

# New Jersey

Fall 1997 • \$4.25

## Outdoors



Colorful Hikes for Fall

Take a Fling at  
Angling for Ling

Bouldering for  
Beginners







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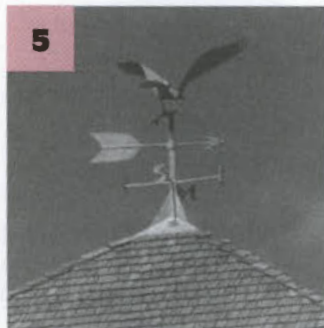
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Autumn foliage brightens the palette of Sunrise Mountain in Sussex County. © Jim Granelli, Vista Photo Productions

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The warm colors of the fall harvest accent the bounty of the earth. © Cornelius Hogenbirk

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Sunlight on Passaic County's Bearfort Mountain turns rock the color of autumn leaves. © Dwight Hiscano Photography



## From the Governor



Christine Todd Whitman,  
Governor

In 1990, a tanker ran aground in the Kill Van Kull, spilling 280,000 gallons of oil that affected wildlife, wetlands and beaches from Bayonne to Cape May. Island Beach State Park, centrally located in the spill zone, was forced to close its beaches for several days due to extensive oil and tar balls that washed onto its shore.

It is only fitting, then, that Island Beach State Park is one of the areas to benefit from the natural resource damages settlement reached in this spill, and that it does so with an opportunity to raise public awareness of the need to protect and preserve its sensitive ecosystem.

This past summer, I helped dedicate the park's new interpretive center, a former boat storage facility renovated through a \$500,000 damages settlement with the tanker's owner. The center offers educational exhibits; nature activities, including saltmarsh and bay studies and bird and wildlife observation; an auditorium; and one of the most comprehensive herbariums, or plant collections, on the Northeast coast.

This center is just one of the many educational facilities and programs in New Jersey's state parks and forests that help us to better understand and appreciate our natural and cultural world.

Accidents such as the 1990 oil spill serve to remind us of just how fragile and valuable our coastal environment is. Environmental education, like that available at the new interpretive center at Island Beach State Park, is vital in helping us to better understand our role in protecting it.

## From the Commissioner



Robert C. Shinn, Jr.,  
Commissioner

In 1986, New Jersey was home to only one nesting pair of bald eagles. Today, a little more than a decade later, there are 14 pairs, thanks to restoration efforts by the Department of Environmental Protection's Endangered and Nongame Species Program.

This majestic bird now is helping to support the program that supported its comeback — through the sale of the new Conserve Wildlife license plate that sports the eagle's image. More than 80 percent of the \$50 license plate fee is deposited in the Wildlife Conservation Fund, dedicated to the program's rare species protection efforts.

The success of the program's efforts, including those to restore the bald eagle, is due largely to the support of New Jersey taxpayers who have voluntarily contributed to the Wildlife Tax Check-Off on their state income tax forms. These donations are the program's main source of funding. But with contributions declining in recent years, the sale of Conserve Wildlife license plates has helped bridge the gap.

A total of \$1.5 million in revenue has been generated from the sale of Conserve Wildlife license plates since they became available in 1994. Nearly 30,000 of the original plates depicting the redheaded woodpecker have been sold and the new eagle plate is equally popular. Both are available at all Division of Motor Vehicle agencies or from any New Jersey automobile dealer when purchasing or leasing a car.

I hope that you consider purchasing a Conserve Wildlife license plate. It's a great way to ensure more success stories like the bald eagle's and to show your continued support for preserving our threatened and endangered wildlife.



State of New Jersey  
Christine Todd Whitman  
Governor



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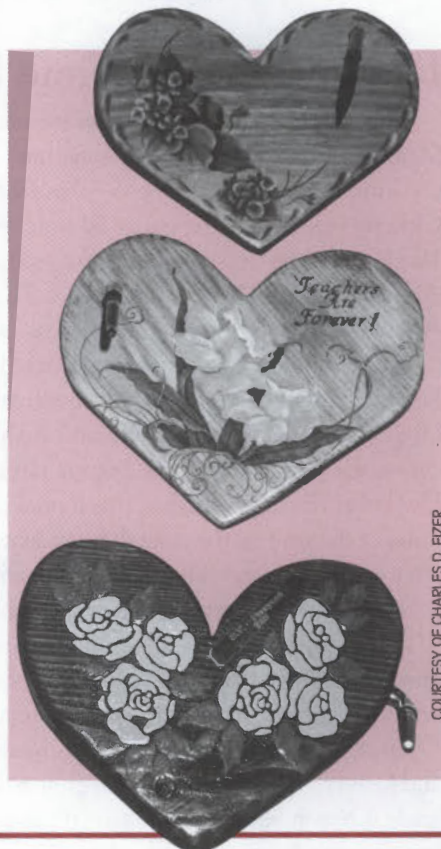
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## New Jersey Outdoors People

### Recycling Parts into Hearts

*Remember the maxim, "Use it up, wear it out, make it do or do without"?* **Chuck Fizer**, who lives in Trenton, literally takes that saying to heart — he recycles discarded furniture and wood scraps into hearts! "I don't like to see all that beautiful wood thrown away," says Fizer. "So I rescue it. Even imperfect pieces can be turned into something useful and beautiful." After deciding what the castoff will become, he cuts it into the shape of a heart, adds a loving or motivational message and varnishes it. His plaques and desk accessories are both recipient- and environment-friendly.

Several "recycled" hearts now serve as pen holders in addition to day-brighteners.



### Logo Selected

*Congratulations to **Joan Campbell***, of Bayville, who designed the winning logo for the Barnegat Bay Estuary Program. The logo symbolizes the program's efforts to restore, maintain, protect and enhance the Barnegat Watershed, which includes not only Barnegat Bay, but also the waters that flow into it and the land that surrounds it. The program is a partnership effort by environmental, business and citizens groups, and federal, state and local government agencies. Anyone interested in volunteering for the Barnegat Bay Estuary Program should contact Heidi D'Ascoli, outreach coordinator, at 732/506-5313.

Joan Campbell (right foreground) displays, with the assistance of Jan Larson of Rutgers Cooperative Extension, the flag bearing her winning logo, as OceanCounty Freeholder James J. Mancini and Freeholder Director John C. Bartlett, Jr., look on. Jan Larson, of Rutgers Cooperative Extension, lends a hand at left.





## Having a Great Time Learning

Most students carry backpacks jammed with books and binders. But at Medford Memorial School, those packs sometimes are filled instead with food and gear for a special kind of learning activity — hiking the Batona Trail. Students who join the Batona Club sign on to hike the entire 50-mile length over three years. They start near Ong's Hat in Lebanon State Forest, pass through Wharton State Forest and end near Lake Absegami in Bass River State Forest. That's equivalent to walking from Medford to Atlantic City and, for a sixth grader, it can seem like an impossible goal.

At Memorial School each grade level has a long established environmental curriculum program in place. Sixth graders experience hands-on outdoors education at a week-long camp; seventh graders visit and study the shore's ecosystem and eighth graders focus on the pine barrens. The Batona Hiking Club, with computer teacher **George Henkel** at the helm, meshed this formal curriculum with a club goal — to complete 50 miles of the trail by the time they graduate. Students must attend meetings during and after school for conditioning, hike preparation and follow-up activities.

The challenge is one that students line up for — the club fills up quickly.

Since the program's inception seven years ago, about half the students that signed up reached the final trail mark in Bass River State Forest. If they finish the 50th mile, the school rewards them with a cookout, a commemorative T-shirt and special mention at graduation.

Students discover as much about themselves as they do about the area's ecosystem and history. They see themselves grow in fitness. The 9-mile hike they trudged in sixth grade is remembered as a struggle; three years later the 12-mile hike is a breeze. They learn to set a long term goal, advance towards it, and celebrate its completion. They learn to appreciate a fragile natural resource, and see how really ugly litter is.

We may attempt to convey with books, films, computer simulations and guest speakers how precious our pinelands are, but nothing compares to having been there. Having hiked the Batona Trail, all 50 miles of it, is something to tell your kids about someday.

COURTESY OF PATRICIA DU BRUL



Henkel and his 15-year-old dog Jasper, who's outfitted with a dog pack filled with first aid equipment, lead a group of students along the Batona Trail.

*The above article was submitted by Patricia Du Brul, who lives in Medford Lakes.*

## Trail Volunteers Honored

The New York - New Jersey Trail Conference recently honored 35 New Jerseyans, each of whom has served as a volunteer maintainer of public trails in the state for at least five years. Volunteer service includes basic trail maintenance or trail building and/or repair.

The NY-NJ Trail Conference, which was formed in 1920 to build and maintain area hiking trails, is a volunteer federation of 9,800 individual members and 88 hiking and outdoor organizations. More than 400 miles of hiking trails in the Garden State are maintained for public enjoyment through Trail Conference volunteers.

"Many of our 5-year service award winners have been active on our area's

hiking trails for much longer than five years," said Trail Conference president H. Neil Zimmerman. "What a tremendous debt of gratitude we owe to these selfless individuals who provide enjoyable and safe hiking trails to their fellow New Jerseyans and visitors alike."

New Jersey Outdoors congratulates — and thanks — **Harry F. Bott**, New Providence; **Robert F. Busha**, Clifton; **Herman H. Clausen**, Ramsey; **Harold Cohen** and **Mimi Cohen**, Upper Saddle River; **Martin A. Cohen**, Ridgewood; **Ronald J. Dupont, Jr.**, Highlands Lakes; **Don B. Dyson**, Roseland; **James Gerofsky**, Upper Montclair; **Coralyn Gorlicki**, Edison; **Stella Green**, Woodcliff Lake; **John Grob**, Morristown;

**Peter Heckler**, Oradell; **Gerard W. Hoekstra**, Oakland; **Edward H. Holovach**, Clifton; **Robert Jonas**, Westfield; **Debra Kantor** and **Mark Kantor**, Dover; **Anita Kientzler** and **Charles Kientzler**, Wayne; **Robert Klein**, Bloomingdale; **Joan A. McFarland**, Teaneck; **Don Morgan**, Midland Park; **Robert Moss**, Bloomfield; **Robert L. Munschauer**, Ho-Ho-Kus; **Martha Olsen**, Vernon; **Alexander S. Parr, Jr.**, Bound Brook; **Monica Resor**, Highland Park; **Joseph Schachtele**, Kearney; **George J. Shellowsky**, Westwood; **David H. Small**, Toms River; **Margaret Smith**, Somerset; **William W. Smith**, Park Ridge; **David Sutter**, Clifton; and **Richard Warner**, Allandale.





# Wings, Water & Wetlands

by Charlotte McDevitt

Just three miles east of exit 10 on the Garden State Parkway, a short distance before the bridge that connects Seven Mile Beach Island with the mainland, one first catches sight of the Wetlands Institute. It stands like an elegant dowager queen, surrounded by acres of green spartina grass that bends gently in the ocean winds. In the night, the building has a shimmering presence, appearing almost surreal and mystical as it emerges from the blackness of the salt marsh.

In the light of a summer's day, however, its true essence is revealed. Swallows, herons, ibis, willets and ospreys hold court in its wetlands. Great egrets stand like garden decorations until they dart quickly to catch a fish for their hungry chicks. Laughing gulls jest overhead and clapper rails scurry through the reeds. The scent of tides caressing the land hangs in the air. The splendor of nature is near and luxurious and exudes abundant beauty.

The Institute's observation deck is a favorite viewing point for many visitors.



The salt marsh is  
— acre for acre —  
the most productive  
ecosystem in  
the world.

One of the Institute's  
instructors uses a net to help  
visitors discover the hidden life  
forms of the salt marsh.

But activity abounds in this building designed to resemble an old Coast Guard station. Couched in its magnificent setting, the Wetlands Institute is a living entity constructed from the love and dedication of a myriad of people who have worked for 25 years to promote appreciation and understanding of the vital role wetlands and coastal ecosystems play in the survival of life on this planet.

## Unlocking the Future

Celebrating its silver anniversary, the Wetlands Institute stands on pristine salt marshes rescued from the encroachment of supermarkets and condos and shopping centers through the love and determination of Herbert Mills. A man who possessed both a sense of preservation and conservation as well as a deep love for the New Jersey shore, Mills, then president of the U.S. World Wildlife Fund, raised funds and successfully negotiated the purchase of six thousand acres of tidal wetlands. This land was later sold to the State of New Jersey under the Green Acres Program. Shortly afterwards, under Mr. Mills' innovative leadership, construction of a facility for coastal research and education was begun and the Wetlands Institute was born.

An important element in the Wetlands Institute's mission is its interaction with the thousands of children who visit each year. Environmental education, the beginnings of research and the discovery of — and respect for — the beauties of the undefiled sections of South Jersey's wetlands are key messages that the Institute shares with young visitors.

Twenty-five years after the Institute's inception, more than 4,000 school children experience the marsh in the spring season, walking and squishing their toes in the rich muck that is food for innumerable animals and plants. They often wrinkle their noses at the sulfur smell of the black dirt and look incredulous when told that they are standing in their future lunch or dinner, but the reality is that every commercial fish and shelled animal we eat spends part of its life cycle in the salt marsh, nourished by the rich detritus. The salt marsh is — acre for acre — the most productive ecosystem in the world. Herbert Mills had the foresight to appreciate its inestimable value and the Wetlands Institute stands dedicated to his vision.

At the dawning of its 25th summer, the Institute anticipated visitors from all over the world numbering in excess of 40,000 people. Awaiting them was a greatly varied selection of ways to experience the salt marsh as well as the Institute itself. All visitors were invited to participate in the special birthday events.

An echo of the former days of weekly lectures, the 25th Anniversary Lecture Series highlighted such topics as The Osprey Story, Salt March Ecology, Butterflies, Habitat Protection and Spotting Hawks and Eagles. The crowning celebration was the gala cocktail reception at the Institute on Saturday, July 12, when the exciting new tower mural was dedicated. The mural, made possible by a gift in memory of frequent visitor Billy Smith, depicts oceanic and marsh life forms.

But this year of festivity would not be complete without the ongoing daily events of marsh walks, kayaking from the Institute, and dune and beach walks.



© BURTON LIPMAN





Children continue to be delighted by Creature Feature days, which allow wee ones to get up close and personal with a featured animal of the marsh. Wetland Wildlife Cruises on the pontoon boat *Skimmer* meander the coastal back bays and afford a close-up look at life there. And Sunday morning birding affords a glimpse of the many avian species that frequent the marshes.

Classes in antiquing and a writing support group, as well as family nights and Music on the Marsh concerts, provide insight into the multifaceted identity of the growing and expanding Wetlands Institute.

## Celebrating the Coastal Ecology

South Jersey residents and long-time visitors know that the best days at the shore usually follow the Labor Day holiday when crowds diminish, the air temperature is a bit cooler and the ocean remains comfortably warm. And that's why it is an ideal time for the Institute's annual Wings 'n Water Festival. Always held on the third weekend in September, the festival is now in its fifteenth year and continues to grow in terms of participants, artists, vendors and visitors.

"The festival attracts many of the world's outstanding artists, bird and fish carvers, sculptors and other artisans — people who have an international reputation in their

The Wetlands Institute's main building welcomes visitors from all over the world.





A nest erected in the salt marsh next to the Institute is home to this osprey family.

field,” says Lucinda (Cindy) O’Connor, the Institute’s executive director. “To complement the artists’ attractions, we also provide a wide variety of demonstrations, music, food, crafts, items for sale and children’s activities so that the entire family can be kept busy, entertained and well-fed in the bargain. We feel that this wide appeal is the reason for our increased success each year.”

Friday evening, with its cocktail reception and silent and live auctions, serves as a prelude to the festival. Over 400 items, including artwork, decorative and educational items, travel and entertainment packages and various carvings, are donated for the silent auction by festival exhibitors, area merchants and the many friends of the Institute. The live auction features quilts, decoys and original artwork, as well as exciting travel and entertainment packages.

Festival attractions, many of which are held at locations in the surrounding community, include a back bay pontoon boat cruise, juried watercolor show, photography exhibit, wildlife art, fish carvings and scale models of boats and ships. Other popular features are a quilt show and sale,

crafts, a chowder cookoff and demonstrations of air-sea rescues, fly-tying, fly-casting, retriever dogs, duck calling and goose calling, as well as music, regional food and children’s activities.

## Research is Key

From its early days, the Institute has been rooted in serious scientific research and has enjoyed a close affiliation with Lehigh University. Graduate students have undertaken studies that resulted in impressive articles, published in reputable scientific journals, and presentations at scientific conferences. This research continues today, as PhDs and college interns alike flock to the Institute during the summer months to undertake such projects as diamondback terrapin rescue and to study beach ecology, horseshoe crabs, the fish of Hereford Inlet, area bird populations and the effects of turtle excluders on crab traps. Many projects undertaken are studies that have long been neglected and which are vitally important to the understanding of the working of the coastal beach ecosystem. A facility such as the Wetlands Institute affords the opportunity for continuing research that, over the years, results in valuable discoveries about our marine environment.

The opportunity for college students to work alongside professionals in their field also brightens the outlook for future research as young students come away with valuable hands-on experience which gives them the confidence to reach for greater heights in their own life’s work. The Wetlands Institute is not only a place of discovery but has also become a place of nurturing and mentoring of some of our finest young scientists.



In June 1972, the fledgling Institute opened its doors to the public. Prince Bernhard of the Netherlands — then president of the International World Wildlife Fund — presided over the dedication of the new Institute after the death of Herbert Mills. Attendees included such personalities as Roger Tory Peterson, Arthur Godfrey and Charles Lindbergh. All gathered on a piece of property deeded for the use of the Institute but which looked quite unlike the lovely site of today. Fill dirt had been hauled in for the development that was to take place. The newly dedicated building consisted of the lab and a couple of offices with the lecture hall and a small area devoted to a bookstore that would come to be called the Tide Pool Shop. Included also was Wetlandia, a hands-on area for children, promoting the philosophy of experiential involvement to connect with nature.

As trees and shrubs and flowers were lovingly planted and grew to fullness and beauty, the building was framed in a stunning array of gardens that contrasted with the lack of diversity in the salt marsh. Birds found high marsh and native species to shelter in and to feast on before fall migrations.

As the trees and gardens grew, so did the building itself. A second story library was added to house the fine collection of books that now make up the Institute library, used so often for research and discovery by Institute members.

The building's unique design seems to include the wetlands as part of the architecture. Panoramic views of the marsh make the outside as much a part of the great lecture hall as the paintings that hang on the walls. Every event held in this room is enhanced by the natural loveliness that surrounds it.

## Windows on the World

The signature logo of the Wetlands Institute is the great tower that caps the main entrance. Small children with parents in tow lead the way up the spiral staircase on a journey to what seems like the top of the world — a journey which, via the newly installed mural, begins on the deep ocean floor and winds up through watery depths until emerging on a sunlit ocean scene. Janet Cleveland's beautiful rendering seems to make diving gear a requirement for the journey upward; one almost feels the need of a gulp of air after staring eye-to-eye with the creatures of the deep.

As one reaches the top, the tower seems to soar into the air in contrast to the surrounding marsh. Yet, as wonderful as the view is on a lovely summer day, the tower also affords a hideaway from which to watch the network of lightning that streaks across the sky during summer storms. The tower has always been a magical element in the magnificence of the Institute building. Now, with the addition of the ocean mural, a whole new adventure has been added to the experience.

Much has changed since the Institute was dedicated, but some things remain the same. Marion Glaspey, a founding trustee and past chairwoman of the board, remem-

As the trees  
and gardens grew,  
so did the  
building itself.

Observation deck visitors  
have a bird's eye view of  
the surrounding salt marsh.

COURTESY OF THE WETLANDS INSTITUTE





## Wet, Wild and Wonderful

Regardless of type — bog, mudflat, estuary, floodplain, marsh, etc. — wetlands are found all over the world, inland and along coastlines, in warm climes and cold. Generally rich in minerals and other nutrients, which enable them to produce plenty of plant material, they can support an incredible array of wildlife.

Wetlands serve critical needs of humans, too, helping to purify water, providing food and protection from flooding, and yielding raw materials used for such diverse products as medicine, textiles and baskets. These natural areas nourish the mind and spirit as well as the body, hosting leisure activities, such as canoeing, fishing and birding, and inspiring art in all its forms.

While climatic changes can negatively impact wetlands, these productive ecosystems also have suffered at the hands of mankind. Many human activities and their side effects, including resource exploitation, drainage, construction and pollution, can result in damage to, or loss of, wetlands.

For the most part, those who live in or near wetlands do so in harmony with their surroundings; they've learned to use nature's gifts in a wise manner. However, we all must be conscious of the need to protect our wetlands, for in sustaining these resources, we are safeguarding the future.

A decoy carving demonstration is just one of the treats that await Wings 'n Water Festival goers.

**Editor's Note:** For additional information about the Wetlands Institute or any of its programs or events, call the Institute at 609/368-1211.

bers green flies flying about the heads of everyone listening to the band on that unseasonably hot afternoon. All except the band enjoyed the benefit of constant "flailing." But the band's military discipline afforded them no such luxury and the music continued uninterrupted.

And the music still continues — music of dreams and hopes and challenge. It can be a daunting experience to let go of the past and move sprightly and vigorously into the future. But the Wetlands Institute that came into being because of the vision of one man seems blessed by that legacy. The determination and courage of many who have followed Herb Mills to the present day have called forth a bold new identity for the Institute as it continues to reach new heights and implement new visions. Projects using the latest in technology — such as monitoring the migration of ospreys by placing satellite telemetry backpacks on those nesting locally — and the broadening of the Institute's outreach programs to national and global audiences are among those visions.

Binding it all together — the past, the present and the future — is the fascination evoked in a child's face at the touch of a sea star moving in her palm or by the sight of a turtle's inquisitive eyes. In this simplicity all things are momentarily one and we can glimpse their interconnectedness. We can sense that we are not apart but that we are rather a part of a whole natural world that calls for understanding, preservation and conservation.

The Wetlands Institute adopted this identity in the fall of 1972 and has lived it since then. As the Institute's goals — teaching the value of wetlands and coastal ecosystems, sponsoring related research and encouraging stewardship of these habitats worldwide — remain constant, its future is bright with promise.

*Charlotte McDevitt, a freelance writer and poet, has been serving an internship at the Wetlands Institute for the past year.*



© BURTON LIPMAN





The tee at the short tenth hole at Crystal Springs overlooks the green, located in the quarry hole approximately 20 yards below.

# Natural History Courses (golf, that is)

Story by Rob Hargraves; Photos © by Fred Cantor

Simply because they know I am a geologist, my golfing friends have sometimes likened my swing to that of someone who has hammered much rock. Be that as it may, my enjoyment of the game is increased by reflecting (afterwards) upon the natural history of courses I play.

Before the advent of heavy earth moving equipment, the natural variations in terrain served as the determining factor in siting and designing golf courses. The topography of these can thus provide the interested player or observer with clues to their geologic history.

## Where Dinosaurs Once Walked

At my home club, Springdale, in Princeton, there is evidence of seafloor spreading, or continental drift, in the terraced rock outcroppings in the creek between the sixteenth and seventeenth holes. Known as Stockton sandstone, the rock is formed from sediment eroded from the flanks of a rift valley dating back approximately 200 million years. This rift extended along the east coast of what is now North America, from Nova Scotia to Georgia, heralding the breakup of the supercontinent Pangea.

