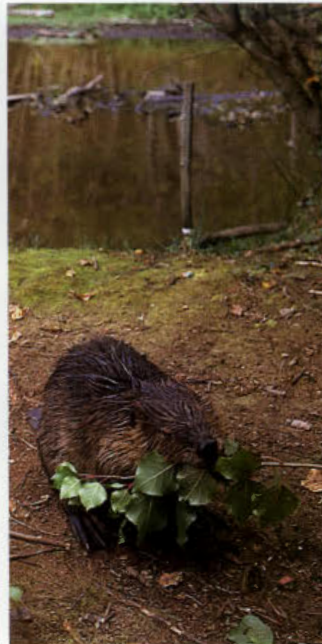
A beaver family's river lodge, like this one in the Great Swamp National Wildlife Refuge in Harding Township (left), may extend six to ten feet beneath the riverbank. Air holes provide ventilation.



© J. WANDRES



© J. WANDRES



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Craig Bitler, a conservation biologist with the Great Swamp National Wildlife Refuge, keeps tabs on beaver cuttings and colonies in the refuge's Wilderness Area (above).

A culvert baffle (far left) built of wire mesh keeps beavers from stopping the flow of water and flooding roads.

As herbivores (vegetarians), beavers feed on the bark of poplar, alder, willow and other softwood trees (left).

What's in a name? Plenty, as illustrated by this picture of Beaver Pond in Stokes State Forest (opposite page).





The beaver's webbed feet help propel it quickly through water.

Beavers are known as a keystone species because of the work they do to support other species.

common source of complaints. However, simply tearing out the dam does not end the problem, according to division biologist Brad Holloway. To a beaver, the sound of rushing water is an alarm, something like "the dam has burst!" Their instinctive reaction is to repair the break. The nocturnal beavers will work all night if needed and have the dam finished the next morning.

A better idea is to install a water-leveling flume device. This usually is an end-capped length of 8-inch-diameter PVC pipe with one-inch holes drilled in it. The pipe is anchored about 12 inches below the stream or pond surface and runs through the beaver dam to the outflow side. The sound of water escaping through the holes in the pipe is muffled and does not trigger the beavers' defenses.

Highway culverts can be protected against beaver activity by installing an open-wire baffle, designed so that highway repair crews can periodically clear away brush. To protect ornamental trees from being cut down by beavers, Holloway advises circling the trunk with a cage of welded wire screen.

If the beaver population is very large, the Division of Fish, Game and Wildlife will issue site-specific permits for live trapping during a specific period. In some instances, the division will move beavers from one location and attempt to reestablish them in an area where there are none. However, the cost of moving a beaver is extremely expensive and can be more than \$200.

Environmental Protectors

Although division animal control staff are responsive to citizen complaints, they also stress that people can benefit from these animals. Beavers are known as a keystone species because of the work they do to support other species. Slow-moving, beaver-dammed streams reduce bank erosion, help maintain subsurface ground water, and nourish wetlands and upland marshes, as well as the animal species they support. Streams also support aquatic life and can be developed for sport fishing. Probably the best aspect of this constant development is that it costs taxpayers virtually nothing.

Freshwater wetlands are worth nearly \$8,000 per acre in ecological services, according to the results of a survey published in *Nature* magazine. The services include the value of taxpayers' money *not* spent on flood control, erosion mitigation, sediment retention, nutrient cycling, waste treatment

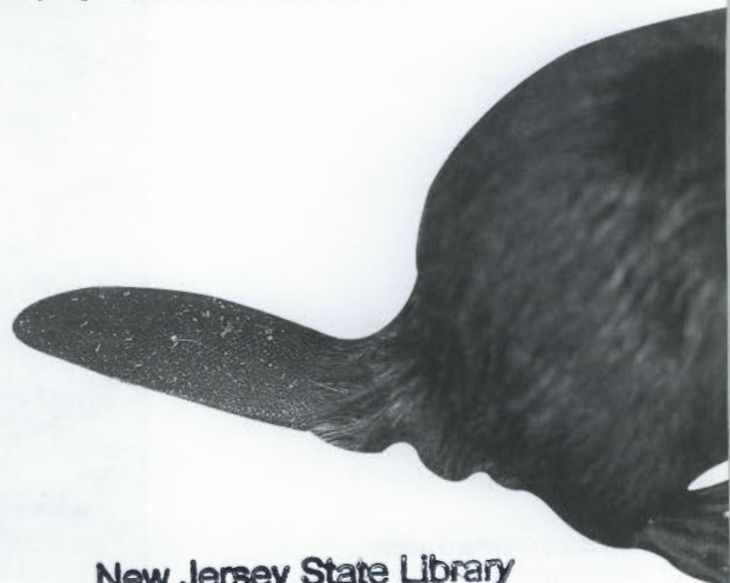
and the creation of animal refuges. Only swamp and floodplain wetlands are rated as more valuable.

Beaver-created wetlands are like "giant chemical reaction chambers," says Dr. Donald Hey, of Chicago's Wetlands Initiative. They can reduce suspended solids by up to 90 percent, and remove pesticides and nitrogen-based fertilizers from the water, thus increasing the levels of dissolved oxygen necessary to support aquatic life. In many places, Dr. Hey has observed, wetlands help to reduce flooding and destruction to surrounding habitats, including loss of topsoil. A beaver-dammed stream may meander through the landscape, even creating new channels as the water flows downhill. These new channels provide opportunities for new dams, and development of new wetlands. What may have been an arid area can become a lush landscape of meadows and woods within a decade.

After beavers have harvested the trees they favor, the opened-up stream habitat encourages new growth of other species, and these eventually support numerous bird and animal populations. Though the beaver dam may be abandoned and eventually disintegrate, the improvements to the environment can last for decades and centuries.

J. Wandres, who admits he never met a beaver he didn't like, last wrote about recycling abandoned railroad lines into rail-trails.

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New Jersey State Library

Carving His Niche in the Landscape

Story by Marshall McKnight; photos © by Bill Puleston



The Good Shepherd stands watch in Bernardsville.



Harry Robinson poses in his Bernardsville outdoor studio/workshop.

Harry Robinson points to his back yard as he stands in his Bernardsville showroom. Through the framed window, a female figure reflects the morning sun. Her shining white surface resembles a Greek goddess. She is not a sculpted piece of stone, but a graceful carving of wood.

"Her name is *Daphne*," Robinson says, as if introducing me to an old friend.

If you drive over the highways of northern New Jersey, you will see Robinson's artistry. *The Good Shepherd* stands with his hand pointing skyward. He faces traffic on Route 202 in Bernardsville, where he tends pasture. It is one of Robinson's best known works.

He saw the form of a shepherd in an old, dead tree that stood in a verdant field across the road from The First Presbyterian Church of Bernardsville. Though they may not know the artist, many are familiar with this local fixture.

Robinson carves everything — from large figures out of dead tree stumps, to shelf size religious icons and decorative animals. His friends describe him as whimsical. The term fits him and his work.

Anyone seeing the 24-foot shepherd

for the first time is apt to catch a mouthful of air and do a double take. Just as an unfamiliar country road may take a startling turn, or the crest of a hill may suddenly give way to a surprising rural bottom land view, so do Robinson's sculptures appear from the New Jersey countryside unexpectedly. He carves an intriguing niche into the landscape.

"People often look at the figures in wonderment," says Robinson. "They remember the tree and now they see something new and it mystifies them."

Freeing the Spirit Within

For countless generations, the tree grows naturally from the ground, following the sun's rays as it slowly turns and twists skyward. Then, under Robinson's hand, the carving unfurls. It is the culmination of a centuries-long gestation period. More than an artistic rendering, a Harry Robinson sculpture is a living creature that finally hatches from its cocoon. Robinson releases the beauty from within what would otherwise be chipped, split, mulched or burned.

