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# New Jersey

## Outdoors

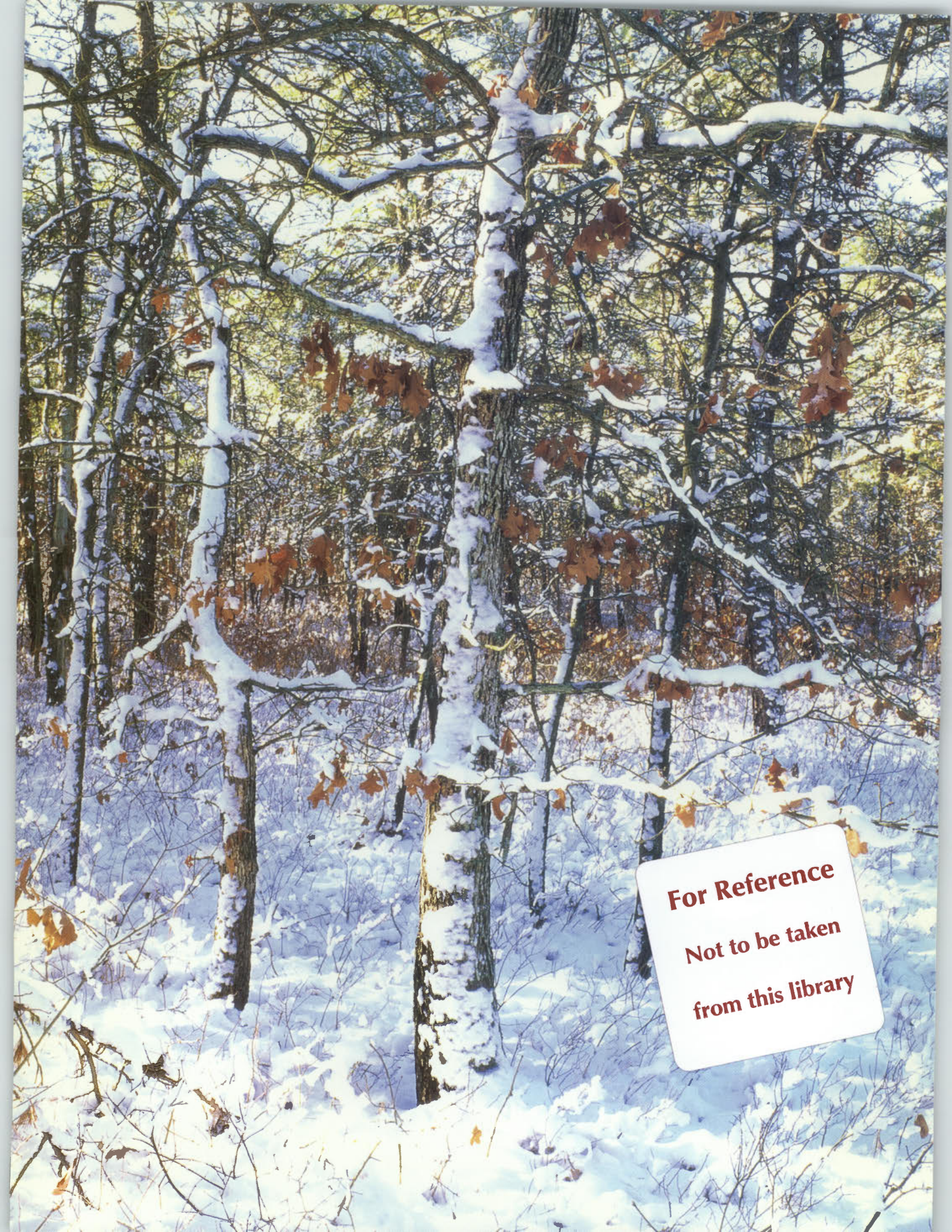
Winter 1998 • \$4.25

The Chills and Thrills  
of Winter Fishing

Butterfly Gardening  
For Fun and Profit

Indian King:  
The Tavern That  
Gave Birth to  
a State





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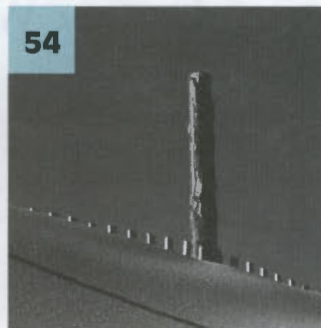
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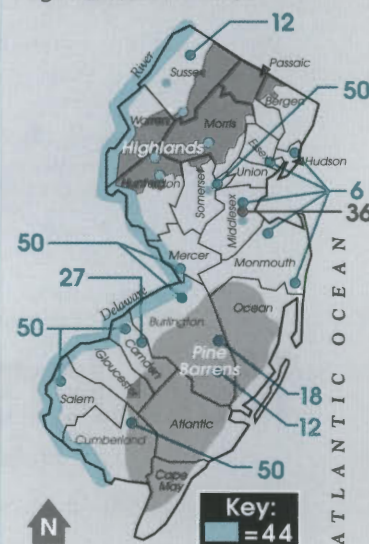
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A male house finch (*Carpodacus mexicanus*) and a winter-kissed bough reflect the traditional colors of the holiday season.  
© Clay Myers

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A wintery blanket of snow paints a pretty picture in the Pinelands.  
© J. J. Raia

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Caught in winter's frozen grip, commercial fishing boats are icebound at Barnegat Light, Long Beach Island.  
© Cornelius Hogenbirk

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## New Jersey *Outdoors*

Winter 1998, Vol. 25, No. 1

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

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## Mailbox



COURTESY OF JIM BISCHOFF

Artist **Susan Napack** dedicated this artwork of white gloves encircling tree trunks to environmentalists, especially those who risk their lives devoting themselves to the protection and preservation of old growth forests. The work was created for the Gallery of South Orange's environment show in spring, 1997, and symbolizes the role women play in protest movements.