Called brownstone, Stockton sandstone was used for the construction of many famous buildings in New Jersey (includ-

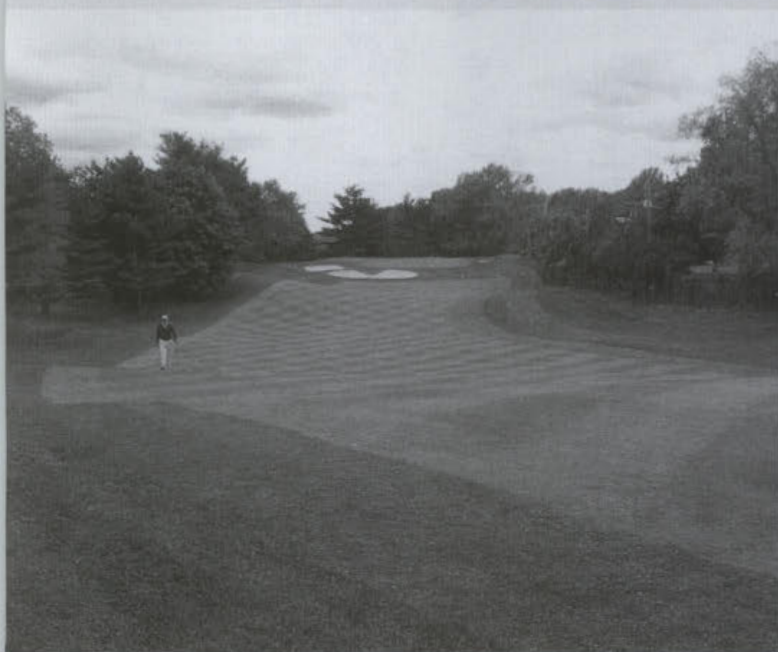
ing Nassau Hall at Princeton) and was quarried at various places around the state. Sometimes the lakes in the bottom of this rift valley dried up and dinosaurs wandered over the flats. Quarrymen have found their footprints preserved in mudstone near Whitehall, in Morris County. I doubt if this is of immediate concern to golfers who happen to hit their balls into Springdale Creek but it is, nevertheless, true.

Eventually, the rift widened and a series of volcanic eruptions occurred. Today these lavas form the Watchung ridges, and some 30 to 40 of the 150 golf courses in New Jersey are located between them.

On a geologic map, the Watchungs form conspicuous reverse-C shaped ridges, concave to the west, which one ascends when driving west from New York on routes 78 or 80. Much of the stone used to pave those highways was probably quarried in the Watchungs because trap rock, as it is called, is tough and hard and is the road material of choice for highway engineers. One of the best known golf clubs in this part of New Jersey is Baltusrol, which has two courses. The upper course is built on the flanks of the easternmost Watchung, but there is an entirely different geologic feature relating to the better known lower course and it has to do with glaciers.



The Plainfield Country Club's slopes and hollows are located on the north slope of a long elevated segment of a ridge called a terminal moraine.



## Ice Age Legacy

The Ice Age lasted about two million years with ice advancing and retreating several times as the climate cooled and warmed. Throughout that time, much of North America north of St. Louis was covered with ice. The last major advance occurred about 18,000 years ago, and on the East Coast it stalled in North Jersey. As continental glaciers advance, they scrape and push ahead all soil and loose debris in their path. When the ice melts, this great pile is left as a boulder- and sand-filled ridge called an end, or terminal, moraine. The southernmost of these ice-age moraines extends like an irregular ribbon all the way across northern New Jersey, from near Belvidere on the Delaware to Perth Amboy on the coast, and the famous lower course at Baltusrol is mostly built upon it. The greens on the first and third holes are just north of the moraine, but the green of the memorable short fourth hole is backed by it.

Metuchen Golf and Country Club, Rockaway River Country Club and Plainfield Country Club — a particularly fine example — are other courses built on this moraine. Standing some 80 feet above the land on either side, Plainfield is located on the north slope of a long elevated segment of the moraine and exemplifies the slopes and hollows typical of such terrain. The difficult uphill par four seventeenth is an especially delightful hole.

Somerset Hills Golf Club, on the side of Mine Mountain just west of Bernardville, is not in the rift valley at all but on its immediate northwestern flank. The rift border-fault runs right through Bernardville, and west of it one passes up into the Jersey Highlands. Underlain by granite-like rocks with thin strips of marble that date back 1.1 billion years, these are the oldest rocks in the state. Somerset Hills stands relatively high — up to

600 feet above sea level — and has magnificent views. On clear days, you can see Manhattan skyscrapers projecting above the Watchungs. It is an upland type course, with rolling slopes and elevations that vary by up to 150 feet. Rocks abound in the rough on the back nine, and the green of the lovely fifteenth hole is nestled in what is appropriately called Happy Valley.

## Safe on the Mainland

The rift valley we have been talking about never developed into an ocean; the final crack from which the Atlantic grew actually occurred farther to the east and some 20 million years later. Scientists don't really know why this change occurred, but as a result, the deposits filling the rift valley were preserved on the North American mainland. Otherwise, Springdale and Baltusrol and all the other courses in the rift valley and farther east might have been underwater off the East Coast, if not in northwest Africa. Somerset Hills, however, remained safe on the "mainland."

In New Jersey, this mainland comprises the Jersey Highlands, underlain by the old granite-like rocks, and the "valley and ridge" terrain in the extreme northwest corner of the state. These valleys and ridges are remnants of the Appalachian Mountains, formed about 400 million years ago when an even earlier Atlantic ocean "closed." Northwest Africa scrunched up against the East Coast, and all the intervening rocks were rumpled like a rug.

Today, the "valley and ridge" terrain represents what is left of the resulting mountains, with the ridges formed of hard quartzites and the valleys carved in the softer limestone. Golf courses in this area of northwest Jersey are distinctly hilly and scenic. Several of those constructed more recently — such as Crystal Springs and Great Gorge — have been laid out around old marble quarries with superb rock outcroppings.

The short tenth hole at Crystal Springs presents a challenge simply because the green is located far below the tee, on that part of the quarry hole that is not filled with water. At least 20 of the hole's roughly 130 yards are vertically downhill, a somewhat disturbing prospect! In addition to beautiful big white calcite crystals in the quarry wall, there are magnificent fluorescent minerals which rock hounds can check out at night with the aid of an ultraviolet light.

## Not Quite on the Seafloor

Seafloor spreading — the subject with which we started — is also indirectly responsible for the terrain of the southeastern part of the state on which many courses are built. Amongst others, these include Atlantic City Country Club, Pine Valley, Metedeconk, and the only state-owned golf course in New Jersey, Spring Meadow.

When oceans widen by spreading, the new crust to make the ocean floor is generated by volcanic outpourings along a mid-ocean crack. This new crust spreads away on either side of the ridge as if on conveyor belts. As it does so, it cools and contracts



Pictured here at Hominy Hill, the author contemplates playing golf where dinosaurs once roamed.

and the ocean floor sinks. The rate of spreading is very small, of course, less than an inch per year at present. But at times it has accelerated to the breakneck annual speed of four inches! This variation in spreading speed has an enormous effect upon sea level, because as the new ocean crust cools and contracts at a constant rate, the spreading speed determines how fast or slowly the ocean floor sinks. If it spreads quickly, the ocean floor as it moves away from the ridge stays relatively shallow for a greater distance, and the capacity of the ocean basin to accommodate the volume of seawater is diminished. Hence water has to spill onto the land.

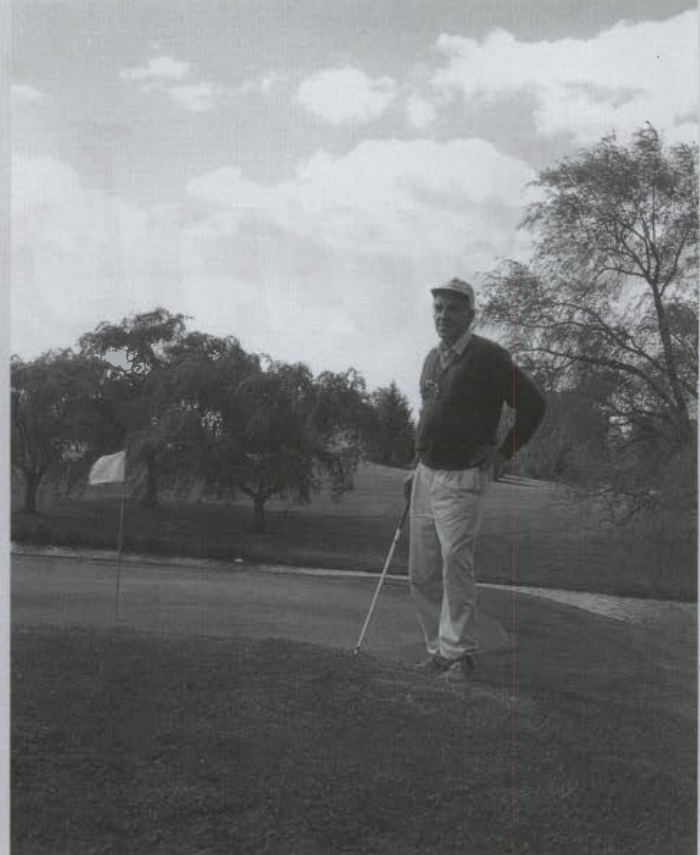
## Greensands Mean Fertile Ground

An interval of rapid spreading occurred in the Atlantic about 100 million years ago and what is now the coastal plain was completely flooded. As spreading slowed, however, the ocean floor deepened and the sea receded. The retreating beach left white sandy deposits covering mud and sands previously deposited in deeper water. These tended to be green because they were mixed with a rather unique green clay mineral called "glauconite." Today these greensands are important because glauconite contains potassium and iron, good fertilizer elements. Wherever erosion has exposed these sands in the coastal plain, the soils are brown (from oxidized iron) and inherently fertile; elsewhere, we have the Pine Barrens. The fertile belt now extends through New Jersey in a tract extending from Raritan Bay, along the east side of the Delaware south of Trenton, and on to Wilmington and beyond. It is in this fertile belt that many commercial vegetable gardens and cranberry bogs are located.

Pine Valley, in southern New Jersey, ranks as one of the finest golf courses in the world. It is constructed on the west edge of the Pine Barrens, on the south slope of the valley of a tributary to the Delaware. This stream has eroded down to the greensand strata and, although the crest and flanks of this valley are underlain by the beach-sand type, the fertile sands are exposed in the valley bottom. I suspect that the builders of Pine Valley may have supplemented their magnificent fairway turf with sand from here, because the soil on the strata above is of typical mediocre quality. This may be the secret of many of the older courses in the Pine Barrens: soil was transported from the greensand belt to fertilize the fairways (because they certainly did not have to import filling for sand traps). But this belt is host to another natural history secret, and Hominy Hill, a public course in Monmouth County, is the holder.

## Hidden History Underfoot

Hominy Hill is a fine course laid out on what is known geologically as the Hornerstown Formation, one of the sedimentary rock units making up the fertile belt. The Hornerstown sands accumulated about 65 million years ago, over a time interval during which a devastating extinction of natural species occurred. A high percentage of all life in the sea and on land —



including the dinosaurs — died out rather suddenly. The cause of this extinction is controversial, the debate revolving around whether it was caused by gradual climate change or was a catastrophe resulting from the impact of a large meteorite.

One of these blasted a crater some 100 miles in diameter and 10 miles deep in the Yucatan, Mexico, at almost exactly that time, and spread dust and disaster around the globe. The Hornerstown Formation, which was being deposited during that instant, extends right across New Jersey, but as far as I know, Hominy Hill is the only golf course that straddles the actual interval within it when the dinosaurs died! The boundary runs just south of and parallel to the creek that divides the course.

There is nothing of it to be seen, Hominy Hill is too well manicured for that, but one actually plays across it from the back tees on the short eleventh hole. I encourage golfers to contemplate the remarkable event in earth history that is reflected in the bedrock beneath their feet as they play that hole.

Consideration of geological oddities such as these will not mitigate the frustration of players who hit into a hazard, but might appeal to those who have played well, and — given the beauty of most courses — perhaps even to nongolfers.

So, the next time you feel called upon to defend the amount of time you devote to golf, claim that it is really nature study. You may even find the statement true as you ponder the origins of the outcroppings, sand traps, natural water hazards, slopes and inclines (not to mention flora and fauna) that offer both challenges and aesthetics on New Jersey's golf courses.

*Rob Hargraves, an avid golfer who hails from South Africa, is a geology professor emeritus at Princeton University.*

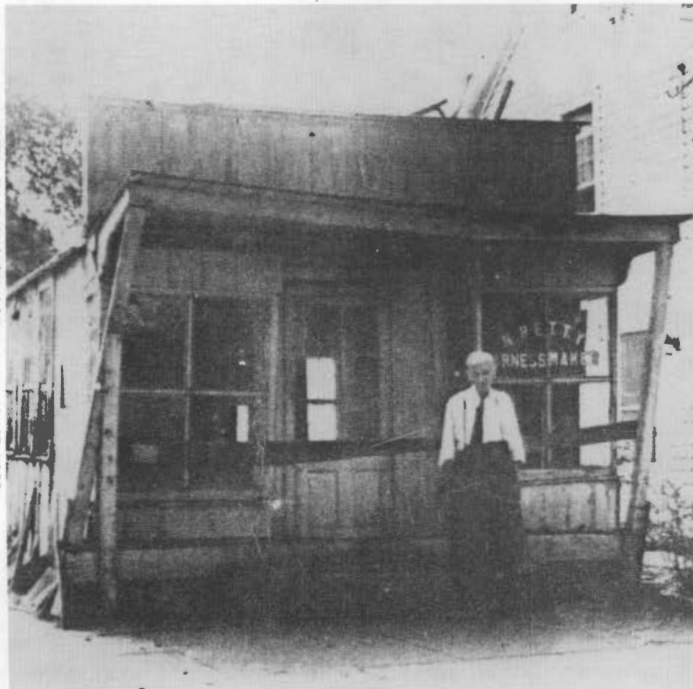


# Cranbury

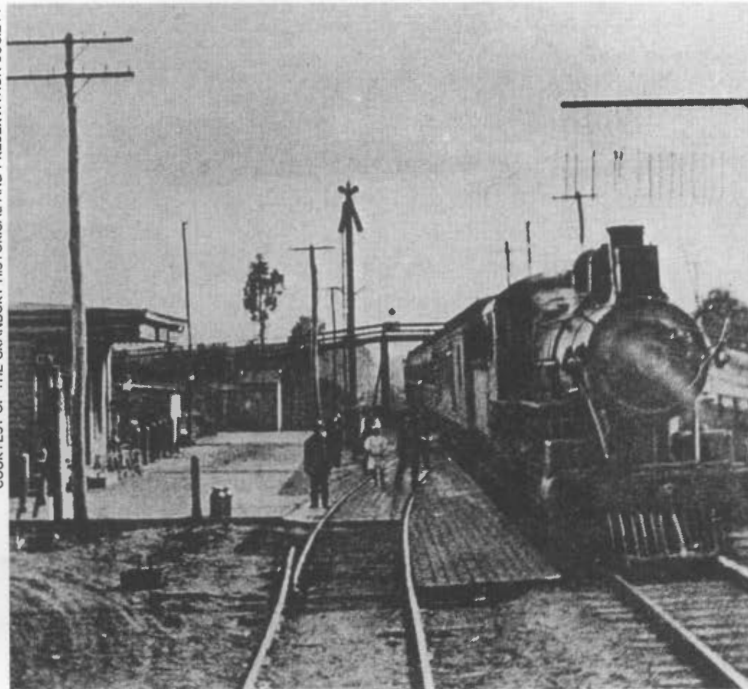
## Yesterday, Today and Tomorrow

by Lorraine Sedor

COURTESY OF THE CRANBURY HISTORICAL AND PRESERVATION SOCIETY



COURTESY OF THE CRANBURY HISTORICAL AND PRESERVATION SOCIETY



The historic village of Cranbury epitomizes the realtor's adage about the importance of "location, location, location." Settled in 1697 on fertile land midway between New York and Philadelphia, Cranbury quickly grew to support both area farmers and travelers to the two cities. Today, as the village celebrates its 300th birthday, strollers along Main Street find evidence everywhere of the town's early success.

Cranbury, originally part of the colony of East Jersey, is one of the oldest towns in New Jersey. With land grants from the East Jersey Proprietors and purchases from the Lenni Lenape (for such considerations as "... coats, ten gallons of Rum, ... seven pound of money ... sixteen knives, forty tobacco pipes, ten pounds of tobacco ..."), early settlers gravitated to the area around Cranberry Brook. There it is suspected wild cranberries grew, lending their name to both brook and town.

Eighteenth century maps show the area as Cranberry and Cranberry Town. In 1857, the Rev. Joseph G. Symmes proposed the name be changed to the English style (bury for borough), as "Cranberry suggested to strangers a low, swampy, sandy country, which this is not ... Let us have the correct, respectable, historical spelling." By 1872, when the township was officially formed from parts of South Brunswick and Monroe townships, the name "Cranbury" was well established.

The brook and the development of a post road through the area each contributed to the town's early growth. In 1686, one George Rescarrick received a "warrant to conduct a house of entertainment for strangers and travellers" on the post road at Cranberry Brook. By 1736, a gristmill stood alongside the brook and quickly became the center of the village. A post house to supply horses to travelers between New York and Philadelphia was operated by John Predmore in 1751, when the

Nelson Petty's harness shop (above, left) was located next to his house at 68 South Main Street. Petty is shown here in 1944, when he retired from the business he began in 1877.

An iron horse (above) stops at Cranbury's depot in this early 20th century postcard.



post road was called "the best road to Burlington," where ferries to Philadelphia were met. One or more inns have existed in Cranbury ever since. The present day Cranbury Inn dates back to 1780.

By 1740, land near the gristmill was donated for a cemetery and, shortly after, a Presbyterian church. The noted missionary David Brainerd, for whom the town's lake is named, established a mission near the village to convert the Native Americans to Christianity.

At the time of the American Revolution, a Baptist church and as many as 15 houses lined the main road. And Cranbury, in its small way, played a role in the colonies' struggle for independence. Although Cranbury cannot claim "Washington slept here," he did in fact visit the home of Dr. Hezekiah Stites en route to the Battle of Monmouth in 1778. The Marquis de Lafayette and Colonel Alexander Hamilton headquartered at the doctor's home and were met there by George Washington, while Lafayette reported "the detachment is in a wood covered by Cranberry Brook and I believe extremely safe." A plaque marks the area on South Main Street where Dr. Stites' home once stood.

## 19th Century Changes

The small village, consisting of 25 buildings in 1789, was to undergo important changes in the 19th century. Farming continued to be the predominant industry in the area. Local business — harness makers, millers, blacksmiths, wheelwrights and carriage makers — catered to the farm community. But the advent of the locomotive and the Industrial Revolution changed the face of Cranbury forever. In 1830, the Camden Amboy rail line was built with a stop in Cranbury Station, less than one mile from the village. Within a few decades, farms and businesses established in Cranbury were reaching customers all along the rail line with produce and products as diverse as men's shirts, violin strings and spices.

In 1865, John S. Davidson established the American Steam Coffee and Spice Mills. He soon brought on young John S. Silvers as a partner. Their wholesale operation blended their own teas and roast and ground coffees, and made a range of seasonings. It even produced patent medicines which, with a goodly dose of alcohol, may not have cured so much as comforted! These products found their way to grocers across the country. The business established offices in Newark, and J. S. Silvers Bros. and Co., as it came to be known after Mr. Davidson's death, made Silvers and his brother, William, very wealthy men. Visitors to Cranbury today can see the c. 1886 home of J.

Rural route mail carriers (below, left), ready for the day's work, line up in front of Cranbury's North Main Street post office in this c. 1902 photo. The building now is a residence.

In the photo (below), taken in the early 1880s, employees stand in front of American Mills, established in Cranbury in 1865.



COURTESY OF THE CRANBURY HISTORICAL AND PRESERVATION SOCIETY





S., located at One North Main Street. The high style Victorian features a porte cochère, and eclectic details in its windows, chimneys and shingles. William Silvers lived at 46 North Main, within sight of the mill. His home also reflects the Victorian penchant for gingerbread, with a wraparound porch and projecting bay windows. The spice mill, a wooden frame structure located behind the present-day Cranbury Market, was twice destroyed by fire, and in 1927 relocated to Hightstown, where it closed several years later.

By 1872, when Cranbury was formally established as a township, there were 1,400 residents. The roads going through the village today were already in place and most of the homes that lined Main Street still stand. Though the roads are now paved and the mills are gone, a visitor from the late 19th century would recognize the Cranbury of today.

The businesses in the village may be different — a gourmet shop, interior decorators, antique dealers — but the buildings are much the same. A. S. Cole Sons & Co., established in 1858, is Cranbury's oldest firm in continuous operation. The undertaking establishment no longer sells suites of furniture or carpeting as it did in its early days (a common practice among mortuaries back then), nor does it conduct services in the homes of the deceased, also a common practice in the 19th and early 20th centuries. A citizen of the late 1800s would read the same *Cranbury Press* and bank in the same establishments, despite name changes due to mergers.

## 20th Century Impacts

Cranbury moved swiftly into the 20th century, with telephone lines going up in 1899 and electricity in 1903. The first indoor toilet was in John Silvers' home, in 1900.

Entertainment and amusements centered around Brainerd Lake, which was formed by the damming of the brook by the gristmill. In the early 1900s, the lake was graced with excursion boats — open and canopied — and swans. Every summer Saturday evening from 1915 through 1931, James H. Goodwin's band performed in a bandstand erected over the dam. During the winter, ice skaters dotted the lake's frozen surface. As part of the tercentennial celebration, citizens recently erected a sign over the lake, similar to the one dedicated to Brainerd's memory in 1905.

In 1900, the first automobile roared through town — and Cranbury once again changed irrevocably. Within 14 years, 66 Cranbury residents owned cars, and in 1915 they held an "Auto

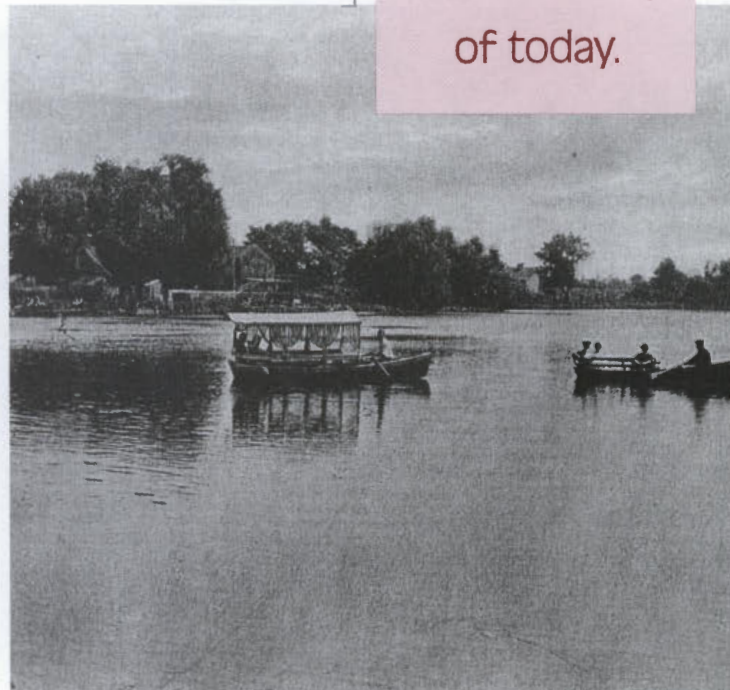
James Goodwin's band, a local institution, (below, left) played in parades and at the Brainerd Lake bandstand.

In the early 1900s, excursion boats — open and canopied — and swans graced Brainerd Lake (below).

Though the roads are now paved and the mills are gone, a visitor from the late 19th century would recognize the Cranbury of today.



COURTESY OF THE CRANBURY HISTORICAL AND PRESERVATION SOCIETY







Social,” consisting of ice cream, cake and a car ride for 25 cents.