"I use the shape within a given piece of tree," says Robinson. "I work with the

grain. I let it come out."

Since retiring in 1989, Robinson has happily pursued sculpting. He sports an easy smile and a calm demeanor, but the sparkle in his eyes gives away his fanciful nature.

A byproduct of Robinson's second career is a wide network of friends. He knows many of them through the Somerset Art Association (SAA).

Norma Rahn, a Bernardsville artist, says their long friendship began some twenty years ago when she met him at an SAA costume ball. Now, her Bernardsville studio and home is alive with heads and creatures that emerged from their bark shells with Robinson's help.

"He asked me one day if my pond was frozen," says Rahn. "I said, 'Sure, why? Do you want to come over and skate?' 'No,' said Harry. 'I want to stand on the ice and carve the heads on your posts around the pond.' It was the only way he could do it," laughs Rahn.

Rahn's property is now a landmark, according to mutual friend Sally Bush, a former SAA director. Bus tours passing by Rahn's studio point out the carved

Squirrel can be seen on Lyons Road in Basking Ridge (right).

Daphne lived within the shell of a 2' x 8' piece of tulip poplar (below).

The artist (opposite page) poses with *The Multitude of the Heavenly Host*.



heads that stand guard at her driveway. Bush has known Robinson for 25 years. She describes his art as organic.

"He doesn't take a piece of wood and add to it," says Bush. "He lets what he sees in the tree come to life. He allows the form to come out. It is like taking a living thing that has died, which most people see as perfectly useless, and resurrecting it."

Bush says Robinson's work can take two directions, humorous or religious. Either way, she says, his whimsical playfulness rises to the surface.

Transitions

Robinson was born in 1924 in Toledo, Ohio, and spent his entire childhood there. "I built a lot of model airplanes," he says. He also did soap carvings and made ceramic chess sets.

He entered college at the University of Toledo, leaving after one year to volunteer for the Navy during World War II. He piloted blimps throughout the Caribbean and Central America and served as an air navigator in the Pacific.

When he returned after the war, he

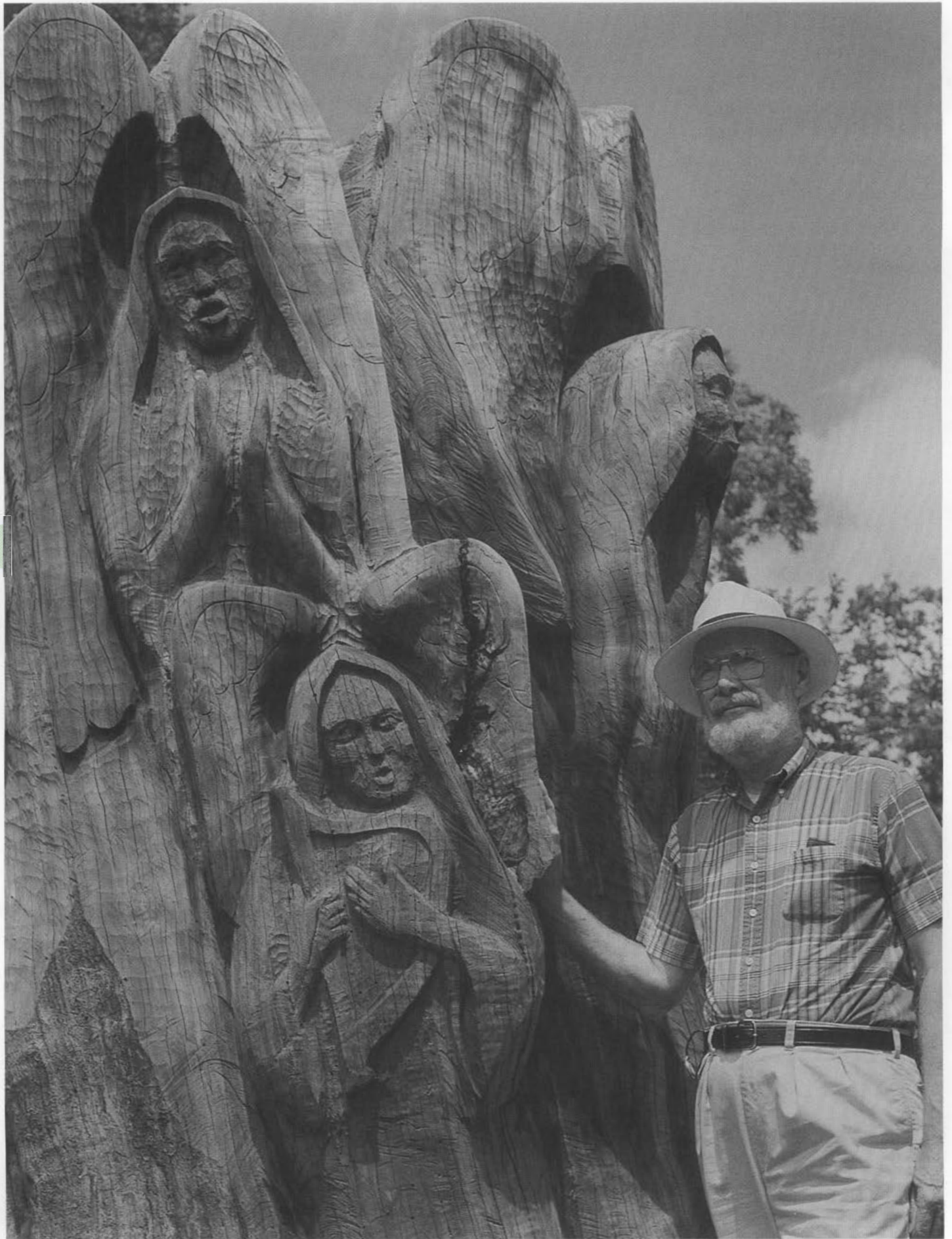
obtained his bachelor's degree in engineering from the university and met Nancy MacPhie at a YMCA dance. They hit it off and married in November 1948. They had two daughters, Martha and Laura. Robinson transferred to New York with his family in the fifties, living in Maplewood where he made sculptures for his rock garden.

In the late sixties, he moved to his Bernardsville home. Surrounded by mature trees, Robinson made the transition from ceramics to wood. *Daphne* appeared from a 2-foot by 8-foot section of tulip poplar. When asked why he called her *Daphne*, Robinson replied, "That's who she is."

Robinson's local reputation grew as he began to carve larger works on commission. He created a bear from a dead tree for a friend who lived nearby on Hardscrabble Road.

In 1976, the late Henry Ruschmann, owner of Meadow Brook Farm in Bernardsville, asked Robinson to create a sculpture for him. A sprawling white oak that stood in pastureland along Route 202 had succumbed to a lightning strike.