### Contest Winner Snaps a Tree-Hugger

During the awards ceremony last spring (Editor's note: the writer's *Cathedral of Trees* captured first place in the Essex County category in *NJO*'s 1996 Photo Contest), I mentioned our local South Orange Environment Show. More specifically, I mentioned *Tree Huggers*, by Susan Napack. Enclosed is a photo of her artistic construction.

Great summer issue. Love the Ocean Grove and antique bottles pics!

**Jim Bischoff**  
South Orange

### They Love New Jersey

We are teenagers, Anna and Adam. Adam goes to West Orange H.S. and Anna attends Rutgers. We came from Poland five years ago, and since the beginning we have lived in West Orange. We like having a page (on the Internet) about New Jersey because we love to live in this state.

We would like to present our page — **Friendly NJ** — to *New Jersey Outdoors*. It's a personal guide to family travel in the state of New Jersey. We started it in December 1996. On average, 60 people per day access our page. They come from different states and countries. About 900 people visited our page on June 20, 1996, when it was awarded a GeoCities Cool Page of the Day.

We would be very grateful if you would mention our page. The URL is:  
<http://www.geocities.com/~orgacki/>.

**Anna and Adam Orgacki**  
West Orange

## From the Governor



Christine Todd Whitman,  
Governor

The winter issue of *New Jersey Outdoors* features an article on the restoration of Indian King Tavern, the place where New Jersey's status as "colony" was abandoned and the State of New Jersey was legally created. As you read about the benefactors and volunteers who are helping furnish the Haddonfield museum with copies of authentic 18th-century tavern furniture and accouterments, don't be surprised if you feel a sense of *déjà vu*.

If you think back, you'll recall that the fall issue contained articles about the volunteers restoring the antique furniture and paneling of the Ringwood and Skylands manor houses, Wildlife Conservation Corps members helping out on a variety of fisheries projects, and experienced hunters sharing their knowledge and love of the sport with young hunters.

In fact, just about every issue features one or more of the varied projects undertaken by those New Jersey citizens who not only treasure their natural and historic resources, but who delight in sharing their time and talents to preserve and protect these resources for future generations.

In addition to the Division of Parks and Forestry's Volunteers in Parks program and the Division of Fish, Game and Wildlife's Deputy Conservation Officer and Wildlife Conservation Corps programs, individuals and groups "adopt" and clean up beaches, rehabilitate ill and injured wildlife, and stencil blue fish on storm drains as a reminder that littering pollutes our waters and can harm marine life.

New Jerseyans of all ages and all walks of life become involved in local watershed projects, recycling efforts and more — there seems to be no limit to the ways in which we are willing to help each other. And the rewards of this involvement are many, from the benefits that accrue to the sites and species they labor to protect, to the enjoyment their work provides for their fellow citizens, to the friendships, new skills and satisfaction they derive from giving of themselves.

On behalf of all New Jerseyans, I would like to thank these volunteers for their enthusiasm and generous support in making our state's natural and historic legacy even richer.

## From the Commissioner



Robert C. Shinn, Jr.,  
Commissioner

Last spring I was invited to attend the opening of a unique photography exhibit in Trenton. The exhibit featured black and white photographs depicting the many facets of the environment, taken by students with physical, mental or emotional disabilities. I was impressed by both the expressiveness of the photographs and the intensity of the messages these images conveyed.

As participants in a program called Special Eyes on the Environment (S.E.E.), the students use specially adapted cameras to help others see the world around them through their eyes. The program has enriched both the students' lives and the lives of those who view the exhibit.

That is why I asked Ross Lewis and his S.E.E. program participants to join the Department of Environmental Protection in a partnership project designed to increase public awareness of watersheds and their management.

I encourage you to learn more about this worthwhile program through the fascinating photos and article on pages 6 through 11 in this issue. You may never again S.E.E. the world around you in quite the same way.

## She's Back!

Wildlife artist Carol Decker's many fans will be happy to note that this issue's inside back cover features a portion of *Heritage*, her new, limited edition poster of a white-tailed deer. Decker's artwork frequently has graced the inside back covers of *New Jersey Outdoors* since 1978.

The new release, pictured here in full, is limited to 500 signed and numbered copies. Printed on 100 percent acid-free, museum quality 80# premium art stock with highest rank UV non-fading inks and ample margins, it is available for \$110. For more information, or to order, call 973/948-5597.

A number of paintings by this nationally acclaimed wildlife artist can be viewed on her Web site <http://www.my-business.com/wildlifeartstudio>



## Tourney Anglers Land Close to 200 Big Ones

Kudos to participants in the sixth annual Governor's Surf Fishing Tournament, held the first weekend in October at Island Beach State Park. The 1997 Governor's Trophy was awarded to **Ron Butkiewicz**, of Plainfield, who landed a 34 1/4-inch bluefish and claimed first place in the adult men's category for bluefish. Butkiewicz — whose name will be engraved on the Governor's Cup, which will be prominently displayed at the park — had another reason to be proud that day. His 16-year-old son, also named **Ron**, captured first place in the fluke subcategory for teen boys with a catch which measured 16 3/4 inches.