The growing popularity of the horseless carriage had some drawbacks. By 1925, the *Cranbury Press* issued this call to arms: “Wake Up Citizens! We need protection. 700 motor cars per hour pass through town on Sundays.” The paper called for establishing a local police force and, within a few years, Cranbury had one uniformed officer. He, aided by the eventual building of the Cranbury bypass — Route 130 — did much to alleviate congestion. In recent years, though, congestion has again become an issue with residents.

## Toward the 21st Century

Today, private citizens and not-for-profit organizations work hard to protect Cranbury from the further onslaught of “progress.” The Cranbury Historical and Preservation Society was formed in 1967. Its museum, located on Park Place East, allows a glimpse into the lives of 19th century Cranburians, with artifacts from many of the town’s first families, businesses and farms.

In the early 1970s, Cranbury Landmarks Inc. fought to save the old brick school building from demolition. Landmarks’ efforts paid off — the old school is celebrating its 100th birthday this year. No longer used for classes, the building now houses township offices, office space for local non-profit groups and an art gallery.

In 1979, the village was designated a State Historic District. When, in 1980, Cranbury was placed on the National Register of Historic Places, 218 well-preserved buildings were included within the district. Its nomination stated, “Cranbury is one of the best preserved 19th century

Cranbury Paint and Hardware’s display of wares adds a splash of color to North Main Street.



As this aerial view of present-day Cranbury shows, the township still is buffered by farmland.

© OWEN KANZLER



villages in Middlesex County. While there are many small mill towns in New Jersey, few are in such an undisturbed environment as that of Cranbury.”

In 1989, a historic preservation ordinance was enacted to further ensure the architectural streetscape and historical character of the village. The ordinance, under the aegis of the Cranbury Historic Preservation Advisory Committee, provides guidance to homeowners, business people and developers.

In the early 1990s, volunteers from the Society restored the grist miller’s house on South Main Street. This building now houses the Cranbury History Center, a repository of genealogies and archival material.

And Cranbury has used the state’s farmland preservation program to its fullest. Working with local landholders, the township, Middlesex County and state together have purchased the development rights to over 900 acres of farmland, ensuring the lands’ agricultural use in perpetuity. Stults farm, in operation since 1915 and one of the farms involved in the preservation program, has turned over part of its acreage to pick-your-own crops such as strawberries, corn and pumpkins. Other area farms primarily grow spinach and grains.

So, while development throughout the township continues today, it is within the context of three centuries of true affection for the village and the present community’s concern for its agricultural heritage.

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*Lorraine Sedor is a resident of Cranbury and an active member of its Tercentennial Committee.*



# House Tour Information

This year, the Cranbury Historical and Preservation Society's biennial house tour coincides with the township's tercentennial observation. This rain-or-shine celebration of Cranbury's finest architecture takes place on Saturday, October 4, from 10 a.m. to 5 p.m. and features seven private homes, two churches and the society's History Center and Museum. The tour's theme, "Homes from Three Centuries," reflects both the rich history of the town and the fact that Cranbury remains a thriving, modern community.

Tour-goers will find today's homeowners have successfully blended the old and the new. Nineteenth century exteriors give way to restored and renovated interiors. Twentieth century lifestyles are revealed everywhere, from kitchens to closets, while the charm of the original is retained.

And, though the homes are always the highlight of the biennial house tour, increasingly the spectacular floral arrangements that grace the rooms are as eagerly awaited as the homes themselves. Members of the Rocky Brook Garden Club use the house tour to showcase their talents using seasonal plant materials.

One of the earlier homes on the tour is today known as the Bunker Hill School. Built in 1851 on donated land, the North Cranbury School (as it was then called) was used until 1896, when the township built a larger structure in the downtown area. The school, located at Six Bunker Hill, was converted into a private

home in 1896. In recent years the homeowners have extensively renovated and added to the structure, while retaining the historic flavor of the original schoolhouse.

At the Historical Society's Museum, a special exhibit will highlight the town's Tercentennial quilt. This work required more than two years of designing, piecing and quilting to complete. It features familiar scenes in town, such as the Water Tower, and some that no longer exist, such as Nelson Petty's harness shop. Other antique quilts featured in the exhibition are from local collections.

Luncheon will also be available that day, from 11 a.m. to 2:00 p.m. The Friends of the Cranbury Public Library will serve soup, chicken salad, beverage and dessert at the First Presbyterian Church. Reservations are required. The Friends will also serve tea and light refreshments from 2:30 p.m. to 5:00 p.m. for which reservations are not necessary.

Tour tickets are \$15 per person and are available the day of the tour in front of PNC Bank on North Main Street. Discounted advance purchase tickets are available through September 15. To order tickets or reserve a space at the luncheon, phone Lyn Green at 609/655-3086 or Midge Paul at 609/395-0293.

The charms of well-preserved Cranbury are evident as one strolls down the street (above).

Some things never change — Brainerd Lake is still a thing of beauty and serenity (right).



© FRED CANTOR



© KEN WAJDA







# Between a Rock and a Hard Place *That's Bouldering!*

Story by J. Wandres

Photos © by Michael S. Miller

The back of Ernie Blundell's Jeep sports two bumper stickers. One says *The Ultimate Hangover*; the other, *Gravity: a Law worth breaking*.

Blundell is neither a problem drinker nor an outlaw. He is a member of a growing group of rock climbers who practice the exotic sport of bouldering. His bumper stickers express some of the appeal of this sport, which challenges climbers to test their agility and strength in scaling steep rocks, up to 30 feet high, in as few moves as possible and without the gear traditionally associated with climbing.

Bouldering is becoming increasingly popular among climbers of all ages in New Jersey, who say they enjoy it because it is a simpler, more pure activity than rock climbing with all of its gear.

I had the opportunity to witness some skilled climbers in action when I accompanied Ernie and his colleagues to a section of Allamuchy State Park in Sussex County known informally as the Waterloo Rocks. It's one of several sites in the Garden State boulderers use to develop their skills.

While Tom Blackwell works his way up a boulder face (right) at Cradle Rocks, north of Princeton, Ernie Blundell spots.

As Tom Blackwell and Ernie Blundell demonstrate here (left), boulderers seldom use climbing ropes or harnesses. Instead, they rely on their skills — and partner — to prevent injuries.

## Straight Up, on the Rocks

After a heart-pounding climb along an ill-defined path up the mountain, we came to Waterloo Rocks. (In fact, Waterloo Village is within hearing distance, just across Route 604.) There are two climbing faces: the Lower Slabs and the Upper Slabs. The bouldering bunch tried a few warm-up scampers up the Main Wall, on climbs known as *B.I.T.U.S.A.* (Born in the USA), *Muddy Waters*, and *Spanglish*.

To the untrained eye, what appears to be just a rough-hewn rock is — to a skilled boulderer — an opportunity to clutch by fingertips to a slight outcrop-

ping, wedge a palm into a crevice, or lock on and leverage up using toe- or heelholds. Each route, or "problem" as boulderers call it, has its own peculiarities and challenges. To map out a boulder route is to "put up a problem." The objective is to reach the summit in as few moves as possible, and not "lose face"; that is, suffer the humiliation of coming off the face of the boulder and falling into the partner-spotter's arms or onto the foam pad.

Ernie, Brian "Muffin" Dellett and Marc Russo put on their tight-fitting climbing shoes, then positioned their



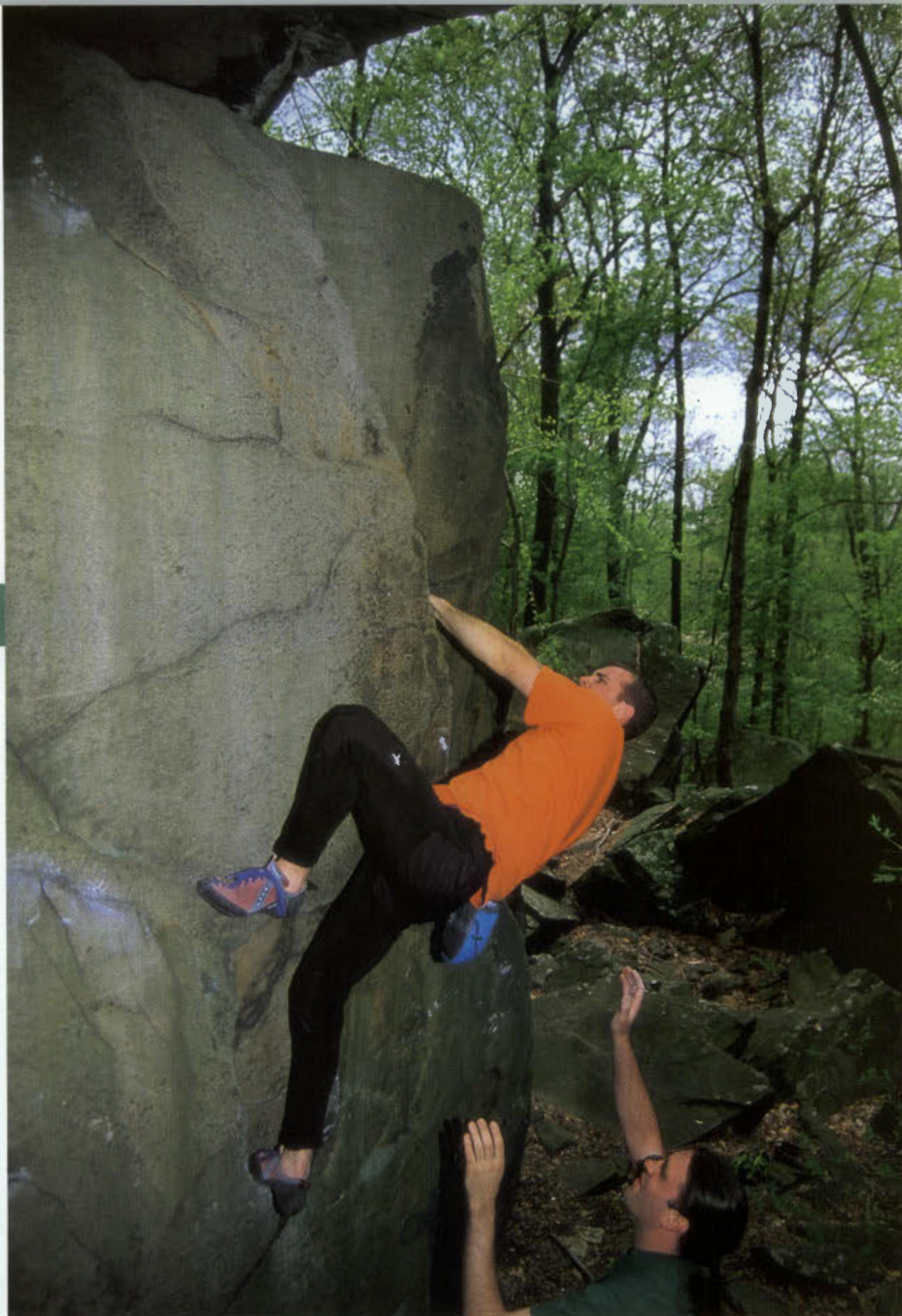


With Tom Blackwell spotting, Ernie Blundell (right) begins an ascent at the Mt. Rose Natural Area north of Princeton, the Cradle Rock climbing area.

At Waterloo Rocks, Allamuchy State Park, Marc Russo and Ernie Blundell (opposite page) "work a problem." It is not the size of the boulder, but the difficulty of the moves that determines the challenge.

foam rubber crash pads on the ground beneath their climb route. As he dusted his hands with chalk to absorb the sweat (and get the mosquitos to buzz off), Marc's eyes plotted and his hands mimed hand- and footholds. Then, with Ernie spotting, he began working his way up the nearly vertical rock face. Tendons in his arms and legs flexed as he found heel holds and cross-handed moves — each one tested and carefully placed before he moved to the next step. Always maintaining position and balance against the boulder face, he worked his way to the top. He made it look effortless, but his skill is the result of years of training and constant practice. Elsewhere at the Rocks, Brian was inching his way up another route, using a minute fissure for finger holds. He, Ernie and Marc tried a few other routes on the Upper Slabs, then decided to explore for new climbs in the area.

We all went trekking through the woods until, halfway down the slope, Marc spotted a house-sized boulder on a level area. Judging by the absence of tell-tale chalk marks, it appeared to be a "virgin" (unclimbed). Off with his boots and on again with the climbing shoes. More chalk dust (and fewer mosquitos). Marc squinched his way down under an over-hanging surface where it met the leaf-covered earth. His fingers gripped the rock at all-but-invisible outcroppings. He worked his way up over the "mantel," then simply walked



## Safety First

Unlike activities such as SCUBA and sky diving, climbing education is not regulated in the United States. Reading relevant books, practicing at climbing gyms, joining a club, finding a good mentor and taking classes — be sure to ask if the trainer is certified by the American Mountain Guides Association — can all be helpful if you'd like to try your hand at bouldering. But regardless of which best suits your learning style, there are several safety rules you should always follow:

- Use the proper safety equipment;
- Work with a ground partner; and,
- Because bouldering is done basically without protection, never climb higher than you'd like to fall.



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All boulderers are  
climbers but not  
all climbers are  
boulderers.

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up the angled top. It was not a great climb, he acknowledged; just okay.

## From the Rocks to the Gunks

Topic A on the way to Cradle Rocks was, of course, about the really, *really* great bouldering problems at the Gunks. To the uninitiated, the Gunks are the cliffs at the Shawangunk Ridge, near New Paltz, overlooking New York's Hudson River Valley. It is one of the great climbing areas on the East Coast. One climbing guide to the Gunks has mapped more than 1,200 routes. Some are easy enough for beginners. Others are rated as among the most challenging of any climb, anywhere in the world!

On a busy weekend at the Gunks, upwards of a thousand climbers can be seen working their way up cliff faces hundreds of feet high. At the base of the cliffs, a one-lane gravel road winds for miles amid the giant slabs of rock and huge boulders that have broken away from the cliffs over the millennia.

"It's not the quantity of the climb," says bouldering enthusiast Marc Russo, "but the quality of the moves." Many boulder problems at the Gunks are well known to climbers, and have acquired names and "personalities." Some favorites include *The Gill Egg*, *Tweaky Crack*, *Andrew*, *Buddha* and *Susie A*. In the bouldering guide to the Gunks he is writing, Marc Russo has named at least two: *Did That Years Ago*, and *Blackhead*, a small, lichen-covered boulder. De-



spite its insignificant mass, it is one of the most difficult boulder problems at the Gunks. Only four people are known to have bested it.

All boulderers are climbers but not all climbers are boulderers. One trait that sets many boulderers apart from climbers is their strict adherence to a natural, clean climb. Because they seldom climb higher than 30 feet, they use no ropes or protection devices to guard against falls.

"If a boulder is covered with lichen and moss, we try to find a face that's clean rather than deface the rock by picking off the natural growth," Russo says, adding "well, maybe a *little* lichen, if it looks like a potentially good problem."

## Up Against the Walls

The growing popularity of climbing and bouldering in New Jersey is evident by the increasing number of indoor rock-climbing gyms now operating in Wayne, East Rutherford, East Brunswick, Edison and Cherry Hill. In Lincroft, Monmouth County's Thompson Park has one outdoor climbing wall and is building a second. At these climbing walls, people of all ages can learn to climb walls that range from al-

most vertical to 120-degree-leaning backwards. The multi-colored gripholds bolted to the gray surface make it look like a giant pasty face with a very bad case of acne. Climbers undergo ground training before hitting the wall, including knot-tying, use of a safety harness, line handling and basic climbing techniques. Every climber works with a ground partner who takes up and lets out slack on the safety line as the climber goes up and comes down.

New Jersey now sports several outdoor shops that supply climbers with lines, protective devices, equipment and clothing. At Mountain Sports in Clinton, Lyle Lange sells and rents equipment for beginners and advanced climbers. He also leads climbing schools and tours to several approved areas and runs Adventure School, the only rock and ice climbing school in New Jersey, Pennsylvania and Delaware accredited by the American Mountain Guides Association. Guides certified by the association also are certified in wilderness first aid.

Numerous climbing and bouldering areas are listed in *New Jersey Crags* by Paul Nick and Neil J. A. Stone



Women, increasingly, have taken up climbing. At the New Jersey Rock Climbing Gym in Wayne, Mychele Lepinski "frees" a problem; that is, she climbs without a top rope.



(Chockstone Press, \$12.95). The guide provides detailed travel directions, including where to park and what permits or permissions should be secured. Most climbs are numbered, named and rated as to their degree of challenge. The guide mentions nearly all climbing areas in New Jersey, including those on private land and those not officially open for climbing. Strictly speaking, rock climbing in state parks is allowed only with a special use permit from the park.

Numerous climbing organizations are trying with great patience to open up some of the better areas, such as Seeley's Escarpment in the Watchung Reservation, near Scotch Plains. Jeff Lucas heads up the New Jersey chapter of the Access Fund, a non-profit organization based in Colorado, which works nationwide to increase access to non-park climbing areas. Local members of the Access Fund were successful in preventing commercial development of the Cradle Rock

bouldering area so it could remain an open space. The group is also working with legislators to clarify a state law which would hold harmless private property owners who permit individuals on their property for recreational purposes.

## The Challenge

A few weeks after I explored the New Jersey climbing areas I got a call from Michael Miller, who took the pictures for this article. Mike is an experienced climber. He and Ernie were going to their favorite indoor rock gym and invited me to come along. Oh, I hawed and hemmed. I said I had no experience. But Miller quietly cut to the heart of the matter.

"You'll never know how high up you can climb in life unless you start at the bottom and work your way up." With that, all I could say was: "Geronimo!"

*J. Wandres' last article for NJO was on iceboating.*

## For Your Climbing Information

### Indoor Climbing Gyms

- **First Ascent Climbing Gym**  
East Rutherford, NJ  
201/933-3355
- **New Jersey Rock Gym**  
Wayne, NJ  
973/305-6777
- **Thompson Park**  
Lincroft, NJ  
732/842-4000
- **Up the Wall Rock Gym**  
East Brunswick, NJ  
732/249-2865
- **Vertical Reality Rock Gym**  
Cherry Hill, NJ  
609/272-1370
- **Wall Street Rock Gym**  
Edison, NJ  
908/412-1255

### Climbing/Outdoor Stores

- **Blue Ridge Mountain Sports**  
Madison, NJ  
973/377-3301
- **Campmor**  
Paramus, NJ  
201/445-5000
- **Mountain Sports**  
Clinton, NJ  
908/638-5700
- **The Nickel/Blue Ridge Mountain Sports**  
Princeton, NJ  
609/921-6078
- **Ramsey Outdoor Store**  
Ledgewood, NJ  
973/584-7799
- **Ramsey Outdoor Store**  
Paramus, NJ  
201/261-5000





# Restoring Yesterday's Splendors

by Judy Finman

What happens when a master craftsman meets a team of indefatigable volunteers? If the artisan is Didier Cogen, of Teaneck, and the volunteers are the Friends of Ringwood Manor and members of the Skylands Association, they roll up their sleeves and save some of New Jersey's deteriorating historic treasures.

The cooperative venture began when Cogen, an antique-furniture restorer and fourth-generation artist trained in the leading workshop in Paris, France, first visited Ringwood Manor in Ringwood State Park in 1993. It was love at first sight.

"To my knowledge, after having seen most of the historic sites of New Jersey, it has the finest collections of furniture, porcelain, paintings and textiles, and its history is one of the most glamorous in this area," he says.

Ringwood is associated with some illustrious names. Peter Cooper, founder of the Cooper Union technical school in New York City and Greenback party candidate for President of the United States, purchased the estate in 1853. When his son-in-law, Abram Hewitt, National Democratic Committee chairman and mayor of New York City, took over the property, the manor — originally 10 rooms in size — grew to 51 rooms. The Hewitt family, which deeded the house and 95 acres to the State of New



Silhouetted above is a restored panel carving from Skyland's five-sided study.

In the photo to the right, Didier Cogen (left) provides hands-on training to volunteers (l-r) Ted Bayer, Donna Batic and Gene Creasi.





© DIDIER COGEN

**Before** (above) — The beauty of this table was concealed by years of neglect.

**After** (below) — Painsstaking restoration revealed both the warmth of the wood and the detailed workmanship.



© DIDIER COGEN

Jersey in 1936, was reputed to have amassed the sixth largest personal fortune in America.

But what captured Cogen's interest was the eclectic collection of furniture from three centuries and many countries, including Spain, Holland, China and the United States, and the wood-paneled dining room. Cogen has a special affinity for wood, and what he saw at Ringwood desperately needed restoration.

## The Answer to a Prayer

Coincidental with Cogen's visit, Elbertus Prol, curator of Ringwood Manor, was looking for someone to restore Ringwood's furniture. With state restoration funds virtually non-existent, Ringwood's treasures were badly neglected. When Prol and the members of the furniture committee of the Friends of Ringwood Manor saw a slide show of Cogen's work, they had the perfect solution. His knowledge and experience, gained in 20 years of working on precious antiques in North America, Europe and the Middle East, should be applied to Ringwood. They asked him to do the restoration, with the Friends as voluntary apprentices to do the labor-intensive cleaning.

"We would pitch in and do it as a labor of love — and make sure we wouldn't damage anything," says August W. Fischer, co-chairman of the committee. "I see it as a community service; you have to give back to the community somewhere along the line. We were all enthralled with the history of the place."

They began by restoring something simple — the walls of the dining room — since everything else was marquetry and veneer.

"I had lay people to train; I had to train them on something. The only thing that was massive and therefore not risking much was the wall panels. And those needed . . . more than 600 hours of work," says Cogen.

Covered with soot from the heating system, the panels looked as though they could have been mahogany or walnut. Cogen suspected that they were cherry, and investigation proved him to be correct.

"The wood is a mixture of cherry and pine; that's very Victorian. The ceiling is really nice; it's boxed in with pine, and the detailing is cherry," he explains.

## Hands-On Training

Beginning in 1994, for four hours every Saturday morning, Cogen trained and supervised 14 to 18 volunteers working on the wall paneling, ceiling, dining room chairs and two side tables. The team came from the Friends and from the Ringwood Manor Citizens Advisory Committee of the New Jersey Highlands Historical Society.

The goal was to train them on the wall panels to qualify them to work on veneer and eventually marquetry, according to Cogen. One group worked on the panels and another on cleaning and conserving dining room furniture. The second year, the walls and ceiling were finished, so they followed up with the furniture. By June 1996, they finished the dining room chairs, two other tables, and two mirrored cabinets.

Maureen Burns, a volunteer from the town of Ringwood, describes the process of cleaning the furniture: "We take off all the old finish completely. There are very ornate legs on the two tables, and it's so difficult to get the old finish off of them. It's like an alligator finish, all cracked and dried. We use toothbrushes and toothpicks — very gently."

With Cogen as trainer, the volunteers worked in the French manner. Using turpentine and alcohol, they cleaned down to the original patina, then waxed and polished and



buffed, all with a special cleaning agent Cogen buys in France. "You don't use anything but what they used at the period the furniture was created," says Fischer.

Cogen's goal was to qualify two or three volunteers to conserve furniture without his help. "That would give the Friends an independence. The State of New Jersey can use volunteers to conserve and clean. Restoration, on the other hand, requires skills of a trained artisan," he says.

Were the volunteers up to the demands of the intense, hands-on work? Fischer devoted himself exclusively to the dining-room ceiling, for four hours at a time. Despite the problems associated with working with arms extended above the head for long periods, seeing the house come back to life made it enjoyable. "You could see the sheen of the wood come up," he says. "It's lighter now. The light bounces off of it."

With the dining-room work completed, the Friends may refinish other furniture, which includes regluing cracked pieces. "We need a climate control system so the furniture isn't so dry," says Fischer.

The state has been very cooperative, according to Cogen, in lending rooms in Ringwood to expand the restoration project and run workshops. "I have another three years of full-time work," he says. "And that's just to maintain the furniture in the open rooms; it doesn't count what's in the attic."