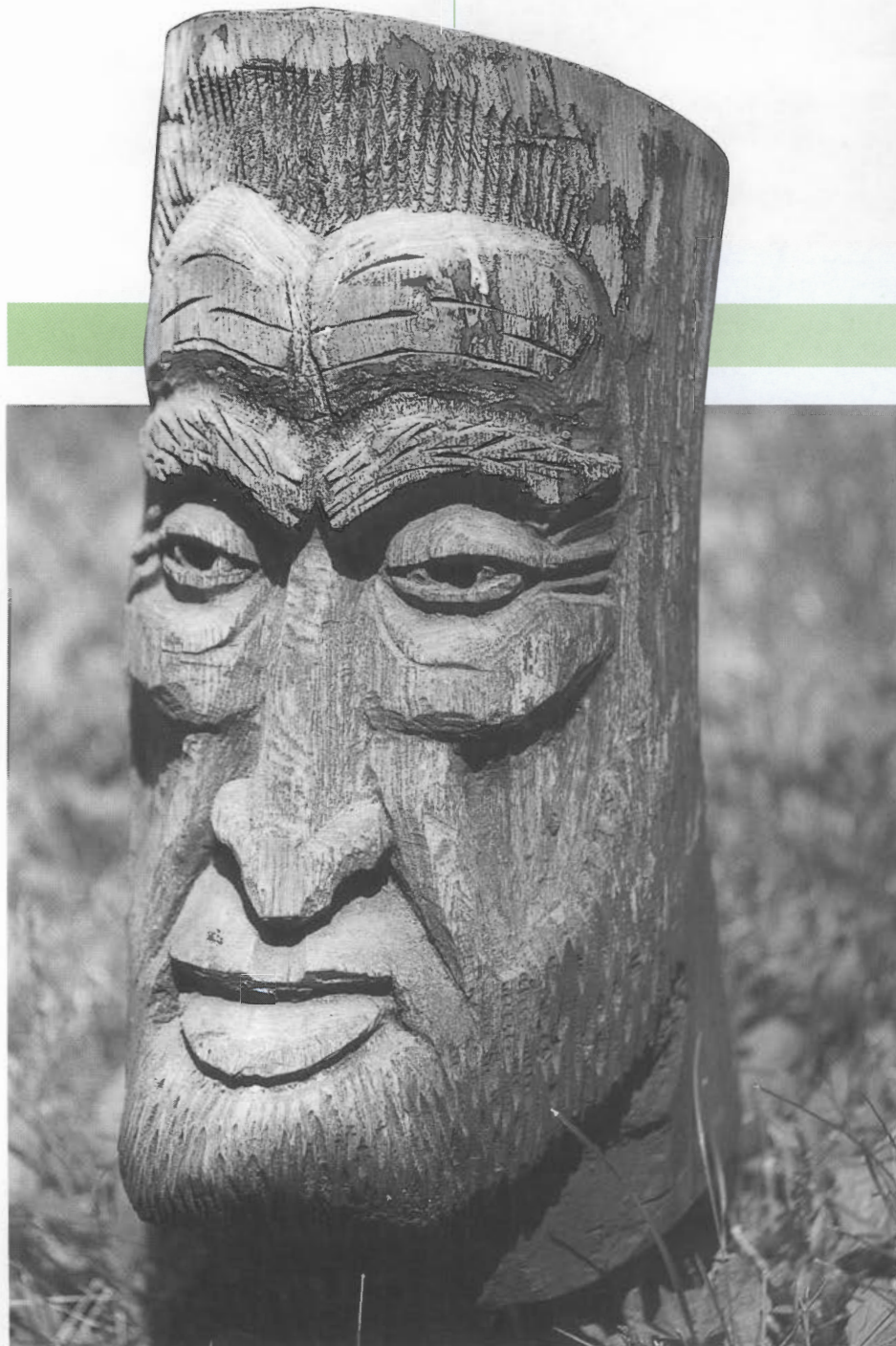
Like most of Robinson's large-scale



This whimsical face (below) is one of many sculptures gracing the Harry Robinson estate in Bernardsville.

The Eagle (left) is hewn from the historic Liberty Tree. Local legend says it was a hanging tree in the 18th century.

The artist's Bernardsville estate also is home to this striking great blue heron (opposite page).



projects, the shepherd is firmly grounded. The dead tree's root system is left intact. For this reason, he applies a preservative, rather than a wood sealant. The sculpture still draws moisture from the ground. The shepherd needs to breathe.

While the shepherd may be the largest Robinson creation, his outdoor *magnum opus* may very well be *A Multitude of the Heavenly Host* at Hilltop Presbyterian Church in Mendham. After 300 years, the stately sycamore finally yielded to disease in 1996. The sculpture is based on the scripture, "...And suddenly there was with the angel a multitude of the heavenly host..." (Luke 2:13)

This passage, and the piece itself, embodies everything that Robinson does. There is a perfect mixture of spirituality and whimsy in the "multitude" that is the artist's trademark. One must walk around the piece in a circle, a spiritual ritual that connects the viewer to the earth, the elements, and the surrounding environment.

Evolutions

On a clear summer day, I visited the Hilltop sculpture with Robinson. He paused and caressed the surface of the trunk. He mur-



Harry Robinson Landscape Tour

- *Good Shepherd*: Route 202 (across from the First Presbyterian Church), Bernardsville, Somerset County
- *Daphne*: Harry Robinson Estate, Bernardsville, Somerset County; call 908/766-1294 for appointment
- *Various and sundry creatures*: Norma Rahn Art Studio, Bernardsville, Somerset County; call 908/766-7011 for appointment
- *Squirrel*: Lyons Road, Basking Ridge, Bernards Township, Somerset County
- *Eagle*: Hardscrabble Road, Mendham Township, Morris County
- *Multitude of the Heavenly Host*: Hilltop Presbyterian Church, Mendham Borough, Morris County
- *Liberty Eagle*: Flocktown and Schooley's Mountain Road (within easy walking distance of the Schooley's Mountain General Store), Schooley's Mountain, Washington Township, Morris County
- *Future work*: Maple tree in Liberty Corner, Bernards Township, Somerset County

mured dissatisfaction at the bores he finds.

Accessible to the outside world, each large-scale Robinson outdoor sculpture is destined for decay. Woodpeckers, insects, water and, on rare occasions, vandals gradually change the appearance of his art. The Buddhist philosophy of impermanence is relentlessly reinforced by nature's soldiers.

Over the years, every type of threat has attempted to bring the stalwart shepherd to his knees. Robinson rescued his old friend by shoring up the back with steel supports and chasing away the burrowing ground hogs and foxes that made a home underneath him.

The first casualty to the ultimate fate that awaits all of Robinson's outdoor artistry was his first Hardscrabble Road bear. Robinson's friend donated the sculpture, a fixture for many years in the Bernardsville community, to the New Jersey Audubon Society. Audubon hired a local tree surgeon to move the bear by tying it like a cartoonish kidnapping victim and hauling it by crane to their property. When workers tried to release the bear from the ties that bound him, he began to fall apart with rot. Only the ropes

held him together. For a time, he stood lashed, with one arm missing, in Audubon's lot. Now, he is mulch.

Robinson takes the inevitable in stride. He laughs and shrugs off the bear's demise.

"An important thing to remember about Harry," says Bush. "Is that he is an extremely generous person. He gives a lot of his time to schools and does a lot of work for charity. He is very generous with his time and talent."

This past fall, Robinson lent his talent to releasing herons on a private estate in Morristown. He also began carving a large Liberty Corner maple, done in by last year's fierce Labor Day storm.

This spring will find him in yet another location. He may be on a roadside near you. Up on the scaffolding with his chain saw, carving through the shell of another living thing, eager to break out. He may be refining intricate details with his hammer and chisel.

No matter where impulse takes him, or what he is doing, this artist will always make time to chat. He will give you a smile and as much time as you desire.

Throughout the New Jersey highlands, the whimsical spirit of a talented

artist reflects a thriving, constantly changing environment. These recycled trees of yesteryear force us to think about how we relate to the outdoors. At the same time, they bring us one step closer to the multitude that surrounds us. With the host comes a smiling, whimsical angel. His name is Harry Robinson.

Marshall McKnight is a freelance writer residing on Schooley's Mountain. When he is not out roaming the countryside, he writes magazine and newspaper articles. His weekly column, Pearls of Wisdom and Other Myths appears in several publications including the Sussex County Chronicle, The Netcong News Leader and The West Morris Star Journal. He currently is working on a novel called North Jersey.