Second and third places in the bluefish subcategory for adult men went to **Bill Trulby**, of Beachwood, and Waretown's **Brian Updyke**. They reeled in blues measuring 30 5/16 inches and 22 1/2 inches, respectively. Two 15-year-olds captured second and third places in the

fluke subcategory for teen boys. **Tommy Stehn**, of Aberdeen, and **Rob Messina**, of Hopewell, snagged 16 1/4-inch and 15 1/2-inch fluke, respectively.

**Joe Rosetti**, a 12-year-old from Bloomfield, captured first place in the blackfish subcategory for boys with a 16 5/8-incher, while a 17 3/4-incher assured Middletown's Arlene Parrino of top honors in the blackfish subcategory for adult women. **Claus Faller**, of Beachwood, **Thomas DiAlfonso**, of Hillsboro, and **Joseph Kennett**, of Jackson, reeled in catches of 16 1/4 inches, 15 1/2 inches and 15 inches, respectively, to secure the top three places in the blackfish subcategory for adult men.

**Steven Senese, Jr.**, a 9-year-old from Rochelle Park, captured first place in the fluke subcategory for boys with a 15 1/2 -incher, while **Jesse James Lockowitz**, 8, took second place with a 14 1/2-inch fluke. **Lockowitz**, of Toms River, pulled in a 28 1/2-inch striped bass in last year's

tournament to take first place in that species' subcategory for children.

Seven-year-old **Jenny Stumpe**, from East Stroudsburg, PA, took the only prize in the fluke subcategory for girls with her 17-inch catch. Leading the adult women in the fluke category was Toms River's **Kathy Lockowitz**, proud mother of winner Jesse. Her 15 1/2 -inch fluke edged out 14 3/4- and 14 11/16-inchers caught by **Rosemarie Suellins**, of Hopelawn, and **Linda Cafone**, of Wall, respectively.

**Eric Rocha**, from South River, landed an 18-inch fluke to capture first place in the adult men subcategory, but timing was everything in the battle for second place. Both **Michael Wilk**, of Bound Brook, and **Tom Cocuran**, of Freehold, pulled in 17-inchers, but catching his at 6:50 a.m. — forty minutes before Cocuran landed his fluke — gave the edge to Wilk.

*continued on page 63*

## 1997 New Jersey Waterfowl Stamps and Prints Available

Since 1984, sales of New Jersey waterfowl stamps, souvenir cards and artist-signed limited edition prints have raised more than \$3,200,000 for the acquisition, protection and improvement of waterfowl habitat and associated wetlands. To date, more than 10,500 acres have been purchased and/or donated to the program. New Jersey duck stamps are required for hunting waterfowl in the state, but the beautiful designs are sought after by stamp and print collectors nationwide.

The 1997 design is by 1996 International Ducks Unlimited Artist of the Year **Rob Leslie** of Turnersville. The scene features old-squaws, with the historic oyster schooner, *A. J. Meerwald* — which now serves as a floating classroom on Delaware Bay — in the background.

The \$5 resident stamp, \$10 non-resident stamp and \$24 souvenir card (8"x10", full color) with matching numbered pair of resident and non-resident stamps (available until December 31, 1998 or until the issue of 2,000 cards is sold out) are available at the Division of Fish, Game and Wildlife's Trenton office or by mail. The Trenton office is located



at 501 East State Street (3rd floor).

Should you prefer to order through the mail, simply specify which item(s) you desire, enclose a check or money order payable to the New Jersey Division of Fish, Game and Wildlife, and mail to: N.J. Division of Fish, Game and Wildlife, P.O. Box 400, Trenton, NJ 08625-0400 (postage costs shown for U.S.A. only).

The full-color limited edition print includes a resident and non-resident stamp. Framed, matted, hand signed and numbered — a piece to display with pride — it is available for \$150 from select art dealers. Call 1-800-382-5723 for the name of an art dealer near you.

For more information, please call 609/292-9450.

### Canoe Champs Awarded Mini-Paddles

Winners of the 25th annual Toms River Canoe Race, sponsored by the Ocean County Parks and Recreation Department, were awarded mini canoe paddles instead of traditional trophies. The champions (kneeling, from left) are: Richard and Raymond Savacool (Manasquan), Men's Tandem; Alice Motten (Phoenixville, PA) and Cecilia Penna (Mount Laurel), Women's Tandem; and Samantha and Greg Gordon (Staten Island, NY), Mixed Tandem. Standing, from left, are: Nicole and Joe Ponticorvo (Ridgefield), Family Tandem; Corey Sperling and Brandin O'Keefe (both of Bayville), Youth Tandem; Joseph and Jeremy Pijak (Toms River), Open Ocean County Residents Tandem; Bob Feder and Eileen Strubel (both of Fort Lee), Open Rental Tandem; Mike Beck (Brick), Open Kayak and Surf Ski/Sea Kayak (two races); John Ziegler (River Edge), Men's Solo Canoe; and Joseph Erwin (Manasquan), who was honored by the county for his leadership and dedication to the sport and the annual race. Not pictured are Senior Tandem winners Robert Tormollan (Toms River) and George Murnyak (Bel Air, MD).



# WHEN S.E.E.ING IS BELIEVING

by Cheryl Baisden

*Our worst fear is not that we are inadequate. Our deepest fear is that we are powerful beyond measure. It is our light, not our darkness that most frightens us. We ask ourselves "Who am I to be brilliant, gorgeous, talented and fabulous?" Actually, who are you not to be? You are a child of God; your playing small doesn't serve the world. There is nothing enlightened about shrinking so that other people won't feel insecure around you. We were born to make manifest the glory of God within us. It is in everyone and as we let our own light shine we unconsciously give other people permission to do the same. As we are liberated from our own fear our presence automatically liberates others.*

Nelson Mandela

The shapes and shadows (left) captured by Lawrence, a student at CPC Behavioral Healthcare, provide interesting contrasts.