He raised funds by giving a course across the corridor from where the volunteers were working. Students who had brought their own pieces in need of repair could see the Friends working on the museum pieces. Among those enrolled in the course was Barbara Wood, president of the Skylands Association, who invited Cogen to come to Skylands Manor, which also was in need of restoration.

© BARBARA HANENBERG



## Another Challenge

Elbertus Prol describes Ringwood as a "laid-back country estate" and its neighbor, Skylands Manor, as "a showplace . . . the jewel in the setting of a formal garden."

Giving every appearance of a 400-year old English Tudor Manor House, Skylands was, in fact, built in the 1920s. Following the practice of many affluent Americans of the period, Skylands' owner, Clarence McKenzie Lewis, and his mother, Mrs. Helen Lewis Salomon, widow of the founder of the New York banking house, bought and transported rooms and furnishings from English and European estates to install in their mansion. A renowned amateur horticulturist, Lewis imported plants from all over the world.

Skylands became state property in 1966, when it was purchased with Green Acres money. In 1985, it was dedicated as the state botanical garden.

The Skylands Association is a non-profit membership group that helps maintain and preserve the garden and manor house. According to Betty Wiest, the group's executive director, "We have an extensive volunteer organization. The state benefits in a quiet way from the things that we do."

Many of the association's 248 volunteers assist in the annual plant sale, garden maintenance and Christmas holiday open house, and in the office. Among those who help is the Bergen County Landscape Contractors Association, which voluntarily does pruning, cleanup, and mulching. Because of Skylands' far north location, "It's hard to get interest statewide," Wiest says. "Some volunteers come from New York State."

Despite the efforts of volunteers, Skylands Manor suffers from neglect. In rooms where America's most powerful and wealthy once stayed, ceilings leak. Still, the entrance to the elegant stone and half-timbered Tudor-style manor house sometimes serves as the backdrop for upscale automobile commercials. Though empty of furnishings now, the house boasts notable European antique stained glass, American-made decorative ironwork, a 15th-century fountain and rich wood paneling.

Note the reflection of light on the cleaned and polished walls of the dining room (above). The small side table under the large picture also was restored by the Friends of Ringwood Manor.



## Artisan Extraordinaire

Didier Cogen, the fourth generation of a family of artists, was born in Paris and studied art at the Etame School of Art and Craft in Erquelinnes, Belgium. After further education in Europe, Japan and South Korea, he was selected to attend the A5 School of Art and Restoration in then Paris, where he studied for five years under the late François Germond, France's leading master of antique wood restoration.

Cogen has restored a timber trading post in Canada, constructed cabinetry for a Saudi Arabian prince, and restored antique furniture for the French Embassy and Consulate in New York. He moved to the United States in 1986, he says, because "I saw a lot of beautiful furniture purchased in auctions in France for America and Japan, and there were few craft people to do the restoration."

He returns to Paris for a week every three months for further study under François Germond's brother, Michel, who is an expert witness at the court of Paris, supervises Christies' experts and restores furniture for the Louvre and such castles as Fontainebleau. Cogen is upgrading his skills to earn a special license for marquetry technique. Only about six such licenses have been granted worldwide, he says, and he will have the only one in the United States.

He says that restoration is important, "to preserve what we have for future generations, and to better understand where we came from."

On his first visit to Skylands, Didier Cogen was "stunned by the beauty, variety and complexity of the paneled rooms." Some rooms were transported whole or in part from old English and European buildings. The small, five-sided study, which Cogen and Skylands volunteers began to restore in March 1996, was taken from a 19th-century German Renaissance-style wardrobe. It is the most elaborately carved room in the house, showing masks, animals, monsters, cupids, birds, mythical figures and horned dragon heads.

Fourteen weeks and 265 work-hours later, a group comprising four to nine volunteers finished cleaning and waxing one wall of the study. Elbertus Prol suggested to Cogen that the panels were varnished in 1980 over an oxidized and darkened finish. Five of the panels were found to be Renaissance period European walnut, which originally had been waxed. The room was finished in copies made much later of varnished American walnut. Close inspection revealed the differences between the handiwork of an Italian craftsman and that of a machine.

Betty Wiest wrote after the first wall panels were restored to their original glory: "Where once the carved figures gave off a such a shine from the varnish . . . the wood now has a soft glow that brings out all the details." In October 1996, under Cogen's leadership, phase two of the project got under way.

### History — and Beauty — Preserved

This is the most difficult part of the undertaking. Unlike Phase 1, in which the wall panels and doors could be taken down and worked on from many angles, the remaining wall and ceiling panels cannot be dismantled. Scaffolding and ladders are required for the upper reaches of the room. Cogen alone is restoring the top of the wall panels and the oak ceiling.

"We're working vertically now," says Donna Batic of Parsippany, who has been on the Skylands project from the beginning. She credits Cogen with imparting knowledge "we would never get anywhere else. He has taught us history as well as refinishing."

For the Ringwood and Skylands volunteers, the experience was rigorous, educative and rewarding. They helped preserve history with their own hands. And they developed camaraderie in their hours together. As Cogen succinctly put it, "They started as Friends and became friends."

In a letter thanking Cogen after the first phase of the Ringwood dining room restoration, Elbertus Prol wrote: "To my knowledge this is the first professional attention given to this room since . . . 1936. The one thing unique about this undertaking was the hands-on training, education and utilization of volunteers . . . who, under your excellent tutelage, accomplished a Herculean feat which resulted in a professional product . . . to my knowledge this has never been done in a museum setting . . . This success has opened innumerable possibilities statewide which, if implemented, will stretch the hard-earned restoration dollar far beyond its originally anticipated limit."

It also should lead other visitors to — as did Didier Cogen — fall in love with New Jersey's treasures.

*Judy Finman, who lives in Franklin Park, is a freelance writer whose work has appeared in previous issues of New Jersey Outdoors.*



Thanks to Didier Cogen and the volunteers, the interiors of both Skylands and the Ringwood Manor may once again rival the majesty of their exteriors.



# Technicolor Trails



Vistas such as this delight the Watchung Mountain Reservation's autumn hikers.

© DWIGHT HISCANO PHOTOGRAPHY

by Arline Zatz

Autumn is special. The sun rises later, the days grow shorter, evenings turn cooler, and the night sky becomes exceptionally clear. Squirrels scurry about gathering and hiding nuts, migrating birds devour juicy berries, and the bears in the northern part of the state prepare for a long winter snooze. Autumn is also when Mother Nature puts on a glorious show by painting the trees a rich palette of colors.

Although many dedicated leaf-peepers travel to Vermont to gaze upon the brilliant fall foliage, Jim Amon, executive director of the Delaware & Raritan Canal Commission, feels that the views here rival those anywhere else. "Anyone from New Jersey who travels out of the state this time of year is making a big mistake because it's not only just as pretty here, but a lot closer," he says.

Hiking is one of the best ways to experience the season's splendor, for being surrounded by trees of all sizes and shapes, admiring the scarlet leaves clinging to a maple tree or the deep purple fruits of a sumac, is as unforgettable as having a deer or tiny critter dart out in front of you on the trail. Best of all, besides being an ideal way to experience nature firsthand, hiking promotes family togetherness, stimulates all the senses, and is a great stress reliever.

Fortunately, marked (blazed) trails abound in the Garden State and, because the terrain is so diversified, it's possible to plan easy, moderate or strenuous hikes in any direction to appreciate the foliage. Essential items to have on hand for all hikes include extra clothing for changes in weather; extra food, snacks and water in case the hike takes longer than planned; sunglasses; a knife; a fire starter (in case of emergency); a lighter or matches in a waterproof container; a first-aid kit containing bandages,





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gauze pads and tape, antiseptic cream, insect repellent, tweezers and aspirin; toilet tissue and plastic bag; flashlight; whistle and backpack for each individual; a map; compass; and, if hiking on rocky trails, sturdy shoes.

Bearing in mind that you have to carry what you bring, you might also opt to bring a camera and plenty of film; a magnifying glass; binoculars; a pad and pencil; books for identifying trees, birds and wildflowers; a walking stick for balance; and a bandanna.

Since Mother Nature — depending on location, previous rainfall, sunlight, wind and temperature — decides the perfect time to paint the leaves, it's best to call before starting out to make certain conditions are right. Dress in layers, taking into account that it's always cooler in the northern part of the state.

While hiking, keep the *blaze* or *cairn* in front of you at all times. *Blazes* are usually painted on trees or rocks; a double blaze

indicates a change in direction. Three dots indicate the beginning or end of a trail. *Cairns* are piles of stone used to indicate trail direction. Should you lose sight of any marker, turn back and find the previous one before continuing.

Besides the sheer joy of hiking during one of the most colorful seasons of the year, you can help plant new trees by collecting fallen acorns from the red, pin and white oaks and delivering them to the State Forestry Service Office in your vicinity. After they've grown into healthy seedlings at the Forest Resource Education Center in Jackson Township, the state's forest education facility, they'll be planted throughout the state. Then, on one of your future hikes, that young oak you see may very well be yours.

The best part about hiking in the fall is that you don't have to rake the leaves! Hike one or more of the outstanding New Jersey trails described below and enjoy the mind-boggling autumn foliage.





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© JOEL L. ZATZ

Hikers who "rise and shine" early enough may catch a glimpse of a frosted oak leaf (opposite page).

Bikers (left) enjoy the foliage at Morris County's Mahlon Dickerson Reservation.

Birch trees frame a pair of hikers (above) at Sussex County's Sunrise Mountain.

## North

"**High Point State Park** is where the forest as a whole is spectacular during autumn," says park superintendent John Keator. Start out early in the day because the days are shorter. It's also best to hike on a weekday when it's less crowded. Although there are many trails to choose from, Keator notes that the *Monument Trail*, a 4.9-mile round trip rocky trail designated by a red and green circular blaze, offers exceptional views with lots of fall color, especially the mixed oaks sporting drab purple or brown leaves; sugar maples adorned in bright purple to orange; birches dressed in bright yellow; beautiful red maples; and the golden-leaved, mitten-shaped sassafras. For an exceptional look at the painted countryside, climb the 220' High Point Monument that stands 1,803 feet above sea level (at the parking lot opposite the

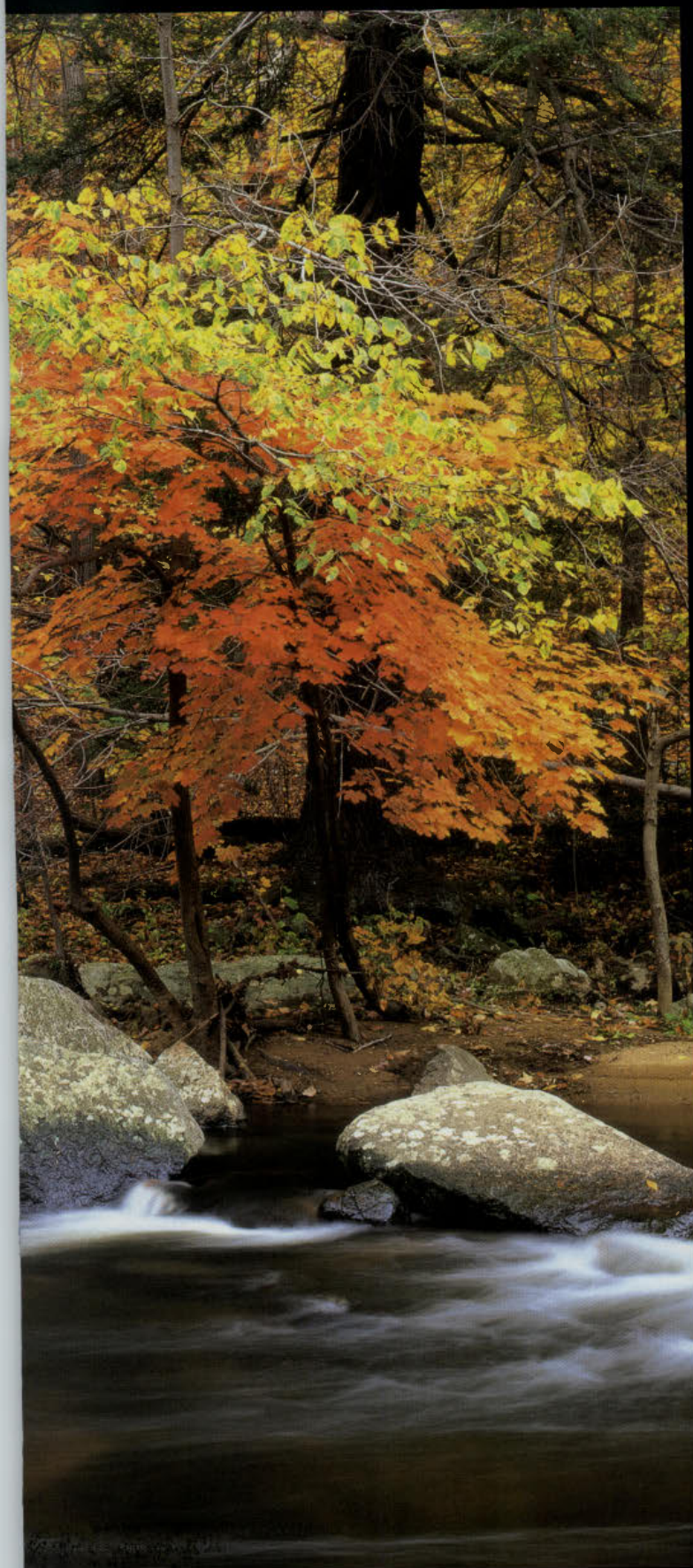
trail head) or view the exquisite scenery from its base.

**Lord Stirling Park**, a 400-acre hiker's delight, is especially beautiful now when the red maple, oak, tulip, and pine put on a brilliant show over a changing topography ranging from woods to open field and back again. Don't worry about getting your feet wet in the swampy areas; the long wooden boardwalks will keep you high and dry as you walk past hundreds of nodding cattails.

There are many hikes to choose from, including the 3.9-mile round trip hike starting from the right of the Environmental Education Center. Take the straight gravel path between two ponds, turn right onto the yellow-blazed trail, turning right at each junction until you reach the red trail. Continue past the bird blind, dense woods and open field, and rest at the East Observation Tower — a great spot to admire the foliage, Passaic River and wildlife — before taking more right turns that lead back to the parking area.



Many parks and reserves other than those mentioned, such as Ken Lockwood Gorge (far left), offer visual delights to autumn hikers.



An abundance of turning leaves provides a multi-hued carpet for the monument at High Point in Sussex County.



Park supervisor Ross Zito suggests hiking here on October 19 to combine the autumn hike with the annual 1770s Festival and Craft Fair, so you can enjoy militia performances, cider pressing and lots more in addition to the great views.

**Sourland Mountain Preserve** probably derived its name from the “sorrel-land” — the reddish-brown colored soils the pioneering German farmers found. Besides the interesting soil color, there’s a wide variety of radiant trees along several trails ranging from the easy, mostly level 1.4-mile round trip *Maple Flats Trail*, to the moderate up-and-down 4-mile round trip *Ridge Trail*. Dominant trees include the tulip poplar, white oak and black oak, mixed with ash, linden, hickory and sugar maple.

**Swartswood State Park** not only has a pretty glacial lake that’s perfect for boating or swimming, but beautiful woods. For a good view of the Kittatinny Mountains that appear to be glow-

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ing this time of year, take the yellow-blazed *Mill Trail*, an easy 1.3-mile loop starting near Keen's Gristmill. Meandering through fields and a forest area, it offers lovely vistas along the lake's southeastern shoreline, and you'll find rocks dating back over 300 million years, various mosses, and colorful oaks, maples, and birches, among others. The new .7-mile *Duck Pond Trail* is perfect for people with canes, walkers, wheelchairs or strollers.

**Pyramid Mountain** is exceptional. Hiking through these lush woods in autumn is truly sensational. You'll have a fine view of Manhattan's skyline and will see Tripod and Bear rocks, huge boulders believed to have been deposited here by a glacial ice sheet around 12,000 years ago. Wear sturdy shoes; if the office is closed when you arrive, begin by turning left onto the blue-blazed trail. Tall oaks will surround you on the climb uphill, followed by a mixed forest of beeches, oaks, tulip trees, and red maples —

their vivid colors resembling an artist's palette. Continue straight ahead, following the white blazes when the blue trail leads left. After admiring Tripod Rock, backtrack down the white trail, turning right at the double white blaze. You will pass through a swampy area followed by dense woods that lead to Bear Rock — a huge rock on the right, at the 2-mile point. Follow the trail as it leads under power lines for a short stretch before switching back onto the blue-blazed trail for your return to the starting point.

**Worthington State Forest**, encompassing the Appalachian Trail and the Dunnfield Creek and Sunfish Pond natural areas, offers rugged hiking that's well worth the huffing and puffing for the fall color and extraordinary vistas. Ridge runner Matt Brownlee notes that, while hiking the rocky 2.5-mile loop trail to Mount Tammany's summit, you'll hear and see the melodious Dunnfield Creek and, upon arriving at the summit — 1,527 feet









© CLAY MYERS



© CLAY MYERS

A burnt pine stump provides stark contrast to blueberry bushes in Wharton State Forest.

Microvistas, such as the mosaic of ferns, club mosses and autumn leaves (left) and the mushroom nestled among sugar maple leaves (above), await sharp-eyed hikers.

above sea level — you'll feel like king or queen of the mountain as you enjoy super views of the Delaware Water Gap countryside with its multitude of trees resembling bright-colored lollipops. For this loop trail, follow the Appalachian Trail's white blazes north from Route 80 for about 1 mile to the *Dunnfield Creek Trail's* cutoff on the right; after 1/4 mile, follow the blue dot trail to Mount Tammany, then return along the red dot trail.

The 4.5-mile round trip hike to Sunfish Pond — take the Appalachian Trail from Route 80 north and follow the signs 1.3 miles north of backpacker campsite #2 — leads through terrain strewn with huge glacial rocks. "The lake area," says Brownlee, "is relatively flat. At about one-third of the way around it, there's a hill with a wonderful view." The changing foliage, consisting of oak, hickory, pine, witch hazel and shad bush, is similar to that found on the hike to Mount Tammany. Should you spot a black bear,

Brownlee suggests that you "wave your arms, make lots of noise and let it know you're there from a safe distance."

**Loantaka Reservation**, a paved 3.5-mile round trip trail, is especially delightful for novice hikers. If you're hiking with children, take extra socks; kids love to "accidentally" fall into the shallow stream along the trail. One of the outstanding trees sporting beautiful foliage is the shagbark hickory; it's identified by loose bark standing out from the trunk and bright yellow leaves. You'll also find plenty of oaks, maples and tulip trees.

**Lost Brook Preserve** offers an enjoyable 4.25-mile round trip trail through dense woods aglow with beautiful beech, tulip and shagbark hickory trees adorned with yellow leaves. Wear waterproof shoes as the pond area is usually muddy, and leave time to visit the nature center.

**Ringwood State Park**, site of the New Jersey State Botanical



Harvest gold leaves provide a striking counterpoint to the bright blue of the autumn sky.



COURTESY OF PENN. SMALL

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Watch out for lush, reddish-leafed poison ivy as you make your way into the rhododendron and hemlock jungle that's so dark you almost need a flashlight!

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Garden, offers several hiking opportunities. Take a one- to two-hour walk through the magnificent 96-acre garden with numerous evergreens, deciduous trees and shrubs or meander up and down, past and over huge boulders along the 5-mile round trip hike with stops at Shepherd Lake (a 74-acre spring-fed lake) and Skylands Manor House, which captures the style and feeling of English country houses built centuries ago. For the hike, start on the white-blazed trail heading east from parking lot A. At the triple green-on-white blaze, turn left, then turn left again at the red-blazed trail. Make another left at Shepherd Lake and return to the parking area via the dirt path along the lake's shore.

Chief ranger Louis Casper also recommends the 8-mile round trip *Ringwood-Ramapo Trail* (start at parking lot C in Skylands) and the *Hoeflerlin Trail*, which is approximately 3 miles long. Both, surrounded by colorful oak, maple, tulip and beech trees,

Ringwood State Park's trails offer hikers breathtaking colors.



© EMANUEL LEKKAS

lead to vistas of Mount Defiance and Pierson's Ridge. Bring lots of water, high-energy foods, a compass and a map.

**Wawayanda State Park** has over 40 miles of trails. For panoramic views of the northern highlands, passing through swamp hardwood, hemlock-mixed hardwood and chestnut oak forest communities, choose the *Bearfort Mountain Natural Area Trail*. The Hemlock Ravine Natural Area, running along a section of the *Appalachian Trail* where dense hemlock-mixed hardwood forest is found, is sensational, as is the Swamp Natural Area, where Atlantic white cedar, mixed oak-hardwood and a spring-fed lake can be found.

My favorite is the 3.9-mile round trip hike starting from a dirt road off Banker Road onto *Banker Trail*, a wide dirt path with yellow blazes. Watch out for lush, reddish-leafed poison ivy as you make your way into the rhododendron and hemlock





jungle that's so dark you almost need a flashlight! You'll also find swaying phragmites in the swampy section before climbing beneath a canopy of beech and hemlock as you turn left onto the blue-blazed *Cedar Swamp Trail*. At the end of the trail, make a sharp right heading east where a single yellow marker identifies the trail to Double Pond Road and your car.

## Central

**Cheesequake State Park**, a transitional area with unique plant and animal life over a diversity of terrain, lies between New Jersey's northern and southern vegetation zones, making it the perfect place for a fall hike. "Hikers will find predominately mixed oaks in various shades of brown; maples in striking orange; beeches turning light yellow and orange; pretty sassafras, with mitten-shaped yellow leaves; and many black gums that turn red,"

according to naturalist Robert Sommers. The understory also is spectacular, especially with the cinnamon fern turning yellow and the blueberry bushes, a deep red. There are many trails to choose from ranging from 1 to 3.5 miles. After the hike, stop in at the nature center to learn more about the flora and fauna of the area.

**Delaware & Raritan Canal State Park**, a 66-mile long linear park, is a visual treat this time of year. Hikes can begin anywhere along the towpath. (Call for parking locations.) A pleasant 3-mile hike begins at the Bull's Island Natural Area, a small forested island sandwiched between the Delaware River and Canal that traverses a lowland floodplain forest where sycamore, silver maple and tulip poplar put on a glorious showing.

Another good hiking bet, one where you can walk as far as you please on a level trail, starts from Prallsville Mills, a 19th-century mill complex. You'll pass lovely ash, sweet gum, various maples and dogwood and, at Griggstown in Somerset County, you'll find the old canal bridge, Muletender's Barracks Canal Museum, and Bridgetender's House amid the glowing trees. Wheelchairs can be used most of the way although tree roots may be difficult to negotiate.

**Hacklebarney State Park** "is magnificent year round, especially this time of year," says park superintendent Al Gomolka. The yellow leaves on the beech trees, poplars and black birch are outstanding against the green of the pines and hemlocks, as are the yellow and red-leafed maples along the water's edge. The *Black River Trail*, a 3-mile round trip, goes down into a glacial valley of unusual beauty, passing a pretty brook before reaching the Black River. Walking past huge boulders along the river's edge before hiking uphill to the starting point is one of the highlights.

## South

**Island Beach State Park** — a narrow barrier island sandwiched between the Atlantic Ocean and Barnegat Bay — has, according to park superintendent Bill Vibbert, "unbelievably colorful fall foliage. The poison ivy turns bright red, and the holly, cedar and pine in various shades of green are the perfect backdrop for the spectacular showing of beach grass that turns an incredible golden yellow." Self-guided trails, located at the Aeolium, Area 13 and the Interpretive Center, take about twenty minutes each, or you can hike along the beach area to see dunes, maritime plants and abundant wildlife. Don't forget your binoculars for the bird blind.