Jersey Sketchbook: Lake Oswego

Story and illustrations © John R. Quinn

The New Jersey Pine Barrens in general, and Lake Oswego in particular, hold many vibrant memories for me as both an artist and a naturalist. My inclinations toward things unmanaged and natural in our world had their origins on my home-ground, a North Jersey town bordered by the Hackensack Meadowlands, but they came to full-flower some years later amidst the tea-colored streams and green and sandy silences of our state's most celebrated wilderness: the "piney woods" of Central and Southern New Jersey.

In the mid 1960s, while employed by

the Academy of Natural Sciences of Philadelphia, I lived in Pennsauken (Camden County), just a stone's throw from the western perimeter of the Pines. Having heard much about this storied and mysterious place, I decided to explore it.

In the company of some of the Academy's herpetologists and botanists, I wandered the sand roads, explored the shadowed "cellar holes" of the many vanished towns deep in the pitch pine woods. I waded through acid-water cedar bogs and "spongs" in the area of Chatsworth and Lebanon State Forest in search of biological adventure. I found plenty to pique my interest, but my ultimate mission was to set up a live

exhibit of the region's unique and beautiful fish at the museum. And Lake Oswego figured prominently in this venture.

The 1965 exhibit was a 50-gallon tank, full of "The Strange and Beautiful Fishes of the Pine Barrens." Most of the collecting of livestock for the exhibit was conducted at Chatsworth Lake and at Lake Oswego, the latter located about six miles south of the town of Chatsworth in the 3,400-acre Penn State Forest. In those days, as now, the access road to the lake's boat launch and small swimming beach was unmarked. Thus the lake was never what one could call the Coney Island of the Pines; it was known mostly to local folk and was never crowded, even on a summer weekend.

It was here that I first came to know some of the Pine Barrens' more intriguing wild creatures. At the boggy margins of the lake I encountered the gorgeous black-banded sunfish, a gem-like creature that looks something like the popular



Tree swallows;
old cedar swamp



Woodduck hen

angelfish of the aquarium today. This fish, characteristic of the Pines' acid water habitats, is so favored by aquarists that it is raised commercially in Europe and Asia.

The lily pad-bedecked warmwater shallows of Lake Oswego are also home to the unique sundew — a carnivorous plant — and to the carpenter frog, whose spring calls sound like a platoon of workers hammering away. Other Pine Barrens-specific fish include the obscure mud sunfish, the dainty banded and blue-spotted sunfishes, the tiny swamp darter and the region's only large game fish — the red-finned and common pickerels. Fence lizards, or swifts, scuttled about the sandy parking lot and the beautiful pine snake was often seen near the lake.

A good many years and much water had passed over the cranberry bog spillway when I visited Lake Oswego again last spring to record it in line art for *New Jersey Outdoors*. What I found was a pleasantly poignant reprise of the "old days" — but first, a brief word about the Barrens themselves.

As a natural ecosystem, the Pine Barrens encompasses some 2,250 square miles, or about 1.4 million acres, more than a fifth of the state's total area. In addition to Penn State Forest, the region

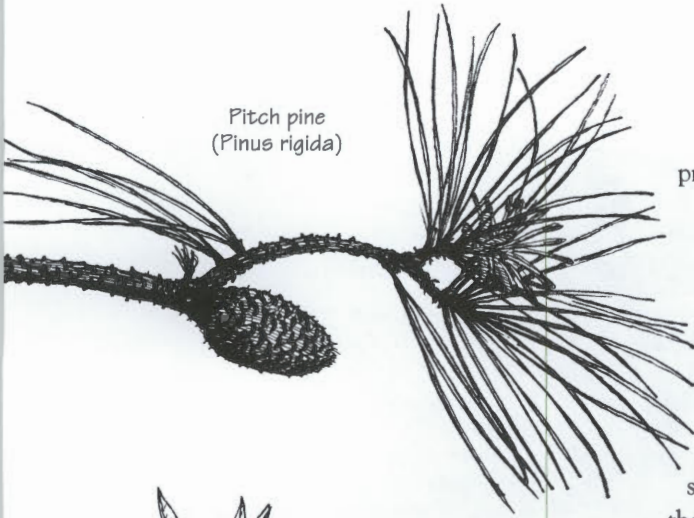
boasts five other major reserves: the 99,000 acre Wharton State Forest, the 22,000-acre Lebanon State Forest, and the Bass River, Double Trouble and Belleplain State Parks. The federal Pinelands National Reserve, designated in 1978, covers a smaller land area of 1,719 square miles (1.1 million acres). The even smaller Pinelands Area, a geographical entity created by the state legislature and under the jurisdiction of the Pinelands Commission, covers about 930,000 acres; development there is regulated by the Pinelands Protection Act of 1979 and administered under the Comprehensive Management Plan. These four designations and the tangle of regulations and legislative bodies designed to coordinate preservation and control development in the Pines was set up in response to the 1960s threat of a major (32,500 acre) jetport and 11,000-acre "New City" proposed for the region, which sits above the 17 trillion gallon Cohansey Aquifer, the largest source of pure underground water in the East. The airport proposal, like the similar one proposed by the NY-NJ Port Authority for the Great Swamp in Morris County, was quashed in part by determined

grassroots resistance. If built, the airport-city complex would have obliterated the entire Penn State Forest, about three-quarters of Lebanon State Forest, most of the unique dwarf-pine habitat of the so-called "Plains" along State Route 72, and many other sensitive wetlands and critical wildlife habitats. The proposed "New City" alone would have provided for a population of 250,000 people and would have been the third largest city in the state; God only knows what summer traffic on the Parkway would be like today if New City had been built!

In the end, the continued nibbling away of the unique Pinelands throughout the 1970s by unregulated and haphazard development further emphasized the need for its protection, and though, in the words of writer John McPhee, "acre by acre, mile by mile, the perimeter of the Pines retreats," the rate of that retreat has been considerably slowed.

Whatever your opinion (Pinelands landowner or not) of the agencies and legislation put in place in 1979 to "slow the retreat" of the natural Pinelands, there's no doubt that a lot less of it — including Penn State Forest — would be around today if they hadn't been. Several

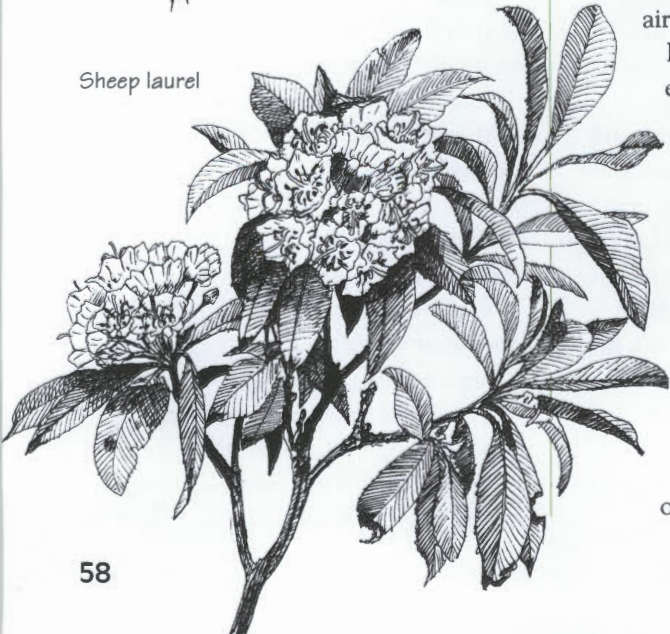
Pitch pine
(*Pinus rigida*)



Swamp azalea



Sheep laurel



proposals in recent years for mammoth new retirement communities in the Pines have been nixed under the oft-contested regulations, and as Governor Whitman has made the preservation of open space a hallmark of her second term, it would appear that the Pinelands management plan will remain inviolate.