The joy of a photographic field trip is reflected on the face of Alexis (opposite page) in this study by Ross Lewis. Alexis attends the Horizon School.





For all of his 12 years, Michael Nevin had been searching for a way to communicate, a way to bring those he loved into his silent world of cerebral palsy, a way to conjure for them an image of the world from his unique point of view. Communicating even his most basic needs required concentration, determination and often luck, as he struggled to maneuver his head enough to trigger a computer-generated statement or harness his halting movements long enough to nod in response to a carefully phrased question. But to reveal what he was really feeling, what was wrestling around in the pit of his stomach, seemed all but impossible for Michael.

That all changed the day he looked through the viewfinder of his first specially equipped camera while participating in an unusual program offered by the Lakeview School in Edison.

"He took some photographs of a playground from outside of the area, through a metal fence that surrounded it," said Venus Majeski, director of community relations at the Cerebral Palsy Association of Middlesex County, which oversees the school. "The images made you feel so totally excluded. I looked at Michael and said, 'It's like you're on the outside, right?', and Michael looked at me with such happiness because I got it. I finally understood where he was and how he felt."

Michael is not the only New Jersey student who has found his voice through the lens of a camera. Under the watchful eye of veteran international photographer Ross Lewis, hundreds of physically and emotionally challenged students have learned to transform their unspoken words into pictures over the past four years. If the familiar adage holds true, and a picture is worth a thousand words, Lewis' students are speaking volumes about their individual visions of themselves and the world that surrounds them.

### THE FIRST FLASH

Lewis launched his Special Eyes on the Environment (S.E.E.) program in 1993, as a way to help the disabled express themselves and gain a better understanding of the environment, all through black and white photography. The seed for his innovative idea had been planted 14 years earlier, on a winter day in November 1979.

"I was standing on the corner of 26th Street and 7th Avenue in New York City when I saw a group of people with disabilities taking photographs," explained Lewis, who, three years earlier, had embarked on a photography career after leaving his post as

Shawn, a Rugby School student, created this stunning abstract of nature.



an assistant director at WCBS-TV News in New York. “I literally could not take my eyes off them. I saw a clear juxtaposition between the difficulties many of them had with these little black camera boxes and the absolute joy they had in their eyes and on their faces. In that moment, I made a decision that someday I was going to give everything I had to contribute to these people photographically.”

The intensity of his reaction caught him by surprise, Lewis recalled. He had never been intimately exposed to a person with disabilities, yet he felt a common bond with these camera-club photographers — a passionate determination to frame a personal statement about the world through the magnificence of photography.

“It was during this time, early in my career, that I was absorbing information from many of the top photographers in the world who operated out of New York,” said Lewis, who has since photographed two Super Bowls and handled assignments around the world, from Europe to South America to Africa.

“They kept telling me ‘It’s not the camera, Ross, it’s you.’ This clearly validated my own experience that photography was not necessarily a mechanical process. It was, in fact, totally about the self, and how you express that through the lens.

That gave me the drive to create, and that’s what I saw on that street corner. That’s why it hit me so hard.”

## EARLY EXPOSURE

S.E.E. began as a pilot program at Robert Wood Johnson University Hospital in New Brunswick in 1993. Enrolling approximately 20 outpatients suffering from heart ailments and Parkinson’s Disease, Lewis presented seminars focusing on the basic tenets of S.E.E.: that each person has a huge contribution to make to this world and that, through the camera lens, those photographic contributions would impact our environmental consciousness.

Accompanied by their families, these first-time S.E.E. participants were sent on their way to photograph our world. They not only enjoyed the time outdoors, but also made some remarkable discoveries.

“They were looking at and seeing things they had never even considered in life, because the view through the lens forced them to focus,” Lewis recalled. “And they were able to communicate these personal images to others through their photographs.”

In no time, Lewis had expanded his program to the audience he had hoped to reach all along — physically and emotionally challenged children and young adults. The transition required modification of S.E.E.’s cameras to accommodate a variety of disabilities, from sturdy mounting devices that connected to wheelchairs to the invention of remote shutter buttons and zoom capabilities that could be operated with the finger, the wrist, or even by a tap of the chin. All this customizing was done with extensive planning with some expert camera repair men in New York. Most of the cameras were provided by Olympus at cost.

“When you see what the equipment these kids use looks like, and how much effort it can take for them to snap one photo, it’s very inspirational,” says Stephanie DeBruyne, director of education services at the Horizon School in East Orange, one of the program’s first participating schools. “But they were hell bent on making a statement through this program, and their determination shows.”

Today, the S.E.E. program operates at seven facilities in Camden, Essex, Gloucester, Hudson, Middlesex and Monmouth counties — the Archway Programs in Atco, the Horizon School, the Durand Academy in Woodbury, the Hudson County Cerebral Palsy Center in North Bergen, the Lakeview School in Edison, CPC Highpoint School in Morganville and the Rugby School in Wall. Each school program runs for a one-year cycle, beginning with two seminars focusing on the value of each student’s personal view, the concepts of environmental beauty and blight, and a few cursory remarks about framing an image. But it is during the students’ three or more hours in the field, visiting both clean and littered environments, that the program’s mission comes into focus.