**Bass River State Forest** is delightful year round. Whether you take the .5-mile self-guided *Absegami Natural Area Nature Trail*, one of the newly-opened short trails that range from 1 to 3.2 miles in length round trip or part of the 50-mile-long pink-blazed *Batona Trail* that cuts through the forest, you'll be rewarded by a canopy of brilliant red maple and oaks, a white cedar swamp and tall, fragrant pines. In the West Pine Plains Natural Area, you can hike through the globally rare Pygmy Forest where



Changing leaves are not the only source of autumn hues. These monarch butterflies take a break from migration to imitate fall foliage.

COURTESY OF ALMA NYGREN



piners and oaks grow only to four feet at maturity. If time allows and the 80-foot-high fire tower is manned, ask permission to climb up for incredible view of the autumn foliage.

**Belleplain State Forest**, with over 12,000 acres, looks much the same as it did when Chief Nummy and his tribe hiked through the area. Here, deep in the heart of the Pine Barrens, are over 40 miles of marked trails that traverse a variety of terrain ranging from brackish water areas, white cedar and lowland swamps to pitch pine forest and pasture land. Two new 1.5-mile loop trails, each with Braille signs, are available for handicapped individuals. A cassette recorder and tape guide for the trail is available at the park office.

My favorite hike here is a 4.5-mile round trip along the white-blazed trail leading through dense forest with pitch pine, black and white oak, sweet gum, red maple and American

holly typical of the coastal plain, while the low swamp areas have magnificent stands of Atlantic white cedar stretching toward the sky. After the hike, head for the nature center to check out the tanks filled with fish found in the area.

**Parvin State Park**, with 40 different tree species, over 60 various woody shrubs, numerous ferns, laurel thickets, holly groves, pine forests, and cedar swamps, is ideal for

leaf-peepers, says naturalist Paul Taylor. "Be at the east end of Parvin Lake early in the morning for the best light. During this season, the dogwood sports bright red berries and deep magenta leaves; the many-lobed leaves of the white oak leaf turn red or pinkish; and the tall tulip trees turn golden yellow."

Nearby, at Fisherman's Landing and along the streams, the winterberry and highbush blueberry make a beautiful showing and, during early autumn, many migrating warblers visit the woods while osprey and great egrets often feed at the lake area. Of the 15 miles of trails here, the longest, which circles the perimeter of the park, is 8 miles. Along Almond Road, there are lots of chestnut oaks adorned with golden brown leaves.

If you enjoy spectacular sunsets, come to Parvin Lake during October, November and December. A short, negotiable trail accessible to the handicapped starts at the park entrance near the lake.

**Wharton State Forest**, in the heart of the Pinelands, offers miles of trails, including a section of the 50-mile *Batona Trail* that connects Wharton, Lebanon and Bass River state forests. My favorite hike in this vast forest begins at Batsto Lake near the village of the same name. Meandering for 2.2 miles round trip through a dense wooded area, it boasts the handsome red oak, New Jersey's state tree. Whether named for its reddish inner bark, reddish twigs, or the deep red color the leaves turn each autumn, the red oak makes an impressive showing against a background of cedars and towering pitch pines combined with an understory of glowing yellow-orange leafed, mitten-shaped sassafras. Around the edge of Batsto Lake, you'll see skeletons of the southern white cedar destroyed by fire in 1960. Miraculously, the stumps are now sprouting new growth.

*In addition to appearing in New Jersey Outdoors, Metuchen's Arline Zatz is the award-winning author of Best Hikes With Children in New Jersey (The Mountaineers Books); 25 Bicycle Tours in New Jersey (Backcountry Publications); New Jersey's Special Places (Countryman Press); and 100 Years of Volunteer Wildlife Law Enforcement (NJ Division of Fish, Game & Wildlife). Her writing and photography appear in magazines and newspapers nationwide.*

## State Forestry Service Offices

- **Northern Region** —  
Franklin  
973/827-1325
- **Central Region** —  
Jackson  
732/928-4925
- **Southern Region** —  
Mays Landing  
609/625-1124



# Your Guide to the Best Hike Sites

The directions provided below begin at the municipality closest to the park. Don't hesitate to call the numbers listed for exact directions from your location.

## North

### ■ High Point State Park

Sussex  
973/875-4800

**Peak Foliage:** From Columbus Day weekend for about a week  
**Difficulty of Hike:** Strenuous  
**Directions:** From Colesville, take Route 23 north into the park. Just past the park office, which is on the left, turn right. Follow signs for the monument (where the trail begins) or park at the nature center, west of the monument.

### ■ Lord Stirling Park

Basking Ridge  
908/766-2489

**Peak Foliage:** Mid October  
**Difficulty of Hike:** Easy  
**Directions:** Go south on South Maple Avenue in Basking Ridge. Turn left on Lord Stirling Road and proceed to the park entrance.

### ■ Sourland Mountain Preserve

Hillsborough and Montgomery townships  
908/722-1200

**Peak Foliage:** Mid October  
**Difficulty of Hike:** Easy to moderate, depending on trail  
**Directions:** From Route 206 in Belle Meade or Neshanic, take either Amwell Road or Blawenburg Road to East Mountain Road. Parking is off East Mountain Road, west of the Carrier Foundation building.

### ■ Swartswood State Park

Swartswood  
973/383-5230

**Peak Foliage:** Mid-October  
**Difficulty of Hike:** Easy  
**Handicapped-accessible**  
**Directions:** Route 80 to exit 25, Route 206 north to Newton, left onto Route 519, left onto Route 622, left onto Route 619 and follow signs.

### ■ Pyramid Mountain

Montville Township  
973/334-3130

**Peak Foliage:** Mid-October  
**Difficulty of Hike:** Moderate to strenuous  
**Directions:** From I-287 North, take Exit 44 (Main Street in Boonton) to Boonton Avenue (County Road 511). Turn right and continue north 3.3 miles to the Visitor Center parking lot. From Route I-287 South take exit 52B to Route 23 North (Butler). Turn left onto Boonton Avenue (Route 511). Go 4.4 miles, then turn right into the parking lot.

### ■ Worthington State Forest

Columbia (Delaware Water Gap)  
908/841-9575

**Peak Foliage:** Second or third week in October  
**Difficulty of Hikes:** Strenuous  
**Directions:** Exit Route 80 west to the first rest area sign after Columbia. Park and walk a short distance into the second parking lot. The trails begin at the white blaze.

### ■ Loantaka Reservation

Morristown  
973/326-7600

**Peak Foliage:** October  
**Difficulty of Hike:** Easy  
**Handicapped-accessible**  
**Directions:** Exit I-287 at Route 24 in Morristown. Head east on South Street, then turn left on Spring Valley Road and left again on Loantaka Way to the parking area.

### ■ Lost Brook Preserve

Tenafly Nature Center,  
Tenafly  
201/568-6093

**Peak Foliage:** October  
**Difficulty of Hikes:** Easy to moderate  
**Directions:** Exit Route 9 in Tenafly. Take East Clinton Avenue west, turn right on Engle Street, and right again on Hudson Avenue. Park at the Nature Center (No. 313).

### ■ Ringwood State Park

Ringwood  
973/962-7031

**Peak Foliage:** Mid October  
**Difficulty of Hikes:** Easy to strenuous  
**Directions:** Take Route 287 to exit 57, following signs to the park. For the garden, use parking lot A or B.

### ■ Wawayanda State Park

Highland Lakes  
973/853-4462

**Peak Foliage:** Mid October  
**Difficulty of Hikes:** Easy to moderate  
**Directions:** From Route 23, exit at Union Valley Road. Turn left at the second traffic light after the stop sign. At the fork, bear left onto White Road. Turn left again at Warwick Turnpike. The park is 4 miles on the left.

## Central

### ■ Cheesecake State Park

Matawan  
732/566-2161  
or 732/566-3208

**Peak Foliage:** Second week in October for several weeks  
**Difficulty of Hike:** Easy  
**Directions:** Follow signs from Exit 120 of the Garden State Parkway

### ■ Delaware & Raritan Canal State Park

Central New Jersey  
732/873-3050

**Peak Foliage:** Mid October for 2 weeks  
**Difficulty of Hikes:** Easy  
**Handicapped-Accessible**  
**Directions:** Access points and parking are available at marked sites along the canal. Call for exact locations. Griggstown can be reached off Route 533, Millstone River Road in Hillsborough or from Canal Road in Franklin Township; Prallsville Mills from Route 29, Stockton; Bull's Island in Stockton.

### ■ Hacklebarney State Park

Chester  
908/879-5677

**Peak Foliage:** Late September to the first week in November  
**Difficulty of Hike:** Easy to moderate  
**Directions:** From Chester, follow Route 24 west for one mile. Turn onto State Park Road and go 2 miles to the entrance on the left.

## South

### ■ Island Beach State Park

South Seaside Park  
908/793-0506

**Peak Foliage:** Late September through early October  
**Difficulty of Hike:** Easy  
**Directions:** Exit the Garden State Parkway at exit 82 and take Route 37 east to Route 35. Travel south to the park entrance.

### ■ Bass River State Forest

New Gretna  
609/296-1114

**Peak Foliage:** October  
**Difficulty of Hike:** Easy  
**Directions:** Follow Route 9 and the Garden State Parkway to exit 52 south or exit 50 north.

### ■ Belleplaine State Forest

Woodbine  
609/861-2404

**Peak Foliage:** Mid-October  
**Difficulty of Hikes:** Easy to moderate;  
**Handicapped-accessible**  
**Directions:** Take the Garden State Parkway to exit 17, then head for Route 550 via Route 9 north.

### ■ Parvin State Park

Pittsgrove  
609/358-8616

**Peak Foliage:** First three weeks in October  
**Difficulty of Hike:** Easy  
**Handicapped-accessible**  
**Directions:** From Vineland, take NJ-540 west about 6 miles. Park opposite the park office on Almond Road or at Fish Landing, farther along Almond Road.

### ■ Wharton State Forest

Atlantic, Burlington and Camden counties  
609/561-0024

**Peak Foliage:** Last two weeks in October  
**Difficulty of Hike:** Easy  
**Directions:** The forest is located on Route 542, approximately 12 miles west of the Garden State Parkway or east of Hammonton. Park at Batsto Village.

## For More Information

Maps are usually available at the park office, nature center, or trail head. They also can be ordered from the New Jersey Geological Survey (Map Sales Office, PO Box 420, Trenton, NJ 08625) or the New York-New Jersey Trail Conference (GPO Box 2250, New York, NY 10116) for a nominal fee.

The *Guide to New Jersey's State Parks and Forests* is available from the Division of Parks and Forestry, PO Box 404, Trenton, NJ 08625.

To learn more about how today's acorns equal tomorrow's trees, join in guided forest explorations, learn about tree identification, or go on a greenhouse tour, attend the Fall Forestry and 4-H Festival on October 4 at the Forest Resource Education Center (732/928-0029).



© JOEL ZANTZ

Tom Keck, Belleplaine State Forest's superintendent, points out a popular trail.



# Pheasant Hunter Class

by Patrick Carr

Point; flush; boom; *smile*.

"I do this to see the kids smile," says Chauncey Herring as he signals for his dog. "Hunting has a rich tradition and this setting encourages responsible and safe hunting practices." Chauncey is a hunter education instructor who donates his time to take young hunters — ages 10 to 15 — on the annual Take A Kid Hunting Youth Pheasant Hunt.

Off in the distance, the blast of a second shotgun echoes as another youngster takes aim on a flushing pheasant. On this November day, 143 youths, guided by 86 men and women like



© PETE MCCLAIN







Thanks to pheasant hunter class, this young hunter may dine on pheasant under glass (opposite page).

The mentors accompany the youths, one at a time, into the hunting fields. Here, a young hunter takes aim (left).

© PETE MCCLAIN



Chauncey, are enjoying a pleasant day of pheasant hunting on the Clinton, Colliers Mills and Millville Wildlife Management Areas (WMAs).

Point; flush; boom; *smile*.

This time Chauncey tells the dog, "Fetch, find the bird," as one of his young companions points to the spot where the bird fell. About half the time, though, "Missed, let's find another," would be Chauncey's command.

The Take a Kid Hunting Youth Pheasant Hunt was initiated in 1995 by the New Jersey Fish and Game Council, which designated the Saturday before regular small game season as a youth hunting day for pheasants. This day provides an opportunity for youngsters to hunt with guidance from adults but without the competition that sometimes exists in the regular season.

Interested hunters from sportsmen's clubs thought it was such a great idea that they secured funding to make it a success. The New Jersey State Federation of Sportsmen's Clubs, the National Rifle Association (NRA) Foundation, the NRA's Environment, Conservation and Hunting Outreach program and the Hunterdon Hills Chapter of the Friends of the NRA donated money to provide ammunition, supplies and refreshments.

### A Gift of Tradition

When the Department of Environmental Protection's Division of Fish, Game and Wildlife announced the youth pheasant hunt, hunters from all areas, including individuals and members of sportsmen's clubs and field trial and dog associations, began contacting the hunter education unit to offer their help. These volunteers



© PETE MCLAIN





Prior to the hunt, the mentors instruct the young hunters on hunting safety and how to hunt over pointing and flushing dogs (opposite page).

This young lady show off her first pheasant, shot over a pointing dog (left).

© PETE MCLAIN



wanted to ensure a successful day afield for the budding hunters.

"I never hesitated when I found out the division was conducting an event like this," says Al Troianello, another hunter education instructor who also helps out with the division's shooting program for novices at the Pequest Natural Resource Education Center Open House. "I love it and it gives my dog a workout before the regular season begins. It is a satisfying experience to get kids started right on something they can enjoy for the rest of their lives."

In 1996, more than 400 youthful pheasant hunters enjoyed great weather and an abundance of birds while hunting on the seven WMAs stocked specifically for the youth hunt. The youths and their adult partners spread out across the areas, hunting hedgerows and woods around stocked fields

throughout the day. Personnel from the hunter education unit matched up the 28 kids who requested help with hunters who had bird dogs. Other hunters with bird dogs just showed up, ready to offer their assistance to any youngster who needed it, and were matched with them on the spot. Most of the youth hunters had partners with dogs.

## A Firm Foundation

All of the participants in the youth pheasant hunts have successfully completed the required hunter education course for firearms. The course is a beginning, where hunter safety, hunter responsibility and wildlife management principles are taught over a 10-hour period. The youth pheasant hunts offer an opportunity to put into practice the techniques learned in the course. Only the

# A Lesson Not Forgotten

Story and photo © by Frank Clark

With their dad a fanatical deer hunter, my children were raised listening to hunting and fishing stories. Weekend rides in the country — usually with a good pair of binoculars — were common. As they grew older, I became concerned about the incidence of gun-related deaths and injuries among youngsters. Although mine were no strangers to firearms, I decided to enroll them in the Hunter Education Course. The training made a lasting impression on both my children, particu-

larly Jim, who went on to hunt with me. But just how strong an impression, I was yet to find out.

Jim had his junior hunting license at age 12 and had gone with me a few times as an observer. But the real test came on opening day of firearm season, 1994. It was bitter cold and windy, with no snow. Still I felt confident when we parked just off the road and began our 40-minute hike up a mountain just outside of Hackettstown in total darkness. About three quarters of the way up, I had

a double level tree stand capable of holding two hunters safely. Jimmy eagerly climbed to his platform and sat down on his 2 x 4 seat, about 12 feet up. My seat, about 10 feet higher, gave an excellent view. The timber was fairly open, so I could spot moving deer 100 yards or more away. Now that I was above, a problem became apparent. How could I communicate with him, letting him know where a deer was, in case he didn't see it? A piece of cord, tied to Jim's hat and to me, solved that problem; one yank and I'd have his attention for sure.

As dawn began to break, I heard one shot, then a few more. Noticing a movement, I turned just in time to see a deer coming up the mountain. A closer look showed the smallish buck to be coming right to us. I yanked on

the string and Jim looked up, saw me point, and picked up his shotgun.

At 40 yards I heard his safety click off; so did the deer. He stopped, then cautiously turned sideways for a perfect shot. "Take him!" I hissed. There was still no shot. The deer moved off and Jimmy, with his safety back on, sat down. The spike, now at about 80 yards away, was still prey for my scope sighted 12-gauge, and fell with one shot. I unloaded and climbed down to Jimmy, who was shaking with both excitement and cold. When I asked what had happened, Jim said he was afraid the gun's recoil might knock him down, making him lose his balance and drop his gun, which could go off. What could I say, except, "Wait till next year."

In 1995, Jimmy had his



youth carries a firearm, so the adult mentors can concentrate on guiding the young hunters, working the dogs, offering encouragement and sometimes, if needed, correcting mistakes.

"It's a good learning experience," said Fish and Game councilman Vern Becker, also a hunter education instructor. "We know from our surveys of the kids that only about half of the participants have ever hunted pheasants prior to this hunt. We also know that a small percentage of the kids who complete hunter education do not have an adult to take them hunting, to start them out right. These youth hunts fill the need for the additional training in safe hunting practices that young hunters require."

Point; flush; boom; *smile*.

It's hard to say whose smile is bigger, the youth hunter or the adult mentor who is passing on a safe tradition.

## The 1997 Hunt

This year's Take A Kid Hunting Youth Pheasant Hunt will take place on November 1. For details, call 908/735-7088 or pick up a copy of the hunting season issue of the *Fish and Wildlife Digest*, which is published by the Division of Fish, Game and Wildlife and is available at sporting goods stores and all division offices, statewide.

*Patrick Carr, a principal biologist with the Division of Fish, Game and Wildlife, is New Jersey's hunter education administrator.*

own stand in a swamp in Hunterdon County. However, all he saw were does, as did I. We both came home empty-handed and exhausted.

We had a last chance, however, both having zone 8 antlerless permits. Now, more than ever, I wanted my son to get a deer. I spent the whole morning trying to push deer in Jimmy's direction. While he froze in boredom, I sweated into near exhaustion. Finally, I moved him, watching him carefully unload his firearm, and lower it cautiously to the ground.

Placing Jim on a run by a cedar thicket, I thrashed through the other side, watching quite a few whitetails race in his direction. Approaching him, I somewhat angrily asked, "What now?"

"Well," he stated, "a big doe ran up the hill and stopped about 30 yards away."

"Yeah?" I snapped. "Well?"

"Dad, you said to shoot only when the animal was sideways, so I could get a clean kill; this one was looking back at me and all I could see was her rear."

"You should have shot anyway," I screamed in anger.

A tear squirted from his eye. "Dad," he stammered, "if I missed I might have hit the truck."

I then could see two tandem dump trucks, their drivers checking the tires, directly in the line of fire. To be sure, Jimmy got a long emotional hug from me.

"You did the right thing, son," I said. Jimmy had learned his hunter safety lessons well; he taught me a lesson, too.

*Author Frank Clark, of Wayne, noted that his son bagged his first deer—a 90-pound doe—just before dark that day.*



Jimmy Clark proudly displays his first doe.



# In Defense of the Lowly Ling

Story by Paul Kerlinger, Ph.D.

Photos © by Herb Segars, Undersea Photo



"Ling-Ling!" The mate's cry rings like a bell. Another double header hits the deck and a young angler is delighted.

As he scrambles to pick up his booty, a salt encrusted veteran next to him quietly says, "Trash fish," and goes back to fishing. The veteran of thousands of hours of party boat sinker bouncing, he has disdain for the two morsels his rail mate has cranked from 80 feet of water. For him, ling have always been the second prize in his quest for the long since depleted cod and pollock. Ling will never excite him.

Ling are far from being a popular fish. Many older saltwater anglers will not go out of their way to catch one and I know of not one party boat that advertises ling as the main catch. They have been called ugly, which may be the reason they have so few culinary advocates. Granted, they do not have colors like a shimmering blue-green bluefish or the distinct greenish black lines that mark the sides of a striped bass. But have you ever looked carefully at a flounder or a blackfish? Who's to say they are any better looking

than ling? Perhaps it is their serpentine-like shape as they wrap themselves eel-like around our hand that makes them hideous to some of us. Or, perhaps it is their soft and slimy (abundant mucous) feel that sets them up for being the untouchable of the angling world.

The fighting ability of ling has also been impugned. Outdoor writers have likened them to "a shoe" or a "tin can filled with mud," while bemoaning their muscular shortcomings. This may be true for ling caught on a 30- or 40-pound conventional rig in 100 feet of water, but vary the rig, move to the shallows, and the action may change significantly.

I like ling and I know many other closet ling lovers. Ling have a lot going for them and I will defend them against angling snobs who think that only salmon, billfish, bonefish or tuna are worthy of an angler's attention.

## What the Hake Is A Ling?

So, what is a ling? A member of the same family (the Gadidae) as cod, pollock, haddock and whiting, ling are cool

water fish that range from just north of Nova Scotia to North Carolina. Biologists recognize several species of ling and call them different names. But, to anglers without the advantages of a piscatorial taxonomy text, they are all ling.

Red hake, white hake and spotted hake are three species of ling caught by anglers along the New Jersey coast. White hake, called mud hake, Boston hake, or ling, are the largest, growing to more than 40 pounds. Red, or squirrel, hake max out at about 6 to 7 pounds. Small red and white hake are so similar that experts say it is almost impossible to distinguish between them. Spotted hake are less well known and are not caught as often. They are smaller than red or white hake and can be discerned from their red and white cousins by their two-toned dorsal fin (white on top of brown) that lacks the thread-like spine that trails behind the dorsal fin of the other species.

Most hake caught by anglers fishing from shore or within a mile of the shore are only 12 to 15 inches long. These fish are about two years old. The bigger white





Who said ling are ugly? This one, peeking out, is kind of cute. (opposite page)

A fishing boat (left) leaves Shark River Inlet and heads north at sunrise in early October.

hake — up to 6 to 10 pounds — are caught from boats several miles offshore all along the Jersey coast.

Catching ling is easy. At the right time and place, they bite readily. They are also abundant, having yet to be exploited like so many of our sport fish. Most ling are caught while bottom fishing for blackfish (tautog), sea bass or cod over wrecks, reefs or a bottom with some structure. Depending on species, time of year and place, they can also be found over sandy or muddy bottom.

## To Catch a Ling

Most ling fishing is done with a stout boat rod of about 6 feet, a revolving spool (conventional) reel, 20- to 40-pound line, and sinkers ranging from 3 to 16 ounces; 6- to 8-ounce sinkers are used most often. Two-hook, high-low rigs with a sinker on the bottom and snelled 1/0 to 4/0 hooks a foot and two feet above the sinker work well. This gear is more than enough to handle ling. The reason heavy tackle is used is that ling are not usually the fish angler's target.

The heavy rod and line are for pulling stronger, and usually larger, blackfish or cod away from a rough bottom, or to dislodge a hook or sinker that has become one with the ocean floor.

Deep water ling take almost any bait you offer them, including clam, squid, crabs and strips of fish belly. Don't use big chunks, as ling will only steal your bait. Small pieces are taken whole and result in more hookups. Their biting style is deliberate. When you feel a solid bump or two, set the hook using a solid, smooth lifting of the rod through a 2-foot arc. Ling are not cunning bait stealers, so you will often get a second chance.

Although ling can be caught in any month of the year in New Jersey waters, they are most active and abundant inshore in the cooler months from autumn through spring. To the truly hardy, ling are available throughout the winter, as long as the weather permits head boats to go offshore. In summer, they are sometimes caught offshore in deeper holes or over wrecks.

The best way to catch ling is to go out on a party boat. If you want to know when

they are being caught, check the sports section of a Friday newspaper or a magazine like *The Fisherman*, which is published weekly. If ling are not mentioned in the outdoor columns of these publications, look at the party boat ads to see what is being caught. These boats advertise when they are catching ling — mostly red and white hake — off New York and New Jersey. Like bread and butter on a restaurant menu, ling do not get star billing. They will always get second billing behind blackfish, sea bass, cod, pollock and even whiting (called silver hake).