In that respect, it was comforting to me that, although the parking lot was uncharacteristically chockfull the day I visited Lake Oswego last spring and a park ranger ambled about checking parked cars and sport utility vehicles for prohibited "adult beverages," the essential tranquility of the place has survived and in fact had hardly changed over the years.

Poking about the lake margins and walking the shaded sand roads in search of art subjects, I felt the visceral images of the less-crowded Pine Barrens of the 1960s coming back. Carpenter frogs still hammered away among the mats of bright green sphagnum moss; black and white dragonflies, bright blue darners and barn swallows coursed over the bogs, and three big red-bellied turtles basked on a cedar stump poking above the brown water. White, star-like waterlilies accented the quiet lake margin and the floral symphony of sheep laurel, highbush blueberry and swamp azalea filled the air with both song and scent.

People are much more in evidence at Lake Oswego today than they were 30 years ago, but I choose to accent the positive in this fact. The crowd of happy campers I saw enjoying the lake that spring day seemed a responsible, well-behaved contingent of humanity. The area has no trash containers—it's a pack-it-in-pack-it-out policy there — but I saw no evidence of littering; a single boom-box,

playing at low volume, provided the only unnatural sounds heard at the lake.

Environmentalists are fond of saying that we will not come to love and protect a place unless we come to know it. For centuries, the Pine Barrens had been regarded as just that: a barren wasteland unfit for conventional agriculture or productive human settlement. Today, as evidenced at places like Lake Oswego, we seem to have rediscovered the positive attributes of the Pines, those less definable but no less essential qualities, like pine-scented solitude, eye-pleasing beauty and spiritual refreshment. To me, that's good for people — and for the Pine Barrens.

Author's note: *Protecting the Pinelands: A New Direction in Land-use Management* (Beryl Collins & Emily Russell, eds., Rutgers University Press, 1988) is highly recommended to readers seeking a comprehensive overview and chronology of Pine Barrens legislation. John McPhee's classic, *The Pine Barrens* (Farrar, Straus & Giroux, 1968), presents the human-interest side of the Pines. McPhee's chapter on Herbert H. Smith, the consultant hired by Burlington County officials in 1962 to draw up plans for the jetport/New City complex, is both fascinating and enlightening.

Artist-naturalist John R. Quinn has published many books on nature and science. His most recent contribution to *New Jersey Outdoors* — "Jersey Sketchbook: Great Swamp" — appeared in the Winter 1999 issue.

Blueberries
& dragonfly



Events

General information is provided here for frequently mentioned event sponsors. The bold-faced name is all that will appear in an event's description.

Albert — Albert Music Hall, 125 Wells Mill Rd. (Rte. 532), 1/4 mile west of Rte. 9, Waretown; 609/971-1593

Batsto — Batsto Village, Wharton State Forest, Hammonton

Cold Spring — Historic Cold Spring Village, 720 Rte. 9, Cape May; 10 a.m. to 4:30 p.m. daily through Labor Day, then only on weekends in Sept.; donation requested; 609/898-2300

Great Swamp — Great Swamp Outdoor Education Center, 247 Southern Blvd., Chatham; weekend and evening nature hikes and other seasonal activities are available in addition to listed programs; 973/635-6629

Hermitage — The Hermitage, 335 North Franklin Turnpike, Ho-Ho-Kus; 201/445-8311
HMDC — Hackensack Meadowlands Development Commission Environment Center, 2 DeKorte Park Plaza, Lyndhurst; preregistration in person or by mail is required for all programs; 201/460-8300 unless otherwise noted

Howell — Howell Living History Farm, Valley Rd. (just off Rte. 29, two miles south of

Lambertville), Hopewell Township (Mercer County); 10 a.m. to 4 p.m., unless otherwise specified; free admission & parking, but a fee is charged for rides, maze and crafts; lunch served 11 a.m. to 2 p.m.; 609/737-3299

Kateri — Kateri Environmental Education Center, 160 Conover Road, Wickatunk; 732/946-9694

Kay — Kay Environmental Center, 200 Pottersville Road, Chester; 908/879-0566

Pequest — The Pequest Trout Hatchery and Natural Resource Education Center, Rt. 46, Oxford (nine miles west of Hackettstown); 10 a.m. to 4 p.m. daily; registration opens two weeks prior to program date; 908-637-4125

Skylands — Skylands Manor and N.J. State Botanical Garden, Morris Rd., Ringwood State Park, Ringwood; yyy for park entrance on weekends from Memorial Day weekend through Labor Day weekend; yyy for manor house admission; 973/962-9534

Space — Space Farms Zoo and Museum, 218 Rte. 519, Sussex; 9 a.m. to 6 p.m.; 973/875-3223

Trailside — Trailside Nature & Science Center, 452 New Providence Rd., Mountainside; 908/789-3670

Wetlands — Wetlands Institute, 1075 Stone Harbor Blvd., Stone Harbor (3 miles east of the Garden State Parkway exit 10B); yyy;

609/368-1211


Wheaton — Wheaton Village, 1501 Glasstown Rd., Millville; Closed on New Year's, Easter, Thanksgiving and Christmas, and on Mondays and Tuesdays in January through March; 10 a.m. to 5 p.m.; yyy; 609/825-6800 or 800/998-4552


Whitesbog — Whitesbog Village, mile marker 13 on Rte. 530, Browns Mills (Pemberton Township); 609/893-4646


Woodford — Woodford Cedar Run Wildlife Refuge, 6 Sawmill Road, Medford; 609/654-6179

Note: Information listed was accurate at the time it was submitted to *New Jersey Outdoors*. Before traveling to an event, readers are advised to call the number listed to confirm the information provided and obtain any additional information desired.

Events Symbol* Key:

 Preregistration required

 Handicapped accessible

 Fee or donation

* Symbols are shown where information was provided by event sponsor.

Ongoing

Pequest Trout Hatchery Tour Pequest Cape May County 64th Annual Fishing Tournament Cape May County waters; 800/227-2297

Nature Classes and Special Events PAWS Farm Nature Center, Mt. Laurel; 609/778-8795; \$;  for large groups

Saturdays and Sundays Guided Walks Parvin State Park, Pittsgrove; 609/358-3105

Sundays except Easter Planetarium Show Trailside; \$

Sundays through May Family Nature Program Trailside

Sundays, May 16 through October Guided Garden Walk Heavy rain cancels; Carriage House at Skylands

Wednesdays Governor's Mansion Tours at

Drumthwacket Princeton; 609-683-0057

Wednesdays through Sundays Environmental Interpretive Programs at State Parks and Forests Call for schedule and other details: Cheesequake, Matawan, 732/566-3208; Island Beach, Seaside Park, 732/793-0506; Liberty, Jersey City, 201/915-3409; Parvin, Pittsgrove, 609/358-8616; Washington Crossing, Titusville, 609/737-0609; Wharton, Hammonton, 609/567-4559 or 609/561-0024

Through April 18 Glen Rudderow & Carol Barnett Exhibition & Sale Gallery of American Craft at Wheaton

Through May 4 Carving and Wildlife Art Preview Somerset County Environmental Education Center, Basking Ridge; 908/766-2489

April through October Sail the Historic A. J. Meerwald Public sails and charters; 609/785-2060

April 10 through October 24 Vanity Vessels: The Story of the American Perfume Bottle A Major Exhibition Museum of American Glass at Wheaton

May 8 through June 13 Handmade in New Jersey Exhibition & Sale Gallery of American Craft at Wheaton

May 22 through June 27 Cape May Music Festival Cape May and Atlantic City; 609/884-5404; \$