“These kids usually have a hard time concentrating on a single thing,” explained Donald DeSanto, assistant executive director of the Rugby School. “Normally, they would see the

This photo below, taken by the Lakeview School's Isabell, offers a unique perspective.



trees, the grass, birds, whatever, as one picture, but when they hold that camera, they find themselves framing a single piece of nature. When they put the camera down, they find they've learned to frame their environment. That carries over into their everyday learning."

According to school administrators, S.E.E. seems to be producing talented photographers as well.

"When I first saw an exhibit of S.E.E. photos, I thought Ross Lewis was hawking his photos," DeSanto said, with a chuckle. "I was amazed when I learned that kids took them. And now that our kids are involved, when parents see the intensity of their work they react as though their child just scored 1,600 on the SATs."

Time and time again, when Lewis sifts through the piles of images snapped during each school's excursions, his young participants prove that they have unique personal visions worth expressing.

"What you don't realize until you see their work is that they all have a different take on the world," Lewis said. "They see things in the environment that I, as a professional photographer, would never see."

That unique vision comes through, according to Barbara

Strickarz, vice president of CPC's residential schools, because Lewis trains school staff members not to guide the program participants. "Your first reaction as an educator is to point them in the best direction to take what you think is a good picture," she says. "When you hold back and find that they produce something you would never even have seen, it's just a tremendous feeling. These images come out of their own beings."

### A SHARP FOCUS

- Cottony clouds peek between an intricate pattern of winter tree branches.
- A dead bird lays mangled amid fresh dog tracks in the sandy beach.
- A handful of young summer leaves cling to a delicate branch.
- A headless baby doll lies sprawled among the moist reeds of a pebbly waterfront.
- Broken bottles, old tires, empty oil cans and fast food wrappers stand as monuments to humanity in a variety of landscapes.

## “I THINK THE UNIQUE PERSPECTIVES OF THE STUDENTS PARTICIPATING IN THE S.E.E. PROGRAM COULD HELP OTHERS TO UNDERSTAND THE IMPORTANCE OF WATERSHED PROTECTION.”

— DEP Commissioner Robert C. Shinn, Jr.

These are the images captured by Lewis’s S.E.E. students — hopeful and harmonious, dark and depressing. They conjure up the emotions Lewis hoped they would: peacefulness, sorrow and anger.

“I really felt the environment was the right thing for the program to focus on,” he said. “I believed if the students got out and saw what they would not normally see, and if the public had the chance to look at their images, it might make a difference in the way the environment and the disabled are viewed.”

And his efforts on both fronts have been a great success.

Rugby School student Aaron Williams, 17, was moved by the collapsing building he photographed in Asbury Park, a sad sight he said he never expected to find at a shore resort. The condition of much of the environment there, he noted, detracted from what could have been a beautiful spot.

“People need to stop polluting, that’s the only way to fix it,” he explained.

“Yeah, that’s why we have garbage cans,” added fellow student Tony Chilemi, 14.

The student responses match Lewis’s environmental philosophy exactly.

“It’s not the Exxon Valdez that we ought to worry about,” he

said. “It’s cleaning up after your dog, or cutting your foot on a bottle, or seeing someone throwing a fast food wrapper out of a car window on the highway; it’s cigarette butts on the beach; it’s insanity. Most of us are resigned to the horrible condition of our environment. We don’t actually believe we can make a difference, so we blame the corporations. In reality, we need to take the responsibility, and that’s what the S.E.E. program forces us to do.”

### EXPLORING POTENTIAL LINKS

The state Department of Environmental Protection is exploring the possibility of working with Lewis this year through a unique partnership project aimed at educating New Jerseyans about watershed protection. Consideration is being given to spotlighting the work of S.E.E. program participants as a way to raise the public’s awareness of watersheds and how to prevent their pollution.

A watershed is the area of land — one which transcends political, social, and economic boundaries — that drains into a particular water body, such as a river, lake, stream or bay. The activities associated with the various ways land within a watershed is used have a direct impact on its water quality. Both “point” sources, such as the outflow of wastewater from a manufacturing plant, and “nonpoint” sources, for example, stormwater runoff that can include animal wastes, excess fertilizer, litter and motor oil, can negatively affect the quality of the receiving water body.

“I think the unique perspectives of the students participating in the S.E.E. program could help others to understand the importance of watershed protection,” says DEP Commissioner Robert C. Shinn, Jr. “The scenes captured on film by these stu-



Nisar, a Horizon School student, found beauty in the blemishes of an urban building (left).

This landscape shot (opposite page), taken by Hudson County CP’s Terrance, captures nature so well you can almost feel the breeze and hear the leaves rustling.



dents would illustrate the many benefits of clean water as well as the many ways in which people unthinkingly contribute to its pollution. Ultimately, their photo essay would encourage viewers to make a positive contribution to ensuring the viability of this most precious resource.”

## VIEWING THE NEGATIVES AND POSITIVES

Within the traditional S.E.E. program, between 75 and 80 S.E.E. photographs are shown together in powerful local exhibits. The exhibits travel from county libraries to town halls, to corporate headquarters and state buildings. In June 1997, more than 300 S.E.E. photographs blanketed Trenton, with five of the schools exhibiting in five buildings simultaneously. In the fall, the exhibit was brought to the Hackensack Meadowlands Environment Center, then to Liberty Science Center.

The exhibits reinforce the S.E.E. program’s intent to publicly acknowledge the visions and contributions of its participants and remind viewers that everyone is responsible for the preservation of the environment. “Without the exhibits,” Lewis notes, “the pro-

gram would rate as just another photography trip to the park.”

While the S.E.E. program is far from a simple field trip to the student participants, it is much more than a collection of amateur photography to those who view the changing exhibits.

“Because they have a real purpose to their photography, their pictures are truly startling,” Lewis said.