My favorite time for catching ling is late autumn and early winter. When water temperatures dip below 50°F, striped bass and bluefish disappear or lose interest in my flies and plugs. I turn to spotted ling. In Cape May, this usually occurs just after Thanksgiving or in early December. At this time, ling can be caught from jetties or from boats just off the beach. They also invade the back bays beyond barrier beaches.

## Who Says Ling Can't Fight?

A light spinning rod with 10-12 pound line makes for decent sport for these fish, which are in the 12- to 16-inch range (1- to 2-year-olds). The "fish that couldn't fight" suddenly puts up a better fight than the fish cranked up from 100 feet with a 40-pound codfish rig. Admittedly, they do not fight like a bluefish, but their battle is about the same as a weakfish. A 1- to 2-ounce sinker and 1/0 to 2/0 hooks, tied in either a high-low rig or a double low rig, work best. I prefer the double low rig because it allows you to keep both baits on the bottom. The best bait is a strip of fish belly (left from fish filleted the previous summer). Other good baits include mullet chunks (3/4" in size) or other pieces of fish. Squid and clams would also work. Ling are not choosy.

Caught in late November or early De-



cember, spotted ling bellies are packed with grass shrimp, although fingernail sized crabs and small fish are also eaten. Spiny dogfish and striped bass may also take your bait at this time of year, so be ready.

I'd bet that these fish can be taken on flies or small jigs designed to look like shrimp. Flies like the Clouser deep minnow, which has lead eyes, can be made to imitate a shrimp or small crab. Twitched slowly on the bottom, they would probably draw strikes from spotted ling invading the shallows in autumn. These fish are hungry and seem to be more active predators than ling living offshore in 50 to 100+ feet of water. Currently, the International Game Fish Association does not have a fly rod category for ling in its record books, but who knows . . .

A rising tide seems to be best, especially at dusk and just after sunset. The first bites come as the sun sets or just after and there is a period of about an hour that is great. After that, the action tapers off, although the fish can be caught steadily into the night. I have heard that these fish are caught in daytime, but I rarely get a

bite until the sun has set. Once you get a strike, fish as quickly as possible. Cast back to the same spot once you have unhooked a fish because spotted ling travel in small schools that move quickly from place to place. Once you don't get a bite, move the bait three to six feet, dragging it across the bottom. Autumn action in close may not last long — sometimes only a few days — although if the water temperature holds just under 50°F, it lasts for several weeks. Once the water cools more, these fish will head offshore again.

### Handle with Care

The reputation of ling as poor quality food fish derives not only from its looks but from its relative softness and its poor freezing quality. There is no doubt that ling flesh is soft, but with proper care after capture, the delicate nature of this fish can be preserved until it melts on your palate. Icing and subsequent filleting should be done soon after capture. In cool weather this is easy.

It is most important to be gentle with

the fish. Squeezing them in a death grip while unhooking them or filleting them macerates the flesh. Unlike blackfish, porgies and fluke that can be held firmly, ling flesh can be damaged simply by rough handling. A sharp fillet knife reduces the damage you inflict and helps to remove the skin.

Ling do not freeze well because freezing triggers a chemical reaction that promotes freezer burn. If you must freeze ling, fillet and freeze them as soon after capture as possible, wrap them so no air is in the package, and do not let them remain in the freezer for long.

Fresh ling has wonderful culinary possibilities. The delicate meat is useful in recipes where a mild flavor is preferred. They can be sautéed with parsley, butter, lemon and white wine. Broiling, baking, or in chowder all work well. I even fry them using the same spiced bread-crumbs/cornmeal (cayenne, garlic powder, parsley, etc.) recipe that I use for other fish.

If ling were not so poorly thought of, they probably would have been depleted like so many other ocean species. Their ugliness, softness and sliminess have all kept them from being over-harvested. They are still rather plentiful and provide lots of sport, especially on party boats.

Ling, whether they are red, white, or spotted hake, don't deserve their bad reputation. I want to go on record as saying they are a wonderful fish. When they come inshore they put up a fight that is as good as other bottom fish of the same size. Their flavor and consistency make them fine table fare if handled properly between ocean and kitchen. And, they are easy to catch and abundant. I even think they are attractive in their own, gargoyleish way. Without ling, many a bottom fishing trip for blackfish, sea bass, codfish and others would be less rewarding. They have come to fill an important niche for many anglers and help to extend our seasons. Don't badmouth ling!

*Paul Kerlinger, Ph.D., former director of research for the New Jersey Audubon Society, now resides in New York, where he works as an environmental consultant.*

Although white hake can tip the scales at 40 pounds or more, red hake (below) max out at about 6 to 7 pounds.







COURTESY OF AUGUSTINE SCAFIDI

# The Gifts of Time and Talent

by Lisa Barno

**Editor's Note:** The following article highlights some of the contributions made by Wildlife Conservation Corps volunteers related to the management of fishing resources in New Jersey; future articles will spotlight their efforts in other Division of Fish, Game and Wildlife program areas.

Virtually everyone would agree that New Jersey's *natural resources* are a precious commodity. And few would make a conscious decision to squander them. But, despite the dedicated efforts of the Division of Fish, Game and Wildlife, there's just never enough time to do all the things that should be done to conserve and manage these resources for the benefit of all.

That's where the Wildlife Conservation Corps (WCC) steps in to help. The program started approximately ten years ago with 125 volunteers; today there are more than 1,000. Members assist division staff with diverse projects, including stocking trout, banding geese and teaching kids how to fish. According to program coordinator Steve Toth Jr., the WCC provides over \$2 million of in-kind services to the division each year, making possible some programs that otherwise would be too costly.

Typically, a WCC volunteer commits to donate a minimum of 40 hours each year. Volunteers attend training sessions to learn more about the division's programs. A periodic newsletter keeps them apprised of specific projects for which assistance is needed. The volunteers then choose the projects they wish to work on. Involvement can range from clerical work to teaching to collecting data on various wildlife species in New Jersey.

The Bureau of Freshwater Fisheries is just one of the program areas that relies heavily on the

Wildlife Conservation Corps members volunteer not only their time, but also their boats, to help stock fish.



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Trout Unlimited  
is another  
organization  
whose members  
regularly appear  
on the  
WCC roster.

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WCC volunteers help build log  
deflectors in a section of the  
Musconetcong River near  
Hackettstown to create more  
pool areas for fish.

WCC for a number of projects, including the division's successful trout stocking program. Each spring and fall, 180 waterbodies throughout the state are stocked with the 575,000 trout raised at the division's Pequest Trout Hatchery in Warren County. The stocking, which takes place over a 10-week spring period and 3-week fall period, is quite an undertaking. More than 40 volunteers are paired with Lands Management personnel who are responsible for the distribution of the fish. Joe Penkala, northern district lands management supervisor, coordinates the drivers and volunteers with the hatchery loads. Without these dedicated volunteers, the stocking of trout would be more costly and division staff would have to be pulled from their regular duties to assist.

Volunteers often are affiliated with other organizations such as sportsmen's clubs and conservation groups. For the last four years, approximately 25 members of the Round Valley Trout Association (RVTA) joined the corps to help stock trout in Round Valley Reservoir. The division stocks more than 11,000 trout annually in this 2,350-acre impound located in scenic Hunterdon County. Since there are only two ramps on the reservoir and the trout are under the 15-inch minimum size limit required for this trophy trout lake, the fish are distributed by boat. RVTA members donate not only their valuable time, but also the use of their private boats for the stocking, which occurs three times during the spring stocking period. The association also spends \$17,000 annually to purchase 6,000 brown and rainbow trout to supplement the state's stocking program. According to Randy Guerrero, the current president of the 1,000-member association, these funds are raised through membership fees, raffles and open tournaments.

Trout Unlimited is another organization whose members regularly appear on the WCC roster. Recently, 25 of its members assisted regional fisheries biologist Pat Hamilton in building four log deflectors in a section of the Musconetcong River near Hackettstown. The deflectors were designed to constrict the flow of the river to narrow and deepen the stream channel. This creates more pool areas for fish — in particular, trout. The enthusiastic volunteers met on four occasions



PAT HAMILTON, N.J. DIV. OF FISH, GAME AND WILDLIFE





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Volunteers helped electrofish the stream, using backpack electrofishing units to stun and collect the 180 brook, brown and rainbow trout that inhabited the stretch.

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Enthusiastic volunteers push logs into place. Next, they'll reinforce the frames and fill them with stones.

to cut trees, dig trenches to build the frames for the deflectors, and insert metal reinforcement bars. The frames were then filled with stones collected from the stream channel.

"It was extremely satisfying to return to build additional deflectors and already see the impacts the previous ones had on the stream environment," said volunteer Barbara Kushner, of Kinnelon. "And, we had a great time!"

Most recently, WCC volunteers assisted with the salvage of trout from Flanders Brook in Morris County. Flanders Brook is one of only three streams in the state that are classified for trout production for all three trout species found in New Jersey. With the state's Department of Transportation about to begin its Route 206 widening project, which runs parallel to the stream, 200 feet of the stream channel had to be relocated to make room for the new roadway. Volunteers helped electrofish the stream, using backpack electrofishing units to stun and collect the 180 brook, brown and rainbow trout that inhabited the stretch. They then measured each fish and relocated them safely to the nearby south branch of the Raritan River.

Corps members also assist in general stream electrofishing and creel surveys, but volunteer opportunities are many and varied. The Natural Resource Education Center, located at the Pequest Trout Hatchery, enlists the services of 120 volunteers who help with division mailings, checking bluebird boxes, maintaining trails and teaching environmental education programs. One such popular program is teaching kids how to fish at the hatchery's fishing education pond. The state's Endangered and Non-Game Species program and the Wildlife Management program also involve volunteers with many of their projects.

The WCC offers a great opportunity to indulge an affinity for the great outdoors while making a real contribution to protecting our fish, game and wildlife for future generations.

For more information, or to join the Wildlife Conservation Corps, call Steve Toth at 609/633-3616. If you routinely surf the Internet, visit the Division of Fish, Game and Wildlife's website at [www.state.nj.us/dep/fgw](http://www.state.nj.us/dep/fgw). You can fill out a WCC application on-line or peruse the current volunteer newsletter.

*Lisa Barno is a senior fisheries biologist with the Division of Fish, Game and Wildlife.*



# Little Stinkers

by Art Lackner

As a boy, my father-in-law and his family would leave their New York City home each summer to vacation with their relatives in New Jersey. They stayed at Swartswood Lake, near Newton, in Sussex County.

One day, while out canoeing with his cousin, my dear wife's dad spotted a small black and white "dog" swimming alongside the boat. The lads decided to be helpful and give the poor pup a lift to shore. With a quick swoop, Fido was on board.

And at that moment, in the flick of a tail, the boys learned more about skunks than they ever cared to know.

Now, some 60 years later, the memory of his contact with this four-legged fumigator still burns clearly in my father-in-law's mind. And while he laughs about it, he encourages us to study these creatures *before* entering their habitat.

## Skunks in New Jersey

The striped skunk is the only variety of skunk found in New Jersey. Elsewhere across North America, you're likely to encounter the eastern spotted skunk, which calls the southeastern states and the Midwest "home," and the similar western spotted skunk, which lives in the western states. Both hooded skunks and hog-nosed skunks can be found in the southwestern part of our country and in Mexico.

Striped skunks or "polecats," biologically known as *Mephitis mephitis*, are quite common. In fact, they live almost everywhere, across the United States and into Canada. French-Canadian trappers used to call the skunk "L'enfant du diable" — the child of the devil.

But here in the Garden State, the black and white stinkers do have some friends.

One is Pat McConnell, who works with the Division of Fish, Game and Wildlife's Furbearer Research Project. "I love skunks," she says with a laugh. "They're one of my favorite topics."

Skunks are fairly evenly distributed throughout New Jersey, McConnell says, and seem most prevalent where woodlands and suburbs meet. "They'll live in the woods, but love to dine on lawn grubs and scrounge for garbage."

As for overall numbers, McConnell believes skunks are doing well. "It's balanced out," she says. "We're developing more land, but also acquiring more open space. It's impossible to come up with hard data but, if anything, skunk numbers are stable or decreasing very, very slightly."

Striped skunks across the continent generally look alike and live similar lives. They are black and white; color patterns range from nearly all white to nearly all black, with every variation in between. Adults are approximately 24 to 30 inches long from tip to tail, and weigh 4 to 10 pounds. Skunks communicate by chirping, growling and screeching. They make a chirring sound when disturbed.

Skunks are primarily nocturnal. They den in a burrow abandoned by another animal, or if necessary dig their own. Dens are lined with vegetation, and entrances are sometimes marked with snagged black and white hairs — a good sign for us to walk slowly away.

Skunks usually mate in late winter, and nine weeks later, in late April or May, four to seven "little stinkers" arrive. In rare cases, a litter might number as high as ten. The young are born blind and nearly bald. Their faint hair, like peach fuzz,

looks more like a black and white tattoo than fur. They are weaned in six to seven weeks, when their scent has developed. At this point, mom starts taking the young ones along on hunting trips.

Mother skunks are fiercely protective of their young. The sight of mom and her babies waddling along in single file might seem comical and cute, but to mom it's serious business. Keep as far away as you can.

As for the males, well, they don't help out much. In fact, they lead rather solitary lives all summer.

Skunks are omnivores, feeding not only on grubs and human leftovers, but on a wide variety of insects and vegetable matter, birds, amphibians and small mammals. They also like honey and bees. They tend to gorge themselves in the fall, becoming quite fat for the lean winter months. They become dormant during extreme cold weather, but do not hibernate.

Skunks have few predators. Only the great horned owl seems willing to risk the consequences of a meal of skunk meat. These large, silent birds will swoop down and snatch a young skunk before its mother has a chance to spray.

## I Stink, Therefore I Am

The striped skunk's anal glands hold about a tablespoon full of stinging, acrid, yellowish liquid. Chemists call this n-butyl mercaptan, and sulphur is its most odorous component. Twin nozzles discharge the liquid in a fine mist, accurate up to 15 feet. The smell can carry up to a mile. Skunks can repeat this double-barreled blast four to six times, although one shot is almost always sufficient. Fortunately for us, skunks usually



don't spray unless provoked.

Before spraying, a skunk will snarl, stomp its front feet, raise its hind legs and click its teeth to get an intruder to back off. It's only after all else fails that the "ornery polecat" will turn its back, raise its tail and fire.

"Just stay calm around skunks," McConnell advises. "Move slowly and don't corner them. If you act in a non-threatening manner and heed their warnings, they'll leave you alone. They're really quite passive."

Skunks have earned respect from their woodland neighbors. While most mammals have evolved a camouflage coloration, the skunk's bold black and white coat seems to signal a warning. They amble about without fear, never looking for a fight but always prepared for one. Like Teddy Roosevelt, the polecat "walks softly and carries a big stick." Only dogs and sometimes humans are foolish enough to provoke these normally docile creatures. And the results are disastrous.

## Now What?

OK, it happens. You're out for a stroll, daydreaming as usual, and suddenly you trip over a black and white critter blocking the path. A split second later, you're covered in cheap perfume.

Well, with luck you were wearing old clothes. The best advice here is to take them off and bury them. Problem solved.

As for you, the two best remedies seem to be repeated rubdowns with tomato juice or diluted ammonia. Try the tomato juice first, as it's much kinder to the skin. Other remedies include vinegar, vanilla extract, and hydrogen peroxide mixed with baking soda and liquid

soap. Also, many pet shops carry commercial products meant for skunk spray.

To deodorize your home, first open the windows. Then, try boiling a pan of vinegar on the stove. When the vinegar odor clears, it should take the skunk smell with it. Other recommendations include strategically placed pans of ammonia, vanilla or vinegar, or a few bowls of fresh, dry, ground coffee.

## Just Go Away!

If you see a skunk in your yard, and you'd rather it roamed elsewhere, there are a couple of things you can do. First, you can discourage skunks from visiting your property by sprinkling a liberal supply of mothballs on the ground. Like most small mammals, skunks are repelled by the smell of camphor. Also, if you're very careful, you can catch a skunk in a humane trap and relocate it elsewhere. Cover the trap on three sides with burlap and your little friend should remain calm. Good luck.

Be especially cautious around skunks acting erratically. They can carry rabies. A rabid skunk will run amuck, snarling and snapping at anything in its path — behavior completely atypical for a healthy animal.

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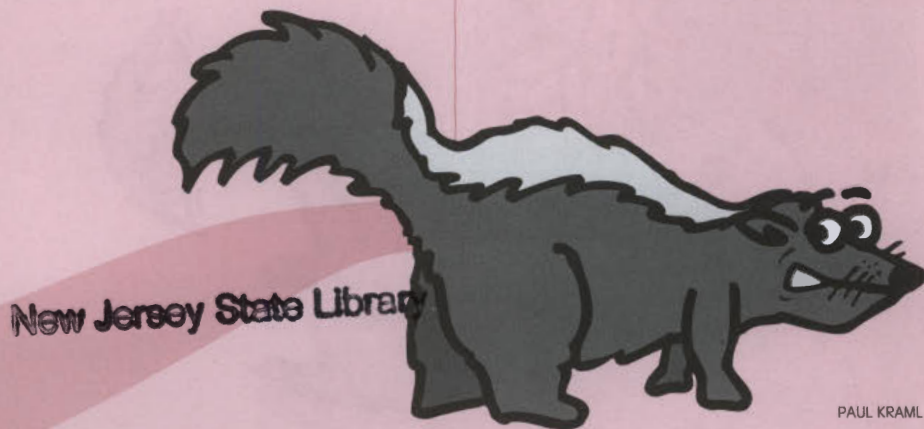
Only dogs and  
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And the results are  
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Skunks. Do we love them, or hate them? There are arguments for both points of view. Skunks help keep insects under control, which benefits us all. They love to dine on lawn grubs, but in the process of finding them tear up the lawn. Since skunks love rodents, many farmers love skunks. Since skunks also love chickens, chicken farmers hate skunks. And of course anyone who's been sprayed by a skunk, like my father-in-law, will rank them pretty low.

Just remember that skunks are peaceful creatures that don't want to bother humans. With this in mind, they're easy to love . . . from a distance.

*Art Lackner is a freelance writer and photographer from Eatontown.*



PAUL KRAML



# Events

## Ongoing

### **A Woman's Approach to the Figure**

(through Oct. 12) A new exhibition and sale in the Gallery of American Craft; 10 a.m. to 5 p.m.; Wheaton Village, Glasstown Road, Millville; no admission fee except during special events; 1-800-998-4552

### **Great Swamp Through the Seasons**

(through Oct. 15) Enjoy a collection of recent color photographs depicting life in the Great Swamp; 9 a.m. to 5 p.m.; Somerset County Park Commission Environmental Education Center, Lord Stirling Road, Basking Ridge; free; 908/644-2489

### **Traditions in Elegance** (through Jan. 4)

This exhibition of 100 rare and unique 18th and 19th century teapots from the Twinings Teapot Gallery at England's Norwich Castle Museum explores the custom of tea preparation and tea drinking; open daily, but hours vary; the Emlen Physick Estate's Carriage House Gallery, 1048 Washington Street, Cape May; \$2/person, free if tickets are purchased for ancillary events; call for hours and information on related events, which include afternoon tea tastings and tours; 609/885-5404 or 1-800-275-4278

**Trail Maintenance** (first Sat. of every month except Jan., Feb. & Mar.) Volunteers bring lunch and help maintain and repair hiking trails; 9 a.m. to 12:30 p.m.; Trailside Nature & Science Center, 452 New Providence Road, Mountainside; free; 908/789-3670

**Sunday Family Programing** (every Sun., Sept. through May) Enjoy family entertainment (e.g., nature hikes, games) that varies with the season; 2 p.m.; Trailside Nature & Science Center, 452 New Providence Road, Mountainside; donation requested for most programs, but some have minimal fee; 908/789-3670

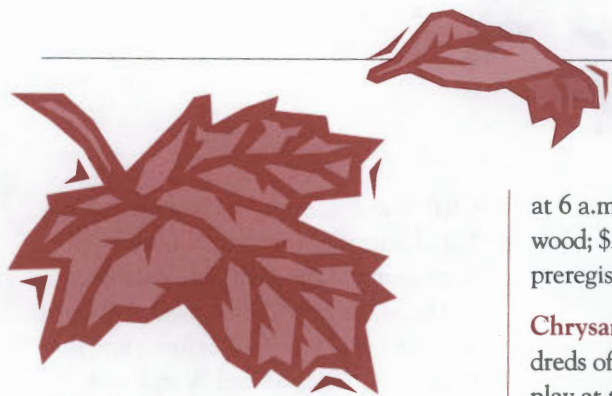
**Planetarium Shows** (every Sun.) The 2 p.m. planetarium show is geared for those aged 6 and up, while the 3:30 p.m. presentation alternates a laser show for ages 10 and up with a pre-school show for children ages 4 to 6, accompanied by an adult; Trailside Nature & Science Center, 452 New Providence Road, Mountainside; \$3/planetarium show, \$3.50 laser show; 908/789-3670

**Hayrides/Campfire** (every Fri. in Oct.) Enjoy tractor-led hayrides, a campfire, singer and hot chocolate; Trailside Nature & Science Center, 452 New Providence Road, Mountainside; call for time and cost; 908/789-3670

**Public Programs** (through mid Dec.) Enjoy family hikes and preschool and after school activities, including crafts, hikes, stories and games; Stony Brook-Millstone Watershed Association, 31 Titus Mill Road, Pennington; call for times and fees or to obtain newsletter; 609/737-7592

**Seasonal Nature Classes** (throughout fall and winter) Children from 2 to 8 years of age will enjoy exciting, fun-filled learning activities centered on farm life and wildlife rehabilitation; open 10 a.m. to 4 p.m. on Weds. through Sun.; call for times and dates of specific programs; PAWS Farm Nature Center, 1105 Hainesport-Mt. Laurel Road, Mt. Laurel; reservations requested for large groups; no admission fee, but please bring a treat, such as apples, carrots or bird seed, for your animal friends; 609/778-8795





## October

1

**Cape May Food & Wine Festival** Explore different cuisines and learn about techniques, products and services from Cape May's award-winning chefs; various locations throughout Cape May; for details and ticket information, call the Mid-Atlantic Center for the Arts at 609/884-5404 or 1-800-275-4278

4

**Beach & Bay Festival & Clam Bake** At 10 a.m., compete in a scenic race through the fingers of the meadows on the bay (Bayfront Park, 5th Avenue & Bay); also enjoy fun, food and music at a late afternoon clam bake on the beach at 3rd Avenue & JFK Boulevard, North Wildwood; admission fee; 609/522-2955

**Hawk Watching at State-Line Look-Out** Learn the basics of hawk watching as you view migrating Cooper's and sharp-shinned hawks, ospreys and maybe even peregrine falcons; 8:30 a.m. to 12:30 p.m.; meet at Weis Ecology Center, 150 Snake Den Road, Ringwood, for the trip to the hawk watch in Alpine; \$5/NJAS members, \$7/nonmembers; advance registration and payment required; 973/835-2160

**Renew Your Vintage Home** Attend workshops about vintage home restoration and browse the marketplace of related products; 10 a.m. to 5 p.m.; The Hermitage, 335 N. Franklin Turnpike, Ho-Ho-Kus; \$5; 201/445-8311

4 & 5

**19th Annual N.J. Beach Buggy Association Surf Fishing Tournament** This two-day fishing tournament is open to teams and individuals; registration begins

at 6 a.m.; 15th and Beach, North Wildwood; \$39/team of 6 anglers, \$8/individual; preregistration suggested; 215/289-2019

**Chrysanthemum Show** Enjoy the hundreds of award winning blooms on display at the Chrysanthemum Society of New Jersey's 45th annual show and check out the container grown garden mums for sale; 1 to 5 p.m. Sat., 9 a.m. to 5 p.m. Sun.; James A. McFaul Environmental Center, Crescent Avenue, Wyckoff; free; handicapped/wheelchair accessible; 201/891-5571

**Western Rodeo on the Beach** Whoop it up at a genuine Western rodeo, complete with cowboys and cowgirls on horseback, calf roping, bull riding and more; 2 to 5 p.m.; Lincoln Avenue and the beach, Wildwood; free, although preferred seating may be purchased for \$5 in advance and \$6.50 on the day of the event; 609/522-1407

**Corn Husking by Hand** (also on Oct. 12) Visitors can help pick and husk the year's corn crop; 1 to 3 p.m.; Fosterfields Living Historical Farm, 73 Kahdena Road, Morristown; \$4/adults, \$3/seniors (65+), \$2/children (6-16), free/under 6; 973/326-7645

**Family Harvest Festival** Celebrate the fall harvest at this festival featuring hayrides, music, pumpkin and apple picking, wine tastings and tours, barefoot grape stomping and more; 11 a.m. to 5 p.m.; Matarazzo Farms/Four Sisters Winery, Belvidere; free; 908/475-3671

5

**The Tourne/Osio Rock Loop Hike** Take a vigorous 6-mile hike and enjoy a picnic lunch on the peak of the Tourne in Norvin Green State Forest; 9:30 a.m. to 1:30 p.m.; Weis Ecology Center, 150 Snake Den Road, Ringwood; \$4/NJAS members, \$5/nonmembers; advance registration and payment required; meet at reception center; bring lunch and plenty of water, and wear comfortable shoes; 973/835-2160



Robin Matarazzo displays pumpkins from the pick-your-own Pumpkin Patch for attendees of the Family Harvest Festival.