June 26 through July 18 Artists of the Creative Glass Center of America Exhibition & Sale Gallery of American Craft at Wheaton

Events

2

Jersey Devil Hunt Woodford; \$; ☞

3

Trailwork Day Trailside; ☞

Lake Cleanup Echo Lake Park (lower lake), Mountainside; 908/527-4900

Henhouse Visits and Egg Collecting Howell

Hike the Manumuskin River Preserve Cumberland County; 609/861-0600; \$

Maurice River Birding Bonanza Birding cruise; Millville; 609/861-0600; \$

Wild for a Day! For ages 7 to 11; Woodford; \$

Children's Easter Party Hermitage; \$; ☞

4

Horse Ride on the Paulinskill Valley Trail Bring horse; 908/725-9649

Guided Tours of Manor Skylands; \$

9 through 11

Cape May Jazz Festival Cape May; 609/884-7277

Batona Trail Hike Backpacking tour of 50-mile trail; Woodford; \$

10

Trout Season Opens

9th Annual "Friends" Symposium Friends of the N.J. Railroad & Transportation Museum; Drew University, Madison; 908/464-9335; \$

Star Watch at Wharton State Forest Batsto; 609/627-3043

Wagon Tours of Spring Tillage Howell

Creative Clay Sculpture Workshop HMDC; \$

Green 'n' New Jersey Volunteers needed for reforestation project; Lebanon State Forest; 609/726-1621

Spring Sightings Cape May Migratory Bird Refuge; 609/861-0600; partially ☞; \$

11

Wildlife Sunday Trailside; \$

8th Annual 21-Yard Trap Championship Lenape Park, Cranford; 908/527-4900; \$

16 through 18

Spring Victorian Weekend Cape May; 800/275-4278 or 609/884-5404

16 through 25

Cape May Spring Festival Cape May; 800/275-4278, 609/884-5404 or 609/884-5508

17

Spring Cleanup Skylands

Hike the Paulinskill Valley Trail Foot-bridge Park, Blairstown; 908/852-0597

New Jersey: A Study in Landscape Diversity Narrated slide presentation; Great Swamp

Whitesbog Landscape Volunteer Morning Whitesbog

Drop-in Whitesbog Village Tours Whitesbog; ☞; \$; ☞

Hooray for Spring Dog Walk Hike 3 to 5 miles with your dog; Whitesbog; \$; ☞

March for Parks Start at either end of the 9-mile Henry Hudson Trail and meet others raising funds for Monmouth County parks in the middle; Aberdeen & Atlantic Highlands; \$; 732/975-9735

Wildflowers and Wildlife of the Pinelands Hike Batsto; 609/567-4559; no \$; ☞

New Faces Day Howell

Conservation Volunteer Day Help grow trees for the future; Forest Resource Education Center, Jackson; 609/928-0029

Estuary Expedition Hike the dike system from Port Norris to Bivalve; PSE&G's Commercial Township Estuary Enhancement Site; 609/861-0600; \$

Pinelands Canoe Expedition Woodford; \$

17 and 18

The Fruits of Our Labor Spring Wine Festival New Jersey Museum of Agriculture, New Brunswick; 908/745-3671; ☞; \$

17 through 25

Plant a Tree for Wildlife Visitors will receive a seedling while supplies last; Pequest

17 through May 1

Children's Trout Derby Must register on April 17 to be eligible for prizes; Echo Lake Park (gazebo, lower lake), Mountainside; 908/527-4900

18

American Iris Society Lecture Skylands

Earth Day Celebration Huber Woods Environmental Center, Locust (Middletown Township); 732/842-4000, ext. 237 or 239; ☞

Fly Fishing for Beginners Ages 12 and up; Pequest; ☞

Earth Day at Wharton State Forest Batsto; 609/567-4559

Canoe through Mill Creek Experienced adult canoeists only; HMDC; \$

22

Earth Day Evening Cruise Adults only; HMDC; \$

Tulip Festival Golf Tournament Cape May; 609/884-5508

24

March for Parks Walk-A-Thon; Skylands; \$

Spring Cleanup Skylands

Wildlife People Fear the Most Live animals; Great Swamp

Outdoor Adventure Expo Turkey Swamp Park, Freehold Township; 732/842-4000, ext. 296 (TDD: 732/219-9484); ☞

1999 Earth Day Celebration Activities will include hikes, workshops, exhibits and lectures; Washington Lake Park, Turnersville; 609/589-6427; ☞

Fly Fishing with Streamers Equipment and some experience required; Pequest; ☞

Litter Day Echo Lake Park, Mountainside; 908/527-4900

Potato Planting for Charity Howell Marsh Meander HMDC; \$

Kids Walk at Johnsonburg Swamp Warren & Sussex counties; 908/879-7262; \$

24 and 25

Wool Days Longstreet Farm, Holmdel; 732/842-4000, ext. 237 or 239; ☞

Tulip and Garden Weekend Convention Hall, Cape May; 609/884-5508

25

Hosta Society Lecture Skylands

Deep Cut Gardens Festival Deep Cut Gardens, Middletown Township; 732/842-4000, ext. 237 or 239; ☞

Spin Casting for Beginners Ages 8 and up; Pequest; ☞

National Skeet Shooting Association Competition Lenape Park, Cranford; 908/241-3942; \$

Tour the Deserted Village of Feltville/Glenside Park Berkeley Heights; 908/789-3670; mostly ☹

A Program about Raptors HMDC; \$

Atlantic County Utilities Authority's 1999 Earth Day Event ACUA's Haneman Environmental Park, Egg Harbor Township; 609/272-6950; ☹

27
Wild Edibles Kateri; \$

30
New Jersey's 50th Anniversary of Arbor Day: *Tomorrow's Future Planted Today* Recognition ceremony and festival with educational stations and entertainment; Mill Hill Park, Trenton; ☹; no \$; 609/633-7597

The Fields and Woods of Hutcheson Memorial Forest Somerset County; 908/879-7262; \$

Jersey Devil Hunt Woodford; \$; ☞

May

1
Pine Barrens Festival – All Country Music Show Albert; \$

Whitesbog Landscape Volunteer Morning Whitesbog

Drop-in Whitesbog Village Tours Whitesbog; \$; ☞

Listening for Frogs Full Moon Hike Whitesbog; \$

Salem County House and Garden Tour Woodstown, Pilesgrove and Mannington townships; 609/935-5004; \$

Trailwork Day Trailside; ☞

Sheep Shearing Howell

Map Art HMDC; \$

Hike the Manumuskin River Preserve Cumberland County; 609/861-0600; \$

2
Horse Ride on the Paulinskill Valley

Trail Bring horse; 908/725-9649

Sunrise Run-Bike-Run Seven Presidents Oceanfront Park, Long Branch; 732/542-1642; \$; ☞

Pet Fair Trailside

3
Geology of New Jersey Slide show; Kay

4
Family Froggin' For ages 5 to 12; Kateri; \$

7
Eldora Evening Adventure Focus on moths; Eldora; 609/861-0600; \$

From Mourning to Evening - The Little Black Dress Exhibit; Hermitage

8
Spring Flower Walk on the Paulinskill Valley Trail Beginning at Footbridge Park, Blairstown; 908/852-0597

29th Manasquan River Canoe Race Ten race categories; Howell Park Golf Course to Brice Park, Wall Township; 732/842-4000, ext. 1; \$; ☞

Old Time Baseball Howell

Nature Walk/Bird Walk HMDC; \$

Migrants on the Marsh PSE&G's Maurice River Township Estuary Enhancement Site; 609/861-0600; \$

Early Bird Banding For ages 6 and up; Kateri; \$

8 and 9
19th Annual Carving and Wildlife Art Show and Sale Somerset County Environmental Education Center, Basking Ridge; 908/766-2489