And every image is displayed in its entirety, without even the most basic cropping by Lewis. Instead, as he explains to the students from the start, they are responsible for every inch of the subject matter. The point seems to be well understood, since weeding out images to compile the final display (which includes at least two pieces by each student) requires considerable effort.

“These kids and their photographs can convey something no one else can,” Lewis concluded. “Instead of looking at them and saying, ‘Those poor unfortunate kids,’ people look at what they’ve captured on film and say, ‘I’m not going to throw paper out the car window any more.’ That’s what makes the S.E.E. program so socially and environmentally powerful.”

*Cheryl Baisden, who lives in Collingswood, is a freelance writer whose work has appeared in previous issues of New Jersey Outdoors.*

# Mushers in Our Midst

by Joe Cavaluzzi

It seems an unusual sport for the Garden State. But among those who go to bed on winter nights with visions of waking to snow-covered tree limbs outside the window is a small but hearty group of New Jersey sled dog racers.

Mushers, they are called in the parlance of this sport that is more readily identified with the wind-swept Alaskan wilderness than with a state that can see years pass without a white Christmas.

And their interest in the sport usually grows from a love of the dogs — Siberian huskies, Samoyeds, Alaskan malamutes and Alaskan huskies, a special racing crossbreed that combines the en-

© E. G. CLEVELAND, PHOTO COURTESY OF KATHY MURARIK



Kathy Murarik races in the snow at Mongaup, N.Y.

Greg Sellentin's appealing Alaskan husky (opposite page) is half pointer and half husky. Pictured here at the age of 8 weeks, "Abby" came from Sweden.

It's strictly  
a family sport  
here in New  
Jersey

duration of Northern work dogs with the speed of breeds such as coonhounds, pointers and airedales. Ask a sled dog racer how he or she got started and the answer invariably leads back to a dog.

For Herman Lindeboom — who, as president of the Mid-Atlantic Sled Dog Racing Association, organizes races as far south as Virginia — and his wife, Hetty, it was the Siberian husky.

"We fell in love with the breed while on vacation in New Hampshire with our children. And from then on it was downhill," says Hetty, who has been racing dog sleds since 1970. "They are a friendly breed, but restless because they are a working dog."

"It's strictly a family sport here in New Jersey and we are having a lot of fun with it," she says. "It's very good for the children.

They learn patience and how to take care of the animals and how to solve problems.”

The dogs, too, seem to enjoy the sport and working with the other members of their team. Healthy, active dogs love to run, and sled dogs are bred, raised and trained for pulling a weight while running.

“The question most people ask me is, ‘Wow, the dogs really like to do this?’” says Jersey City resident Greg Sellentin. “You can tell when a dog is happy. This is what they’ve been bred to do, just as a retriever will return with a ball.”

Sellentin, a commercial photographer’s agent who works in Manhattan, fell in love with Siberian huskies in 1988, when he and his fiancée saw a blue-eyed husky in a pet shop. The dog came with a book about the breed and Sellentin became fascinated with the Siberian husky’s background. He now has a small kennel of seven huskies at his home in Jersey City and 14 others at a friend’s kennel near Lake Placid, where he goes to train.

Mushers — well aware of sled dogs’ need to be in superb physical and mental condition — take excellent care of their teams. They ensure that the animals receive the necessary nutrients, veterinary care, and training; provide for appropriate housing, equipment and transport; and devote many hours to developing a trusting relationship with the dogs.

Dogs must be carefully watched during races and training. Running them on a hard surface like asphalt can cause injuries to their ankles and jar their shoulders. Huskies sweat through the pads of the paws, so mushers must be vigilant to make sure that ice does not built up between their toes.

## Where There’s A Will . . .

There are at least two sled dog clubs in New Jersey — the Jersey Sands Dog Club, based in southern New Jersey, and the New Jersey Sled Dog Club. The latter, formed in 1978, now has about 25 members from various walks of life and of all ages. It schedules an annual race at High Point State Park, but last year’s event never came off — no snow.

The lack of snow is but one adversity New Jersey sled dog racers must overcome. Development takes place at the cost of trails and large open spaces for sled-dog races, leaving New Jerseyans with the choice of sprint races or travel. In the Northeast, most sled dog events are sprint races — faster, shorter races at distances of one mile for each dog in the team — and a few are mid-distance races that range from 40 to 80 miles.

The Pine Barrens of southern New Jersey are another alternative for snowless winters. Mushers have developed three-wheeled gigs, and race on packed sand trails that have the benefits of longer distances and loops so the dogs do not have to be stopped and turned around during the races.