COURTESY OF RJM MARKETING

**Heritage Festival** Enjoy a community event featuring ethnic foods, music, cultural and quilt displays and more; noon to 5 p.m.; Holly Beach Station, Pacific Avenue between Spencer and Lincoln, Wildwood; donation requested; 609/729-6818

**Big "C" Day** Celebrate the nature center's anniversary with nature walks and talks, van and boat tours, bay seining, kids' activities and exhibits; 8 a.m. to 4 p.m.; Cattus Island Park (take the Garden State Parkway to Exit 82, then go east on Route 37 to Fischer Boulevard to the third light); free; 732/270-6960

**25th Annual Canoe Race** Enter one of 12 categories in this race for young and old; 9 a.m.; Old Toms River Bus Terminal, Irons Street, Toms River; \$10/solo, \$18/tandem; call for application; 609/971-3085

**Antique Glass & Bottle Show** (rain date: Oct. 12) Various vendors display antiques and collectibles that may be purchased; 10 a.m. to 4 p.m.; Batsto Village, Route 542, Wharton State Forest, Hammonton; free; 609/561-0024



## Events • October

**Antique Car Show** Enjoy good, old-fashioned, live rock & roll music as you check out the classic cars, antique autos and street rods on display; 11 a.m. to 3 p.m.; Duke Island Park, Old York Road, Brigantine; \$3/visitor car, \$5/exhibitor car; proceeds benefit the Somerset County Park Commission Therapeutic Recreation Dept.; 908/722-1200, ext. 236

**Fungus Fest 1997** Learn all about the world of mushrooms and fungi through guided mushroom walks, cooking demonstrations, short lectures and slide shows, books and crafts, displays on dyeing and cultivation, children's corner and much more; 11 a.m. to 4 p.m.; Somerset County Park Commission Environmental Education Center, Lord Stirling Road, Basking Ridge; suggested donation: \$1.50/adults, \$.75/children; 908/644-2489

**Step Back in Time!** Enjoy tea and a lecture about the costumes of the 1920s and 1930s; 3 to 5 p.m.; New Jersey State Botanical Gardens at Skylands, Ringwood; call for information and reservations; 973/962-9534

**Tour of Skylands Manor** (also on Nov. 2) Take a guided historic tour; 1 to 4 p.m.; New Jersey State Botanical Gardens at Skylands, Ringwood; meet at the Carriage House; \$3/adults, \$2/seniors, \$1/children ages 6 to 12, free/under 6; 973/962-9534

### 10 - 13

**Discover the Wildwoods** Celebrate Columbus Day weekend by enjoying island-wide events including a Pasta Bowl, flea market, air show, sand castle sculptures, a Columbus Day parade, fireworks and more; 1-800-786-4546

### 10 - 19

**Victorian Week** Highlights include historic house tours that showcase famous restored Victorian structures, Victorian arts and crafts workshops, mystery dinners, antiques and crafts shows, Victorian fashion shows, a brass band concert, glass blowing demonstrations on the lawn of the 1879 Physick Estate, and authentic Victorian Vaudeville; throughout Victorian Cape May; cost varies by event, weekend packages are available; for more information or a free brochure, call 609/884-5404 or 1-800-275-4278 (TTY: 1-800-852-7899)

### 11

**Cranberry Harvest Cross-Country Run** Race along sand roads through the Pines and around the bogs; 8 a.m. registration; Whitesbog Village, mile marker 13 on Route 530, Pemberton Township; call to receive a race flier with registration form and entry fee information; 609/893-4646

**Pennsauken Surf Fishing Club Tournament** Fish the waters off the Wildwoods; registration begins at 6 a.m., fishing starts at 7 a.m.; meet at the Moose Lodge in North Wildwood; \$42/team of 6 anglers, \$7/individual; to preregister, send a check (payable to the club) to the tournament director c/o 2643 Haddonfield Road, Pennsauken, NJ 08110; 609/665-1540

**Family Fall Foliage Hike** (an NJAS Centennial Event) Enjoy the brilliant colors of the Highlands as you take this 3-mile moderate hike to High Point; 10:30 a.m. to 1:30 p.m.; Weis Ecology Center, 150 Snake Den Road, Ringwood; \$3/NJAS members, \$4/nonmembers; advance registration and payment required; meet at reception center; bring lunch and plenty of water, and wear comfortable shoes; 973/835-2160

**Civil War Encampment** (rain date: Oct. 12) Members of the 33rd N.J. Infantry Regiment and the 11th N.J. Volunteers will be at the mill to talk about and demonstrate camp life, musket firing and skirmishing during the Civil War; 1 to 4 p.m.; Cooper Gristmill, State Route 24/County Route 513 (1.3 miles west of Route 206), Chester; admission is by donation; 908/879-5463 or 973/326-7645

**Fall at Fosterfields** Enjoy demonstrations of blacksmithing, beekeeping, antique engines and seasonal farm activities such as butter making and corn husking; 10 a.m. to 4 p.m.; Fosterfields Living Historical Farm, 73 Kahdena Road, Morristown; \$4/adults, \$3/seniors (65+), \$2/children (6-16), free/under 6; hands-on activities; 973/326-7645

**Christopher Columbus Treasure Hunt** Children will enjoy this treasure hunt on the beach; noon to 3 p.m.; 22nd & Beach, North Wildwood; free; 609/729-3223 or 1-800-882-7787

### 11 & 12

**Chrysanthemum Show** Enjoy the hundreds of locally grown, prize winning blooms on display at the New Jersey State Chrysanthemum Society's 44th annual show, find out how to grow and show mums for pleasure and check out the flower arrangements and potted garden mums for sale; 2 to 6 p.m. Sat., 1 a.m. to 5 p.m. Sun.; Frelinghuysen Arboretum, Haggerty Education Building, 53 East Hanover Avenue, Morristown; free; handicapped/wheelchair accessible; 973/326-7600

**Mountain Man Rendezvous** Come and see how the Mountain Men, Civil War soldiers and Indians dressed and lived, and watch tomahawk throwing, muzzleloader shooting and other demonstrations; 9 a.m. to 6 p.m.; Cemetery Field, Space Farms Zoo and Museum, 218 Route 519, Sussex; no fee for event; 973/875-5800



**Indian Summer Seafood Festival** Enjoy ongoing entertainment and great food; 10 a.m. to 5 p.m. Sat., 11 a.m. to 5 p.m. Sun.; no admission fee; Community Hall, Avalon; 609/967-3936

**Thunder on the Lake** Enjoy power boat racing, crafts and food; 10 a.m. to 6 p.m., with racing beginning at 1 p.m.; Sunset Lake, New Jersey Avenue, Wildwood Crest; free for spectators, fee for participants; 609/523-8051

## 11-13

**Indian Summer Weekend and Seafood Festival** Browse the wares of more than 400 vendors at a 10-block craft fair on Sat., enter a sand sculpting contest on Sun. (1 p.m. at the 12th Street beach) and enjoy your favorite seafoods in front of Music Pier each day; 10 a.m. to 4 p.m.; Ocean City; no admission fee; 609/525-9300



## 12

**American Wheels Show** (rain date: Oct. 26) See hundreds of cars from the '50s, '60s and '70s; 10 a.m. to 5 p.m.; Wheaton Village, Glasstown Road, Millville; \$6.50/adults, \$5.50/senior citizens, \$3.50/students, free/children 5 and under; 1-800-998-4552

**Whitesbog Cranberry Harvest Tour and Slide Show** Observe the spectacular sight of a cranberry harvest and learn about the development of the cranberry industry in the Pine Barrens; 9 a.m.; Whitesbog Village, mile marker 13 on Route 530, Pemberton Township; \$5/person, \$10/family; preregistration requested; 609/893-4646

**Apple Cidering Demonstration** (also Oct. 18) Enjoy the fruits of fall as you learn about the history and preparation of apple cider, and then sample some; 2 p.m.; James A. McFaul Environmental Center, Crescent Avenue, Wyckoff; free; 201/891-5571

**Autumn Poets and Guitar** Music and poetry about autumn; 3 p.m.; meet at the Carriage House, New Jersey State Botanical Gardens at Skylands, Morris Road, Ringwood; free, but donations welcome; 973/962-9534

**Corn Husking by Hand** (see Oct. 4 & 5)

**Cider Pressing** Visitors may watch and help use a turn-of-the-century type cider press; 1 to 4 p.m.; Fosterfields Living Historical Farm, 73 Kahdena Road, Morristown; \$4/adults, \$3/seniors (65+), \$2/children (6-16), free/under 6; 973/326-7645

**Cooking in the Wilderness** (also on Oct. 19) Enjoy a demonstration of cooking on a wood-burning stove in the kitchen of The Willows mansion; 1 to 4 p.m.; Fosterfields Living Historical Farm, 73 Kahdena Road, Morristown; \$5/adults, \$4/seniors (65+), \$3/children (6-16), free/under 6; 973/326-7645

## 13

**Farewell to the Queen** During this living history tour of Cape May you'll meet, at five Victorian landmarks, historic Cape May figures trying to revive the fortunes of the "Queen of the Seaside Resorts"; 2 to 4 p.m.; \$15/adults, \$7.50/children ages 3 to 12; although tickets may be purchased the day of the tour at the Washington Street Mall Information Booth, at Ocean Street, attendance is limited and advance reservations (order tickets by calling 1-800-275-4278) are recommended; 609/884-5404 (TTY: 1-800-852-7899)

## 17 & 18

**How to Spot Hawks and Eagles** Learn how to spot hawks and eagles via Pat and Clay Sutton's lecture and field trip; refreshments and lecture at 5:50 and 6:30 p.m. (respectively) Fri., field trip Sat morning; Wetlands Institute, 1075 Stone Harbor Boulevard, Stone Harbor; 609/368-1211



## 18

**Surf Fishing Tournament** Sponsored by the Delaware Valley Surf Anglers Association; on-site registration begins at 6 a.m., tournament runs from 7:30 a.m. to 2 p.m.; Municipal Marina, Sea Isle City; \$42/team of 6 anglers, \$7/individual; may preregister at Sea Isle City Recreation Center, 42nd Place, Sea Isle City; 215/643-0705

**Wildflowers and Wildlife of the Pinelands Hike** (also on Nov. 22, Dec. 20 and Jan. 17) A guided, easy-paced, 2- to 3-mile walk that courses through various Pinelands habitats; 10 a.m.; Annie M. Carter Nature Center, Batsto Village, Wharton State Forest, Route 542, approx. 9 miles east of Hammonton; insect and tick repellent recommended; preregistration by phone required; free; 609/567-4559

**Pine Cone Workshop**

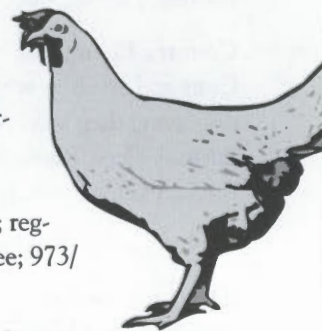
Create a pine cone wreath; 2 p.m.; New Jersey State Botanical Gardens at Skylands, Ringwood; meet at the Carriage House; registration required; fee; 973/962-9534

**Chickens and Eggs** Learn about raising chickens at Fosterfields 100 years ago; 1 to 4 p.m.; Fosterfields Living Historical Farm, 73 Kahdena Road, Morristown; \$4/adults, \$3/seniors (65+), \$2/children (6-16), free/under 6; 973/326-7645

**Apple Cidering Demonstration** (see Oct. 12)

## 18 & 19

**Chatsworth Cranberry Festival** This celebration of New Jersey's cranberry harvest features competitions for the largest and smallest cranberry, as well as home decorating, photo, recipe, storytelling and quilt patch contests, an antique car show and authentic Pine Barren entertainment; 10 a.m. to 5 p.m.; White Horse Inn, Chatsworth; parking donation; 609/859-9701





19

**Lord Stirling 1770s Festival** Watch more than 50 costumed craft people at work, listen to live music, see a militia, take a hayride and participate in children's activities at a re-creation of Lord Stirling Manor colonial courtyard activities; 10:30 a.m. to 4:30 p.m.; Somerset County Park Commission Environmental Education Center, Lord Stirling Road, Basking Ridge; \$2/person donation suggested; 908/766-2489 (TDD: 908/766-2575)

**Turkey Swamp Park Day** Enjoy a full day of activities, including an arts and crafts sale, pony rides, wagon rides, entertainment, a pee wee run, food, snake shows, pick 'n paint pumpkins, a scarecrow building contest and more; 11 a.m. to 5 p.m.; Turkey Swamp Park, Georgia Road, Freehold Township; free; preregistration required for scarecrow building contest; 732/842-4000

**Country Living Fair** (rain date: Oct. 26) Craft and art show with various vendors displaying their work; 10 a.m. to 4 p.m.; Batsto Village, Route 542, Wharton State Forest, Hammonton; free; 609/561-0024

**Cooking in the Wilderness** (see Oct. 12)

**Back to School at Miss Dana's** Enjoy a reenactment of Miss Foster's school lessons (Miss Foster, the last owner of Fosterfields, lived here from 1881 to 1979); 1 to 3 p.m.; Fosterfields Living Historical Farm, 73 Kahdena Road, Morristown; \$4/adults, \$3/seniors (65+), \$2/children (6-16), free/under 6; 973/326-7645

24 • 26

**New Jersey Shade Tree Federation's 72nd Annual Meeting and Tree Expo** This three-day conference is designed to focus on community forestry problems and solutions for both the shade tree commissioner and the commercial arborist; Sheraton Atlantic City West Hotel, Pleasantville; C.E.U. and pesticide recertification credits will be available; call for registration information; 732/246-3210

25

**Autumn Family Festival** This unique educational fun fest on a 100-acre historical farm, sponsored by the New Jersey Conservation Foundation, will feature guided hikes, conservation workshops, music, wolves, Indian storytellers, a costume contest, food and more; 11 a.m. to 4 p.m.; Bamboo Brook Outdoor Education Center, 170 Longview Road, Far Hills; no admission fee, but there may be a fee associated with some activities; preregistration suggested; 908/234-1225

**Spooky Spectacular** A fun event for little ones, featuring a parade, crafts, games, prizes, music and, at 2 p.m., a folk singer/storyteller; 1 to 4 p.m.; Atlantic County Park, Route 50, Estell Manor (4 miles south of Mays Landing); free; 609/645-5960 or 609/625-1897



**Haunted Hayride and Halloween Open House** (rain date: Oct. 26) Take a haunted hayride and enjoy Halloween festivities including a magic show, pumpkin painting, bobbing for apples, face painting and more; 7 to 10:30 p.m.; recreation center at 900 Central Avenue and Beach, North Wildwood; \$2.50/person; 609/522-2955

**Whitesbog Halloween in the Pines for Youths and Families** Celebrate with scary stories, a bonfire, haunted walks and hayrides; 7:30 p.m.; Whitesbog Village, mile marker 13 on Route 530, Pemberton Township; \$10/person; advance ticket purchase required; 609/893-4646

**Surf Fishing Tournament** Sponsored by the Women's Surf Fishing Club of New Jersey; 6 to 7 a.m. registration, fishing starts at 7:30 p.m.; Municipal Marina, Sea Isle City; \$42/team of 6 anglers, \$8/individual; may preregister at Sea Isle City Recreation Center, 42nd Place, Sea Isle City or by sending a check (payable to the club) to the club treasurer c/o 5750 Corsair Court, Bensalem, PA 19020; 215/855-3411

**Halloween Show** Presented by the Pinelands Cultural Society, the program features live stage presentations of bluegrass, country, old time and folk music by local and professional bands from the tri-state area; 8 to 11:30 p.m. (doors open at 7 p.m.); Albert Music Hall, 125 Wells Mill Road (Route 532), 1/4 mile west of Route 9, Waretown; \$4/adults, \$1 children under 12; prizes will be given for the most unusual, scariest, funniest and prettiest adult costumes; 609/971-1593

**Miller's Halloween** Visit the Cooper Mill, in costume if you like, and have some Halloween fun; 10 a.m. to 5 p.m.; Cooper Gristmill, State Route 24/County Route 513 (1.3 miles west of Route 206), Chester; admission is by donation; stories will be told at 1, 2 and 3 p.m.; 908/879-5463 or 973/326-7645

**Pumpkin Carving** Parents and children can create a scary/happy face; 2 p.m.; New Jersey State Botanical Gardens at Skylands, Ringwood; meet at the Carriage House; registration required; fee; 973/962-9534

25 & 26

**Civil War Weekend** Enjoy a living history encampment featuring infantry drilling, Civil War medicine, skirmishes and a memorial service for General Joseph Revere; 10 a.m. to 4 p.m.; Fosterfields Living Historical Farm, 73 Kahdena Road, Morristown; \$5/adults, \$4/seniors (65+), \$3/children (6-16), free/under 6; 973/326-7645



26

**SPUR (Special People United to Ride) Hunter Pace** A game played on horseback where a pair of riders tries to match the pace set for a course through woods with obstacles; 10 a.m. to 1 p.m.; Clayton Park, Emley's Hill Road, Upper Freehold Township; 732/842-4000

26 - Nov. 22

**Craft Boutique** Browse the hundreds of handmade items displayed for sale throughout the historic Hermitage; 10 a.m. to 9 p.m. Mon. & Thurs., 10 a.m. to 5 p.m. Tues., Weds., Fri. & Sat., 1 to 5 p.m. Sun.; The Hermitage, 335 N. Franklin Turnpike, Ho-Ho-Kus; \$5; 201/445-8311

27

**The Nature of Halloween** (also Oct. 29 & 30) Take your favorite 3- through 6-year-olds on a 45-minute educational night walk and meet a giant bat, spectacular spider and other critters; begin at 5:30 p.m. and later; Somerset County Park Commission Environmental Education Center, 190 Lord Stirling Road, Basking Ridge; \$5/parent and child pair, \$3/additional persons; phone for times and tickets; 908/766/2489

29 & 30

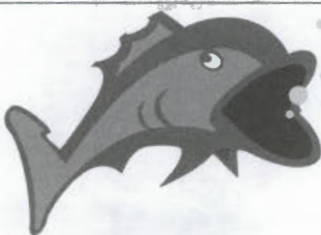
**The Nature of Halloween** (see Oct. 27)

31 - Nov. 2

**Whitesbog Halloween in the Pines for Ages 13 and Up** Celebrate with old-fashioned Halloween storytelling around a bonfire, haunted walks and hayrides; 7:30 p.m.; Whitesbog Village, mile marker 13 on Route 530, Pemberton Township; \$10/person; advance ticket purchase required; 609/893-4646

31 - Jan. 4

**The Handcrafted Gift: Toys, Noise and Playthings** A holiday exhibition and sale in the Gallery of American Craft; 10 a.m. to 5 p.m.; Wheaton Village, Glasstown Road, Millville; no admission fee except during special events; 1-800-998-4552



## November

1

**South Jersey Surfcasting Fishing Club Tournament** Members and nonmembers can participate in this tournament; 7:30 a.m., depending on tide; North Wildwood beaches; \$7/person, \$39/team of 6; call for application to register in advance or register on site from 6 to 7 a.m.; 609/522-8479

**NJ Devil Show** Presented by the Pinelands Cultural Society, the program features live stage presentations of bluegrass, country, old time and folk music by local and professional bands, highlighted by a special visit from the NJ Devil; 8 to 11:30 p.m. (doors open at 7 p.m.); Albert Music Hall, 125 Wells Mill Road (Route 532), 1/4 mile west of Route 9, Waretown; \$4/adults, \$1 children under 12; 609/971-1593

**Advanced Spelunking** Enjoy a challenging day of exploring Leigh's Cave; 9 a.m. to 5 p.m.; Weis Ecology Center, 150 Snake Den Road, Ringwood; \$8/NJAS members, \$11/nonmembers; participants must have completed a Weis Beginner Caving Class or have caving experience; all participants must be at least 10 years old, and anyone under 18 must be accompanied by an adult; advance registration and payment required; meet in outer parking lot; 973/835-2160

1 - 30

**New Jersey's Junior Duck Stamp Exhibit** (Wednesdays through Sundays, only) View the 36 winning entries of the 1997 statewide competition; 10 a.m. to 4 p.m.; Weis Ecology Center, 150 Snake Den Road, Ringwood; free; 973/835-2160

2

**Mineral Club Show** Enjoy displays, lectures, demonstrations, mineral sales, workshops; 1 to 5 p.m.; Trailside Nature & Science Center, 452 New Providence Road, Mountainside; donation; 908/789-3670

**Tour of Skylands Manor** (see Oct. 5)

7 - 9

**Cape May Jazz Festival** Attend any or all of the complementary workshops, intimate jam sessions and exciting concerts — from a special youth concert to acoustic jazz played in club settings — and enjoy some of the greatest names in jazz; \$15/person for Fri. night, \$3/children and 5/adult (children under 10 must be accompanied by an adult) for the Sat. youth concert, \$15/person for Sat. afternoon jam session; \$25/person for Sat. night; \$15/person for Sun. jam session & concert, \$55/person for a pass to all 18 events; call for brochure; 609/884-7277

8

**Garden Work Party** Help restore Elizabeth White's native Pine Barrens garden; 9 a.m.; Whitesbog Village, mile marker 13 on Route 530, Pemberton Township; free, but preregistration requested; 609/893-4646

**Homeplace Family Show** Presented by the Pinelands Cultural Society, this show will feature multi-generational families stopping by to sing and play their favorite tunes; 8 to 11:30 p.m. (doors open at 7 p.m.); Albert Music Hall, 125 Wells Mill Road (Route 532), 1/4 mile west of Route 9, Waretown; \$4/adults, \$1 children under 12; 609/971-1593

**Exploring Nature Through Art Workshop** Children in grades 1 to 3 can learn how to capture favorite natural images on paper and try out their newly developed skills as they come face-to-face with Weis' two live screech owls; 10 a.m. to noon; Weis Ecology Center, 150 Snake Den Road, Ringwood; \$5/NJAS members, \$8/nonmembers; advance registration and payment required; 973/835-2160