Spring Flower Festival Art show, manor tour and Mother's Day tea; Skylands; \$

9
58th Annual Union County Open Skeet Championship Lenape Park, Cranford; 908/527-4900; \$

Mothers' Day Tea Hermitage; \$; ☞

12
Family Froggin' For ages 5 to 12; Kateri; \$

14
Jersey Devil Hunt Woodford; \$; ☞

15
NJ Audubon Society/Cape May Bird Observatory's 16th Annual World Series of Birding Statewide; 609/884-2736 or 609/861-0700

Bike Ride along the Paulinskill Valley Trail 908/722-7428

A Walk in the Rain Forest Slide presentation and discussion; Great Swamp Black Lighting and Baiting for Moths at Whitesbog Nature program and walk; Whitesbog; \$; ☞

Rose Culture Workshop; Skylands; \$
Wildflowers and Wildlife of the Pinelands Hike Batsto; 609/567-4559; ☞

Fishing Derby for People with Disabilities Rain date: May 16; Echo Lake Park (lower lake area), Mountainside; 908/527-4900; ☹; ☞

Spring Planting and Plant Sale Howell
The Fire Children Participatory family show with storytelling, songs and more; HMDC; \$

15 and 16
Overnight Canoe Trip Woodford; \$
Return of the Dolphin Contest Beaches of North Wildwood; 609/522-2919

16
Hike the Paulinskill Valley Trail Beginning at Warbasse Junction; 908/852-0597

Thompson Park Day Family fair; Thompson Park, Lincroft; 732/842-4000, ext. 237 or 239; ☹

Pests and Insects of Ornamentals Skylands Garden Fair Trailside

66th Annual Union County Open Trap Championship Lenape Park, Cranford; 908/527-4900

19
Surrounded by Shorebirds Delaware Bayshores; 609/861-0600; \$

21
Time Quest Ages 6 to 10; Kateri; \$; ☞

21 through 23
Cape May Bird Observatory Spring Weekend Cape May area; 609/884-2736 or 609/861-0700

22

Birds of Prey Slide, discussion and live raptors; **Great Swamp**

Honey! The Bees Are Buzzing! Rain date: May 23; separate workshops for adults and children; **Skylands**; \$

Quilting Bee Howell

Surrounded by Shorebirds Delaware Bayshores; 609/861-0600; \$

Canoeing Crash Course Woodford; \$

20th Great Cape May Footrace Convention Hall, Cape May; 609/884-5508

23

National Skeet Shooting Association Competition Lenape Park, Cranford; 908/241-3942; \$

Sail Away on Delaware Bay Depart from Bivalve aboard the *A. J. Meerwald*; 609/861-0600; \$

26

Family Fossil Fun For ages 5 and up; **Kateri**; \$

28

Jersey Devil Hunt Woodford; \$; ☞

28 through 30

Spring Troop Show Horseback riding show; Watchung Stable, Mountainside; 908/527-4900

28 to 31

14th Annual Wildwoods International Kite Festival Wildwood; 215/736-3715

29

Whitesbog's 3rd Annual Canal Exploration Canoe tour; **Whitesbog**; \$; ☞

Hayrides and Haying Howell

Pinelands Canoe Expedition Woodford; \$

29 and 30

Chautauqua New Jersey Family entertainment; **Cold Spring**

Summer Blues & Wine at Waterloo Waterloo Village, Stanhope; 908/745-3671; ☞; \$

29 through 31

Annual Juried American Indian Arts Festival Rankokas Indian Reservation, Westampton Township; 609/884-2736 or 609/861-0700; ☞; \$

30

Friends/Jersey Shore Running Club Trail Run Hartshorne Woods Park, Middletown; 732/542-6090; \$

June

5

Delaware Bay Day Family Festival Port Norris, Bivalve and Shellpile; 609/785-2060

National Trails Day Celebration Paulinskill Valley Trail; 908/852-0597

Whitesbog Landscape Volunteer Morning Whitesbog

Drop-in Whitesbog Village Tours Whitesbog; \$; ☞

National Trails Day Trail work at Turkey Swamp Park (Freehold Township), Tatum Park (Middletown) or the Henry Hudson Trail (Aberdeen to Atlantic Highlands); 732/842-4000, ext. 283; ☞

Insect Day Great Swamp

National Trails Day Hike Heavy rains cancel; **Skylands**; ☞

Orchids Workshop; **Skylands**; \$

Star Watch at Wharton State Forest Batsto; 609/627-3043

National Trails Day Volunteers needed for trail work following hike with naturalist; **Trailside**; ☞

International Agriculture Day Howell **Canoe through Saw Mill Creek** Experienced canoeists only; **HMDC**; \$

Cruise to Laurel Hill Rain date: June 12; adults only; sponsored by the HMDC Environment Center, but cruise leaves from Carlstadt Golf Center and Marina; 201/460-4640; \$

South Jersey Canoe and Kayak Classic Ocean County Park, Lakewood; 609/971-3085

Canoeing Crash Course Woodford; \$

5 and 6

New Jersey's Free Fishing Days No license or trout stamp required; all other regulations apply.

Confederate Weekend Civil War encampment; **Cold Spring**

Art & Crafts Show Nomahegan Park, Cranford; 908/527-4900

6

Horse Ride on the Paulinskill Valley Trail Bring horse; 908/725-9649

Manor House Tours Skylands; \$

11

Music in the Mountains Wayne Chamber Ensemble; **Skylands**

Jersey Devil Hunt Woodford; \$; ☞

12

Reptiles Great Swamp

Honey! The Bees Are Buzzing! Rain date: June 13; separate workshops for adults and children; **Skylands**; \$

Dairying Howell

Pinelands Canoe Expedition Woodford; \$

Antique Fair Hermitage; \$

Victorian Fair Emlen Physick Estate, Cape May; 609/884-5404

12 and 13

Union Weekend Civil War encampment; **Cold Spring**

13

Bottle Show Wheaton

Friends 5 Race Holmdel Park, Holmdel; 732/975-9735; \$

8th Annual Managers 25 Straight Club Championship Lenape Park, Cranford; 908/527-4900; \$

15

Hackensack River Evening Cruise Rain date: June 22; adults only; sponsored by the HMDC Environment Center, but cruise leaves from Carlstadt Golf Center and Marina; 201/460-4640; \$

17

Hackensack Meadowlands River Eco-Tour Skylands; \$; ☞

19

Wildflowers and Wildlife of the Pinelands Hike Batsto; 609/567-4559; ☞

Hog Slopping and Weighing Howell

Cruise to Laurel Hill Rain date: June 26; adults only; sponsored by the

Call for Entries . . .



New Jersey Outdoors 1998-1999 Photo Contest!

The next *New Jersey Outdoors* photo contest will celebrate our state parks, forests, recreation areas, marinas and historic sites, so we're looking for pictures of whatever strikes your fancy at these great leisure time spots. For more information about these facilities, call the State Park Service at 609/984-0370.

NJO 1998-1999 Photo Contest Entry Form

Name _____

Address _____

City _____ State _____ Zip _____

Daytime phone (_____) _____

Title of image _____

Where taken _____

When taken _____

Description _____

Names of any *identifiable* people* _____

* *Note:* A signed release is required when the subject is easily identifiable *and* a potential for litigation exists.

Make copies of this form if needed.

Photo Contest Rules

■ The contest is open to any New Jersey resident or visitor, except Department of Environmental Protection employees and their immediate families.

■ Images must have been taken at or of one of New Jersey's state parks, forests, recreation areas, marinas or historic sites. Both interior and exterior shots are eligible, and pictures may have been taken in any season.