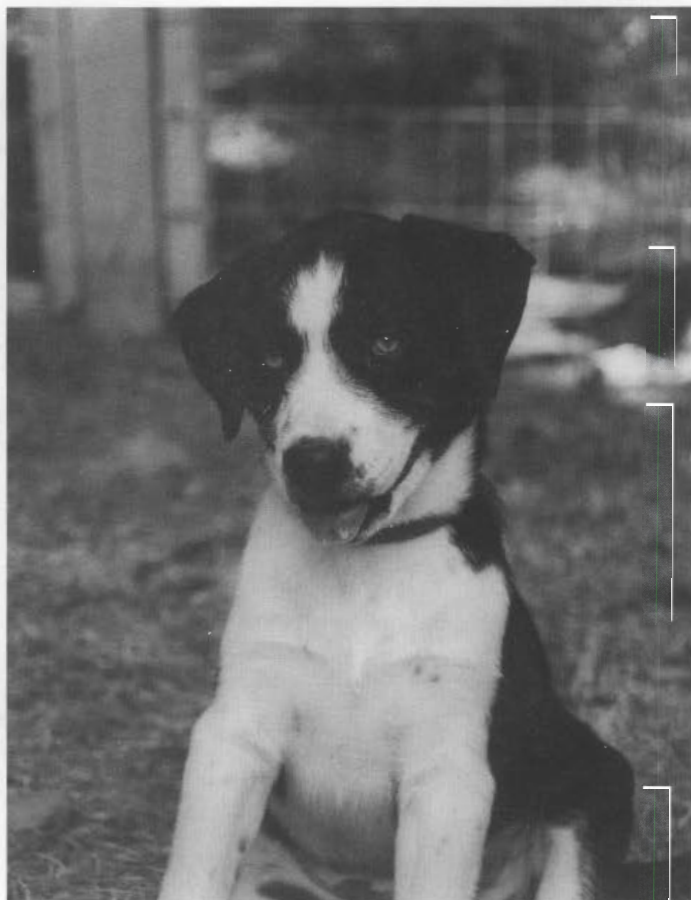
Nor does age appear to deter those who enjoy sled dog racing. One veteran New Jersey musher, Bob Messinger, of Verona, started mid-distance racing at age 50 and only now, having just turned 70, is thinking about going back to the shorter sprint races.

“You’re not prohibited by age or by sex. In fact, Susan Butcher has won the Iditarod four times,” Messinger says.

But those who have raced on both sand and snow say there is little comparison.

“It’s more Zen-like on snow,” says Sellentin. “I’ve raced the gig races in the Pine Barrens. I thought they were really neat at first. A lot of people get hooked that way. But when you change from racing on snow to sand, it doesn’t seem as natural.”

“As you talk to more people about them, you eventually get around to what the dogs were originally used for, which was pull-



© GREG SELLENTIN

ing a sled,” he says. “At the turn of the century, in the gold rush in Alaska, people used any type of dog they could get to move supplies and to take people to the claims. There was actually a lot of dog-napping. The whole story of that really fascinated me. I brought my one pet to a race and got hooked. I found out you didn’t have to live in Alaska to do this. They were doing it in New Jersey.”

Indeed, it is the hard side of nature that gave birth to the sport of sled dog racing.

## The Great Race of Mercy

Sled dogs were bred by the natives of the polar regions long before racing them was a sport. Alaskan malamutes,

raised by the Malemute Eskimos to carry food to their people across a vast region in the upper part of the Anvik River in Alaska, were one common sled dog. The other common breed — the smaller, faster Siberian husky — was used by the Chukchi people of northeastern Siberia to herd reindeer as well as to pull heavy loads.

The first major organized sled dog race was the All-Alaska Sweepstakes, held in 1909. In 1925, around the time airplanes were beginning to take on some of the transportation work of dog sled teams, the race that would develop

into the Iditarod took place. Known as the Great Race of Mercy to Nome, it would prove that sled dogs were invaluable to life in the region.

Nome was experiencing an outbreak of diphtheria. The antitoxin serum to combat the disease was in Nenana, 674 miles away. Airplanes were grounded by temperatures of 40 degrees below zero. Twenty mushers and about 100 dogs made the run to Nome in five and one-half days. The trip is credited with saving many lives and it was the origin of the Iditarod.



© NEIL HUBBARD

## Have Dog, Will Ski(jor)

Looking for a way to experience the thrill of dog sled racing without making a big investment? Skijoring, which substitutes skis for a sled, provides just such an opportunity.

“Skijoring is very popular in Europe and has gotten more popular in this country during the past five years,” says Kathy Murarik.

Initially a winter sport in which a skier was drawn over ice or snow by a horse or vehicle, skijoring now also describes cross-country skiing in which one to three dogs pull you along. It’s ideal for those who do not have the room,

the desire or the money to keep a team of sled dogs.

“That’s the beauty of skijoring,” says Greg Sellentin, who races sled dogs throughout the Northeast and in Canada. “Although it takes more endurance, you get the same exhilarating experience of being out there with your dogs as you do with a sled.”

It also is more accessible because people use a broader variety of dogs, as Sellentin found out while attending the sprint sled dog racing and skijoring world championships in Finland last March. German short-haired pointers and other hunting breeds were popular dogs at the event.

“I think this part of the sport (of mushing) could be really accessible to people

The Iditarod is a grueling race across 1,150 miles of jagged mountain ranges, desolate tundra, dense forest and frozen rivers from Anchorage, in south central Alaska, to Nome, on the Bering Sea coast in the west. It was dubbed “The Last Great Race on Earth” when it was first run in 1973. Since then, more than 400 mushers have finished the Iditarod. Martin Buser won the 1997 race on March 11, averaging 4.86 mph over 9 days, eight hours, 30 minutes and 45 seconds. Young mushers, from ages 14 to 18, compete in the Jr. Iditarod, covering 130 miles.

The Iditarod Trail, now a National Historical Trail, is more like the territory where Bob Messinger learned to drive a dog sled than the sprint courses of the Northeast.

## Work Leads to Play

Bob Messinger was a radio operator in the Coast Guard during World War II when he was transferred to the Labrador coast.

"They had a team of seven Greenland huskies. The guy who was training them and using them to transport supplies was leaving on the boat I arrived on. I was a dog lover and I decided to try it," Messinger says. It started a life-long passion for working dogs of the North.

"We used the dogs to transport supplies to the town of Battle Harbor, seven miles away. Without the dog team, we would

have been isolated by the snow," he says. Messinger made his first trips with a couple of the natives, who taught him how to drive sled dogs. His first adventure came when a Coast Guard cook who was being discharged needed a ride from Battle Harbor to Red Bay, 50 miles away, to board a ship home.