## Events • November/December

8 & 9

**Antique Show** This event, sponsored by the Cumberland County Historical Society, will feature outstanding dealers from several states; 10 a.m. to 5 p.m. Sat., 11 a.m. to 5 p.m. Sun.; Morris Goodwin School, Ye Greate Street, Greenwich; \$2.50; 609/447-3530

9

**Bearfort Mountain/Surprise Lake Circuit Hike** Take a challenging 7-mile trek through scenic mountain laurel groves and beside back woods ponds and get a good look at diverse plant and wildlife species; 10 a.m. to noon; meet at Weis Ecology Center, 150 Snake Den Road, Ringwood; for adults and teens only; \$4/NJAS members, \$5/nonmembers; advance registration and payment required; bring lunch and plenty of water, and wear comfortable shoes; 973/835-2160

13 & 14

**School's Out Programs** Special programs for all ages during Teacher Convention days; Trailside Nature & Science Center, 452 New Providence Road, Mountain-side; costs and times vary; call for information; 908/789-3670

15

**Donald Jones Memorial Hike** Experience the beauty of scenic and historic Delaware Township in Hunterdon County as you hike from Prallsville Mill (in Stockton) through the New Jersey Conservation Foundation's Wickecheoke Creek Reserve; 1 p.m.; free; preregistration required; 908/234-1225 or 1-800-LAND-SAVE

**A "Wild" Thanksgiving** Learn about winter food webs by attending a tracking workshop, playing the "Migration Challenge," visiting the owl pellet lab and exploring the WILD Box; 10 to 11 a.m. for children in grades 1 to 3, 1 to 2:30 p.m. for children in grades 4 to 6; Weis Ecology Center, 150 Snake Den Road, Ringwood; \$4/NJAS members, \$5/nonmembers; advance registration and payment required; 973/835-2160



16

**SPUR (Special People United to Ride) Hunter Pace** A game played on horseback where a pair of riders tries to match the pace set for a course through woods with obstacles; 10 a.m. to 1 p.m.; Huber Woods Environmental Center, 25 Brown's Dock Road, Locust section of Middletown Township; 732/842-4000

18

**Whitesbog Full Moon Hike** (also on Dec. 13 and Jan. 10) Hike on moonlit sand roads through the Pines and around the bogs; 7 p.m.; Whitesbog Village, mile marker 13 on Route 530, Pemberton Township; \$4/person, \$9/family, free/members; pre-registration requested; 609/893-4646

22

**Wildflowers and Wildlife of the Pinelands Hike** (See Oct. 18)

23

**Explore the World of Bats** (an NJAS Centennial Event) Learn about this misunderstood mammal, help construct bat houses for use on the Weis grounds, take home simple plans to make one of your own and take a short walk to a local mine to observe bats in the wild; 1 to 4 p.m.; Weis Ecology Center, 150 Snake Den Road, Ringwood; \$5/NJAS members, \$7/nonmembers; advance registration and payment required; wear hiking boots and bring a flashlight; 973/835-2160

28 • Jan. 4

**Christmas Exhibition** A holiday display in the Special Exhibition Gallery in the Museum of American Glass; 10 a.m. to 5 p.m.; Wheaton Village, Glasstown Road, Millville; \$6.50/adults, \$5.50/senior citizens, \$3.50/students, free/children 5 and under; special holiday weekend activities and events; 1-800-998-4552

## December

3 - 6

**Winter Wonderland** Visit with Santa and his reindeer, see the elves making toys, hear the beautiful sounds of Christmas choirs and take a stroll down Santa Claus Lane; 6 to 8:30 p.m.; Kuser Farm Park, 390 Newkirk Avenue, Hamilton (Mercer County); free; 609/890-3500

4 - 7

**Skylands Manor Holiday Open House** Visit this historic manor, aglow with seasonal decor; Thurs. noon to 4 p.m., Fri. through Sun. noon to 7 p.m.; New Jersey State Botanical Gardens at Skylands, Ringwood; call for fees; 973/962-9534

5 - 14

**Festival of Trees** Enjoy periodic live performances while you view this indoor display of more than 50 trees decorated in various themes and listen to seasonal music; 9:30 a.m. to 5 p.m. Mon. Through Thurs. and Sat., 9:30 a.m. to 8:30 p.m. Fri., 11 a.m. to 5 p.m. Sun.; Somerset County Park Commission Environmental Education Center, 190 Lord Stirling Road, Basking Ridge; \$3/adults, \$1/seniors and children; 908/766/2489

6

**Christmas Open House Tour** Some of the finest historic homes in Bridgeton, decorated in period and classic trappings, are featured on this tour; 3 p.m. to 8 p.m.; 609/451-9208 or 1-800-319-3379

**Holiday "Nature" Boutique** You'll find just what you need for the nature lovers in your family, from nature books and field guides to T-shirts and bird houses; 10 a.m. to 3 p.m.; Weis Ecology Center, 150 Snake Den Road, Ringwood; 973/835-2160

**Children's Holiday Party** Kids ages 6 to 11 will enjoy games, crafts, activities and refreshments; 1 to 3 p.m.; The Hermitage, 335 N. Franklin Turnpike, Ho-Ho-Kus; \$10; 201/445-8311



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**6 & 7**

**Remember the Animals Weekend** Bring a treat (proven favorites include apples, carrots and bird seed) for your favorite animal friends at Paws Farm Nature Center; 10 a.m. to 4 p.m.; 1105 Hainesport-Mt. Laurel Road, Mt. Laurel; 609/778-8795



**Christmas Tree Sale** (also on Dec. 13, 14, 20 and 21) Select your tree from among the many fresh, beautiful Fraser and Douglas firs, blue spruces and white pines and help support the Center's environmental education programs; 10 a.m. to 5 p.m.; Weis Ecology Center, 150 Snake Den Road, Ringwood; tree prices range from \$30 to \$50; 973/835-2160

**Candlelight and Carols** (also on Dec. 17) Enjoy carols and refreshments amid holiday decorations in the Hermitage; 6 to 9 p.m.; The Hermitage, 335 N. Franklin Turnpike, Ho-Ho-Kus; \$5; 201/445-8311

**Christmas in Fort Hancock on Sandy Hook** (also on Dec. 13, 14, 20 & 21, with some variations in time and activities) Enjoy open house weekends at History House; 1 to 5 p.m.; Fort Hancock, Sandy Hook; free; a special evening open house will be held on Sat., Dec. 13, from 6 to 8 p.m., and a walking tour of Fort Hancock will take place on Sun., Dec. 14, at 2 p.m.; 732/872-5970

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**7**

**Christmas in Greenwich** Tour 17th and 18th century homes, enjoy exhibits & demonstrations, and participate in the Sankta Lucia Ceremony; noon to 5 p.m.; Gibbon House, Ye Greate Street, Greenwich; \$8; 609/455-4055

**Nature Boutique** Craft show featuring handmade items made from natural materials or with a natural theme, children's gift shop, light refreshments and Santa; 1 to 5 p.m.; Trailside Nature & Science Center, 452 New Providence Road, Mountainside; donation; 908/789-3670

**Holiday Happening** Enjoy a full day of activities, including an arts and crafts sale, visits with Santa, wagon rides, entertainment, a toy hunt, wacky relays, bird feeder making, wreath making demonstrations and more; noon to 5 p.m.; Thompson Park, Newman Springs Road (Route 520), Lincroft (Middletown Township); free; 732/842-4000

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**9**

**Holiday House Tour** Tour area homes decorated for the holidays; 10 a.m. to 4 p.m.; meet at the Hermitage, 335 N. Franklin Turnpike, Ho-Ho-Kus; \$25; 201/445-8311

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**10**

**Tranquil Times** (also Dec. 17) Escape the holiday rush and enjoy music, holiday decorations and refreshments; 1 to 4 p.m.; The Hermitage, 335 N. Franklin Turnpike, Ho-Ho-Kus; \$3; 201/445-8311

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**11 - 14**

**Dickens' Christmas Carol** Enjoy refreshments and a parlor performance of this classic tale, hosted by Mr. Dickens himself, just as he did in his own home; 8:00 each night, as well as 3 p.m. on Sat. & Sun.; The Hermitage, 335 N. Franklin Turnpike, Ho-Ho-Kus; \$25; 201/445-8311

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**12**

**Whitesbog Village Candlelight Tour** Join us on a candlelight tour of some of Whitesbog's historic homes and buildings; 7 p.m.; Whitesbog Village, mile marker 13 on Route 530, Pemberton Township; \$5/person, \$10/family; preregistration requested; 609/893-4646

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**12 & 13**

**Festival of the Woods** (an NJAS Centennial Event) Enjoy crafts and decorations, music and refreshments, a candlelight walk through the December night (dress warmly), holiday carols and a campfire visit from Old Saint Nick; 7 to 8:30 p.m.; Weis Ecology Center, 150 Snake Den Road, Ringwood; \$5/members, \$7/nonmembers; advance registration and payment required; 973/835-2160

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**13**

**Whitesbog Full Moon Hike** (see Nov. 18)

**24th Annual Christmas Candlelight House Tour** (also on Dec. 20 and 27) Take a self-guided tour of Cape May Victorian inns, homes, churches and hotels, specially decorated for the Christmas season, and stop in the Carriage House (on the grounds of the Physick Estate) to enjoy a yummy holiday display of gingerbread houses; 5 to 8:30 p.m.; free shuttle service and refreshments included; \$15/adult (two for \$25), \$7.50/child (ages 3 to 12); call for ticket information; 609/884-5404

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**13 & 14**

**Christmas in Fort Hancock on Sandy Hook** (see Dec. 6 & 7)

**Christmas Tree Sale** (see Dec. 6 & 7)

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**17**

**Candlelight and Carols** (see Dec. 6 & 7)

**Tranquil Times** (see Dec. 10)

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**20**

**Christmas Show and Party** Presented by the Pinelands Cultural Society, the program features live stage presentations of bluegrass, country, old time and folk music, plus a Christmas sing-along and a special appearance by Santa Claus, who will have a goodie for all children under 12; 8 to 11:30 p.m. (doors open at 7 p.m.); Albert Music Hall, 125 Wells Mill Road (Route 532), 1/4 mile west of Route 9, Waretown; \$4/adults, \$1/children under 12; 609/971-1593

**Wildflowers and Wildlife of the Pinelands Hike** (See Oct. 18)



# CALL FOR ENTRIES

# 1997 Photo Contest

## New Jersey Outdoors

### FORMAT

Color 35 mm slides, transparencies or unmounted, unframed prints, no larger than 8" x 10" (no entries can be returned so you might want to send duplicates)

### RULES

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

■ Only photos taken of New Jersey, including its territorial waters and air, are eligible.

■ Images must be crisp and in focus, except where depth of field applies.

■ Only two entries per subject (not per category) will be accepted from each entrant.

Although you may enter several images in the same category, do not send more than two shots of the same activity, same historic site, etc. — enter only your best one or two images.

■ Each image must be attached to a completed entry form. (photocopies accepted)

■ Entries must be received by April 1, 1998.

■ All entries become the property of the Department of Environmental Protection and may be published/used for any purpose, such as illustrating a story or advertising NJO. (Photographer credits will be given.)

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

### CATEGORIES

■ (A) *Enjoying Our Natural Resources* —

Images of people engaged in nature-based outdoor activities (e.g., fishing, hunting, hiking, boating, birding)

■ (B) *Remembering Our Past* —

Images of people, places and activities that bring the past to life (e.g., living history demonstrations, reenactments, preserved sites)

■ (C) *Finding Humor in Nature* —

Images of nature (or people enjoying it) that tickle your funny bone.

### ENTRY FORM

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ ZIP \_\_\_\_\_

Daytime phone (\_\_\_\_) \_\_\_\_\_ Category (circle one) A B C

Title \_\_\_\_\_

Where taken (required) \_\_\_\_\_

Description (required) \_\_\_\_\_

Names of any identifiable people\* \_\_\_\_\_

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

This form may be reproduced as needed for multiple entries.

Please send entries to: New Jersey Outdoors, P.O. Box 402, Trenton, NJ 08625-0402

**24th Annual Christmas Candlelight House Tour** (see Dec. 13)

**20 & 21** \_\_\_\_\_

**Christmas in Fort Hancock on Sandy Hook** (see Dec. 6 & 7)

**Christmas Tree Sale** (see Dec. 6 & 7)

**20 - 23** \_\_\_\_\_

**Holiday Tour of the Batsto Mansion** (also Dec. 26-30) Take a guided tour of the Batsto Mansion, which will be decorated for the holidays; tours begin at 10:30 and 11:30 a.m. and 1:30, 2:30 and 3:30 p.m.; Batsto Village, Route 542, Wharton State Forest, Hammonton; \$2/ages 12 and up, \$1/ages 6 to 11, free/under 6 years of age; 609/561-0024

**20 - Feb. 8** \_\_\_\_\_

**Nature Through a Child's Eye Exhibit** See how the artwork of kindergartners

through 6th graders expresses children's love of our natural world, our environment and our earth; 9 a.m. to 5 p.m.; Somerset County Park Commission Environmental Education Center, 190 Lord Stirling Road, Basking Ridge; free; 908/766/2489

**26-30** \_\_\_\_\_

**Holiday Tour of the Batsto Mansion** (see Dec. 20-23)

**27** \_\_\_\_\_

**24th Annual Christmas Candlelight House Tour** (see Dec. 13)

**28** \_\_\_\_\_

**Candlelight Reception at the Murray Farmhouse** Listen to colonial period music in a historic farmhouse, dressed up for the holidays in the 18th century manner, as you enjoy a cup of mulled cider warmed on the open hearth; 4 to 6 p.m.; Poricy Park, Oak Hill Road, Middletown

(just west of Route 35; use Garden State Parkway exit 114 for Holmdel-Middletown; there are directional signs posted on Route 35 and at Parkway exits); free; 732/842-5966

## January

**3 & 4** \_\_\_\_\_

**Maple Sugaring** (also every Sat. & Sun. through Feb. 28) Learn how to identify the maple tree, tap it and boil the sap into golden syrup, then treat yourself to a taste test of 3 different maple syrups; 2 p.m.; Great Swamp Outdoor Education Center, 247 Southern Boulevard, Chatham; \$1/adults, \$.50/ages 7-18; free/under age 6; 973/635-6629

**10** \_\_\_\_\_

**Whitesbog Full Moon Hike** (see Nov. 18)

**10 & 11** \_\_\_\_\_

**Maple Sugaring** (see Jan. 3 & 4)



## Web Sites

The Department of Environmental Protection's home page is due for a facelift, and its designers would like to know what improvements you'd like to see. E-mail your suggestions to [njo@dep.state.nj.us](mailto:njo@dep.state.nj.us) or snail mail them to the magazine at P.O. Box 402, Trenton, NJ 08625.

For those who wound up a little lost in cyberspace when trying to visit the web sites listed in the sidebar to the Summer 1997 article on water gardens (page 45), a good route is via <http://w3.one.net/~rzutt>. The home page of the Internet Pond Society, it offers direct links to the FAQ page, files for download, a chatroom, membership information and much more.

Murdo Morrison, whose article on habitat gardening appeared in the Spring 1997 issue of *New Jersey Outdoors*, has introduced his new web site, *The Garden Bench*. Beautifully designed, it takes you on a tour of his back yard, and provides information on gardening to provide habitat for bees, birds, butterflies and other creatures. Visit at <http://www.voicenet.com/~mmorriso>.

South Jersey resident and NJO reader Fran Rapa shared a list of his favorite sites, including:

- South Jersey Canoe Club  
<http://www.cybernet.net/%7ekbillert/sjCanoeClub.html>
- Outdoor Club of South Jersey  
<http://www.voicenet.com/ubert4/ocsj/>
- Delaware Bay Home Page  
<http://www.delawarebay.com>
- Barnegat Bay Decoy and Baymen's Museum  
<http://www.icsglobal.com/baymens-museum>
- Hadrosaurus Foulkii Page  
<http://www.levins.com/dinosaur.html>
- Mullica River National Estuarine Reserve  
<http://inlet.geol.sc.edu/MUL/home.html>
- Plants of the NJ Pinelands  
[http://georgianedu/bi\\_pines/bi\\_pb\\_nj.htm](http://georgianedu/bi_pines/bi_pb_nj.htm)
- Marine Mammal Stranding Center  
<http://www.mmsc.org/>

Young Walter Johnson (right) and Bobby Shomo proudly display the three striped bass they caught using 10 lb. test lines while drifting eels on a beautiful mid June day.

## Sport Fish Management Efforts Appreciated

**Walter F. Johnson, Jr.**, CEO of Johnson & Towers Inc., reported great fishing in the Delaware Bay and sent along a photo of two of his crew with a few "keepers" to prove it. He, his son, Walter F. Johnson III, and two of his seven grandchildren, Walter F. Johnson IV, of Hainesport, and Robert Shomo, of Shamong Township — fished Cape May's "Rips" for two months this spring in their 1967 Pacemaker Wahoo.

"Our spring fishing in Cape May



COURTESY OF WALTER F. JOHNSON, JR.

amounted to over 100 legal size bass," he said. "This was not an unusual catch," he added, referring to the photo above.

In his letter to *New Jersey Outdoors*, Johnson attributed the great striped bass fishing to New Jersey's efforts to protect the species.

## New Jersey Conservation Magazine Debuts

The New Jersey Conservation Foundation recently published the premiere issue of *New Jersey Conservation*. The quarterly magazine's first issue features articles on the Great Swamp and Pinelands preservation. Also included is the foundation's 1997 annual report. J. Wandres, a frequent contributor to *New Jersey Outdoors*, serves as editor of the new publication; his latest NJO article can be found on page 20.

- Sierra Club—West Jersey Group  
<http://www.snip.net/users/ginacee/home.htm>
- South Jersey Sea Kayakers' Association  
<http://ns1.qsl.net/Kb2cix/>
- Something Fishy  
[http://www.anowalsky.com/somethin\\_fishy/sfhome.html](http://www.anowalsky.com/somethin_fishy/sfhome.html)
- Cape May County Party and Charter Boat Association  
<http://www.fishingnj.com>
- Canoeing and Hiking  
[http://oceancountygov.com/discover/oc\\_hike.htm](http://oceancountygov.com/discover/oc_hike.htm)
- Base Camp's Pine Barrens Pages  
[http://www.bpbasecamp.com/wilderness/nj\\_pinebarrens](http://www.bpbasecamp.com/wilderness/nj_pinebarrens)
- South Jersey Astronomy Club  
<http://members.aol.com/njastroc/index.html>
- Delaware Bay Lighthouses  
<http://www.lewes-beach.com/lighthouse.html>
- East Coast Outdoor Guide  
<http://www.bgwebmasters.com/index.html>
- Shore Cycle Club  
[http://206.66.24.251/Organizations/Shore\\_Cycle\\_Club/](http://206.66.24.251/Organizations/Shore_Cycle_Club/)
- New Jersey Forestry Association  
<http://loki.stockton.edu/~forestry/index.htm>

By now, you've probably noticed that these all relate to the southern portion of the Garden State. If you'd like to share your favorite central and/or northern New Jersey sites with other readers, please send NJO a list.



# The Green Sea Turtle

by Jeanette Bowers-Altman

The green sea turtle, *Chelonia mydas*, is one of eight species of sea turtles known to inhabit the world's oceans. It can be found throughout the Mediterranean, northern Pacific (including Hawaii) and at most tropical islands in the central Pacific. In the eastern United States, the green turtle can be found along the U.S. Virgin Islands and Puerto Rico and from Texas to Massachusetts, where mostly immature turtles have been reported. It is an occasional — but somewhat elusive — visitor to New Jersey waters. Since 1978, only eight of the sea turtle strandings reported by the Marine Mammal Stranding Center in Brigantine were green turtles.

The green turtle is characterized by a dark green skin tone and mottled shell pattern. It can be colored gray, green, brown or black, and is sometimes spotted with yellow. One of the larger sea turtles, it can weigh up to 400 pounds and achieve a carapace (upper shell) length of more than three feet. The green turtle, which has an average life span of 40 to 50 years, is thought to reach sexual maturity at about 20 years of age.

As with all sea turtles, the green turtle's feet and legs have been modified into powerful flippers that serve to propel it gracefully through the water. An air-breather, the green turtle surfaces about every two minutes when active. When sleeping, however, it can remain underwater for two and one-half hours or more.

Using keen underwater vision, the green turtle forages for its primary food items of eelgrass and algae in warm, shallow water. Hatchlings have a more varied diet consisting of fish, crustaceans, jellyfish, and algae. As they grow, the turtles become increasingly herbivorous, developing sharp jaws that cut through tough, fibrous vegetation.

Every year, male and female turtles migrate — sometimes thousands of miles — to the same beaches to nest, often returning to the beach where they themselves were hatched. Breeding takes place on the water's surface between October and February and is followed by egg

laying several nights later. Important Atlantic green turtle rookeries (nesting beaches) include Tortuguero in Costa Rica, Aves Island in the Caribbean and Ascension Island in the mid-Atlantic. It is estimated that between 200 and 1,000 females nest on United States beaches, many of which are in Florida.

To deposit eggs, the female painstakingly drags herself onto the beach, digs a large hole with her powerful front flippers, and lays approximately 100 hard shell eggs resembling ping-pong balls. She then covers the eggs with sand and returns to the sea, repeating the task several times over the next few weeks. Incubation temperature determines a hatchling's sex — at 82 degrees Fahrenheit, hatchlings are all male; at 90 degrees Fahrenheit, they are all female.

Two to three months after egg laying, one-ounce hatchlings dig their way to the surface and emerge at night. Once through the sand, they must begin the dangerous trek to the sea — at a time when they are particularly vulnerable to predators such as shorebirds.

Hatchling green turtles are found in the open ocean at this stage and have often been seen floating atop strands of brown algae and other debris. Older juveniles eventually leave the open ocean to enter coastal foraging areas which serve as developmental habitat. It has been estimated that only one to two hatchlings out of 100 survive their first year.

Once common throughout its range, green turtles now number a fraction of what they once were. Declines in green turtle populations can be attributed to a long history of commercial harvesting for eggs and food, as well as for leather and jewelry. In response to this dramatic decline, the species was listed in 1978 as endangered/threatened under the United States Endangered Species Act. The breeding populations off Florida and the Pacific coast of Mexico are listed as endangered while all others are threatened. The species is also listed as endangered by the International Union for the Conservation of Nature. Like all sea turtles,

the green turtle is protected under Appendix I of the Convention on International Trade on Endangered Species. Federal management of the species is shared between the National Marine Fisheries Service and, since the females nest on land, the U.S. Fish and Wildlife Service.

Despite protective laws, human activities in nesting areas continue to threaten green turtle populations. In the United States, egg poaching still occurs in a number of areas. Erosion of nesting beaches, along with beachfront development, can result in a loss of nesting habitat. Beach replenishment efforts during the nesting season bury nests and disturb nesting turtles. In addition, off-road vehicles and the mechanical raking of beaches compact sand and cause tire ruts that may hinder or trap hatchlings. Artificial lighting of beachfront areas has been shown to interfere with the sea-finding behavior of emergent hatchlings.

The marine environment also has an effect on green turtles. Dredging can result in habitat destruction by disrupting foraging grounds, while the ingestion of debris can interfere with metabolism and digestion. Propeller and collision injuries are a concern in areas where recreational boating and ship traffic is intense. Nets and long lines associated with commercial fishing pose another threat, and the illegal take of green turtles in the Caribbean, particularly near Puerto Rico, also is a significant problem.

Increasing public awareness, coupled with protection efforts, offers hope to dwindling green turtle populations. Turtle project personnel inform and educate beach users about how to minimize disturbance to nesting turtles, protect nests and rescue disoriented hatchlings. Private organizations, such as the Center for Marine Conservation, National Audubon Society and Greenpeace, have produced a variety of materials designed to promote sea turtle conservation.

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