■ Only 35 mm slides, transparencies and unmounted, unframed prints (no larger than 8" x 10") may be entered. Images must be crisp and in focus, except where depth of field applies. Images should not be under- or overexposed. No entries can be returned, so you might want to send duplicates.

■ Each image must be attached to a completed entry form. (The form at left may be reproduced as needed.)

■ **Entries must be received no later than June 1, 1999.**

■ All entries become the property of the Department of Environmental Protection and may be published or displayed for any purpose, such as illustrating a story or advertising *New Jersey Outdoors*.

■ **No entries will be returned**, so please do not send a self-addressed, stamped envelope.

■ **Mail entries to:**

New Jersey Outdoors
P.O. Box 402

Trenton, New Jersey 08625-0402

HMDC Environment Center, but cruise leaves from Carlstadt Golf Center and Marina; 201/460-4640; \$

South Jersey Traditional Small Boat Festival and Sneakbox Rendezvous Berkeley Island County Park, Bayville; 609/971-3085

Canoeing Crash Course Woodford; \$

19 and 20

Tools, Tractors, Trucks and Engines Displays and demonstrations; Cold Spring

20

Hike the Paulinskill Valley Trail Beginning at Warbasse Junction; 908/852-0597

Father's Day Celebration Space

25

Music in the Mountains United States Military Academy Group; Skylands

New Jersey Celebrates the Pinelands Seminar and banquet commemorating 20 years of Pinelands protection; Hyatt Regency, Princeton; 609/894-7300; ♂; \$; ♀

Jersey Devil Hunt Woodford; \$; ♀

26

Ladies of Acoustic Music Show Albert; \$

16th Annual Whitesbog Blueberry Festival Whitesbog; ♂; \$

Wagon Tours of Pleasant Valley Rural Historic District Howell

Pinelands Canoe Expedition Woodford; \$

26 and 27

Threads through History Quilt and needlework display and demonstrations; Cold Spring

Mountain Man Rendezvous See frontier

history come alive; Space; ♂

27

National Skeet Shooting Association Competition Lenape Park, Cranford; 908/241-3942; \$

Gloucester County Waterfest Displays, kayaking, crafts and more; Scotland Run Park, Clayton; 609/881-0845; ♂

29

Hackensack River Evening Cruise Rain date: July 6; adults only; sponsored by the HMDC Environment Center, but cruise leaves from Carlstadt Golf Center and Marina; 201/460-4640; \$

30

Summer Arts Festival Concert; Echo Lake Park, Mountainside; 908/527-4900 (schedule); 908/352-8410 (rain site)

Pine Barrens Treefrog

by Jim Sciascia and Sherry Meyer

Pine Barrens treefrogs are more often heard than seen. A visit to a Pinelands cedar swamp in early June usually will be rewarded with the sound of the rapid and nasal *quonk-quonk-quonk* call of this unique species. One of the reasons it is heard more often than seen is its diminutive size. Measuring from 1.13 to 1.75 inches in length, it is our fourth smallest frog, larger only than the cricket, spring peeper and chorus frogs.

Despite its small size, those fortunate enough to see one truly will be impressed. Vibrant green and boldly marked, the Pine Barrens treefrog (*Hyla andersonii*) is one of New Jersey's most beautiful amphibians. A purple stripe bordered by a thin yellowish-white line extends from the snout through the eye down each side of the body. Although the underparts are white, there are vibrant orange patches beneath the hind legs, showing a flash of color when the frog jumps. There is a purplish tinge to the throat, which is particularly visible on the male.

Its striking appearance is not the only factor contributing to its uniqueness. The distribution of the Pine Barrens treefrog is remarkable. In New Jersey, it occurs only within portions of nine counties that contain the Pinelands ecosystem. What makes its distribution remarkable is that the closest population to New Jersey's is located 500 miles south, in North Carolina. The only other areas in which it occurs are portions of South Carolina, south-central Alabama and along the Florida panhandle. The New Jersey population is the largest stronghold for this species throughout its entire range. The Pine Barrens treefrog requires specialized habitats, such as Atlantic white cedar swamps and pitch pine lowlands that are carpeted with dense mats of sphagnum moss. During most of the year, the population is scattered amongst the trees and shrubs of both upland and wetland Pinelands habitats. In June, the urge to breed concentrates the population at temporary woodland ponds, white

cedar or cranberry bogs, and seepage areas along tributaries of major rivers and streams that serve as breeding ponds. Preferred habitat consists of an open canopy, a dense shrub layer and heavy ground cover. Rare orchids, sundews and pitcher plants are other Pineland specialties that often occur at breeding sites.

Pine Barrens treefrog breeding ponds, which may dry up by mid summer, contain between 4 and 24 inches of water. The water is clean, yet very acidic, with pH values as low as 3.4. Studies have shown that most other amphibian species can not successfully reproduce in such acidic conditions. This evolutionary adaptation by the Pine Barrens treefrog has successfully reduced habitat competition with other frog species that cannot tolerate low pH.

The male calling activity, which often is initiated prior to sunset, peaks during humid June evenings when temperatures exceed 68°F. Males may vocalize from the ground or within vegetation near the breeding pond and may call from the same location on different evenings. Although a few individuals may call into mid July, vocal activity typically concludes early in that month.

One female may deposit as many as 1,000 eggs. To minimize the risk of losing an entire clutch, female treefrogs scatter individual eggs throughout a breeding pond. The eggs, which are fertilized externally by the male, hatch into tadpoles in one to two weeks. Tadpoles consume algae, microscopic invertebrates and aquatic vegetation. Depending on weather conditions and rainfall, the tadpoles transform into tailed "froglets" in 80 to 100 days. Following transformation during late July, August and sometimes September, juvenile frogs disperse into woods, bogs and wet meadows. Fat reserves stored in the tail sustain the froglets until they are able to capture their own prey, such as grasshoppers, crickets, beetles, spiders, ants, flies and other insects. Treefrogs hide within ground cover or perch in trees during the day and emerge at night to forage.

Although the Pine Barrens treefrog

occurs sporadically throughout its discontinuous range in the eastern United States, large populations of this species were historically common in the Pine Barrens of southern New Jersey. By the 1970's, habitat destruction and water degradation had led to the loss of many historic colonies and threatened existing populations. As a result, the Pine Barrens treefrog was listed as an endangered species in New Jersey in 1979. The DEP's Endangered and Nongame Species Program has carefully documented the locations of Pine Barrens treefrog populations over the last 20 years and the database containing these locations guides protection of its habitats. Fortunately, the land use restrictions placed on endangered species habitats by both the Pinelands Commission and the Coastal Area Facility Review Act now provide protection for Pine Barrens treefrog populations. However, vigilance is still warranted to protect against the secondary impacts of growth and development that may be as damaging to populations as habitat destruction. Factors that endanger the Pine Barrens aquifer, including pollution and lowering of the water table will negatively affect Pine Barrens treefrog populations. Also, pH increases resulting from agricultural liming or dilution may affect treefrog breeding or prohibit larval development. Increased pH levels allow establishment of aggressive competitors like the bullfrog, a competitor and predator of both larval and adult Pine Barrens treefrogs.

The Pine Barrens treefrog serves as a barometer of Pinelands ecosystem health. Water quality protection and habitat preservation will benefit the Pine Barrens treefrog and the hundreds of distinctive plant and animal species that rely on this unique ecosystem.

Jim Sciascia, who reported on bobcats in the Winter 1999 issue of New Jersey Outdoors, is a principal zoologist with the New Jersey Division of Fish, Game and Wildlife's Endangered and Nongame Species Program. Sherry Meyer, a wildlife technician with the division, profiled the American oystercatcher in the Summer 1997 issue of the magazine.



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