"It was very exciting," he recalls. "I followed one of the native drivers and we drove on the foot, which is a build-up of snow and ice at the bottom of the cliffs along the ocean, where the sea freezes and is frozen for miles out. We didn't stay in Red Bay, we just turned around and came back. I didn't even

who like to ski. If more people knew they could do this, they would," he says. "It's really an extension of jogging and bike riding with your dog."

But Sellentin and others warn that people should be good cross-country skiers before they hitch themselves up to their dog or dogs.

Skijorers wear a wide belt around their waist or hips, connecting them via a three-to four-meter-long line to the harness on their dog or dogs; a built-in bungee cord absorbs the jerking. They ski — a skating motion works best — as the dogs pull them along.

A quick release of some kind is a very important piece of skijoring equipment. It enables the skier to cut

loose after a fall or if the dog is heading for danger. As Sellentin points out, "A lot of people underestimate the power of the dog. A 100-pound golden retriever could pull you a couple of hundred yards after you fall."

Skijoring is a team effort, and the dog has to be shown what to do. One way to teach a dog to pull a skier is to get all hooked up without skis and run with the dog. Have a friend run ahead, calling your dog, to get the dog to run in front of you. Start on a level area at first; fall before running into your dog; and don't do too much too fast — dogs that have been inactive will need time to get in shape.

Packed — but ungroomed — ski trails, bike paths, park

trails, open fields and similar areas all are good places for skijoring. You'll need to clean up after your dogs no matter where you go, so bring a plastic bag for that purpose. A bowl and water to give your dogs a drink are necessities. And dog booties are an option to consider, especially if you go out in icy conditions.

Ultimately, the ability to get started in skijoring without a major investment is likely to bring more people into the sport of sled dog racing, says Sellentin. Murarik agrees, noting that skijorers often move on to sleds because they find that with sledding they spend more time upright and less time being dragged.

Sled dog clubs have a class

for skijoring races and joining a club is a very good way of getting started. Most local sled dog clubs can help with information and first-hand advice about skijoring, but you also may want to contact the North American Skijoring and Ski Pulk Association to learn more about the sport. (A *pulk* is a small sled; in Nordic-style mushing, the dog pulls the sled and the musher skis behind it.) Or obtain the book *Skijor with Your Dog* by Mari Hoe-Raitto and Carol Kaynor, OK Publishing, P.O. Box 84302, Fairbanks, Alaska. Suppliers of sled dog equipment also carry the book.

© WALT MARZ



Sean Hubbard (opposite page) drives his gig behind a team of dogs with tongues flying.

Skijoring in a snowless Mercer County Park could mean substituting in-line skates for cross-country skis.

see the town because we got there in the dark.”

Messinger, a native of Cape Cod, now trains with his team — led by an American Kennel Club Champion Siberian husky — on River Road along the Delaware River in the Kittatinny Ridge. “We’re always looking for trails and the trails are disappearing,” he says. “It’s all interconnected up there, with only a couple of spots where you have to go a few hundred yards on macadam.”

About 15 years ago, Messinger got involved in racing in the Northeast, although he did very little racing in New Jersey, opting instead for mid-distance in New England and Canada. He



© KATHY MURARIK

has raced about 30 times in the mid-distance range of 50 to 80 miles. He follows a circuit that starts with a race near Bradford, in northwest Pennsylvania, and moves on to races in the Pocono Mountains and upstate New York before going on to three races in Ontario and one each in Maine and New Hampshire.

“They run these races every year, depending on the weather. Most of the races were canceled last year,” Messinger says. “We’re all at the mercy of the snow.”

Messinger, 70, said he plans to return to sprint racing and will be working with the New Jersey Sled Dog Club this winter. “Having traveled in Labrador and having been to Alaska many times, I’m too old for distance racing. I’ve been out 18 hours and that’s as long as I want to go. It’s a test of man and beast,” he says.

## High Point Hopes

New Jersey, like most of the Northeast, saw very little snow last winter. It is a weather pattern all too common in recent years for most sled dog drivers’ tastes, says Kathy Murarik, president of the New Jersey Sled Dog Club.

“What’s happened to the weather over the past 25 years is that there has been little snow. In the late 1970s and early 1980s we got good snow that would stay on the ground for a while. We put on a race at the Newton Volunteer Firefighters Winter Carnival and it was the center of the carnival.”

But the unpredictability of snow made the sled dog race an iffy event for that area. So, the sled dog club moved up to High Point “because if there’s any point in New Jersey where you’re going to have snow, that’s it,” she says. The club has tried to hold races in the Catskills, but the logistics of transporting mushers and their teams to that region proved too difficult.

Kathy started racing 15 years ago. Her husband, Paul, is the more serious racer in the family and usually races sprints with a six-dog team. Their son, Christopher, races with two- or three-dog teams in the club’s junior class.

The Murariks have a kennel of 14 Alaskan and Siberian huskies. But you don’t need a full team of dogs to enjoy racing them over the snow.

“All you need is a dog harness and bicycle,” Kathy says. “It has to be a proper-fitting, sled-pulling harness. Or you can try skijoring, which is being pulled on cross-country skis. There is actually a class for that, for people who own just one or two dogs. It’s very popular in Europe and has gotten more popular in this country during the past five years.”

Sled dog racing is not a very expensive sport to get started in. Dog sleds run from \$300 to \$1,500 and are always hand-made. Mushers usually purchase them from any one of a number of mail-order outfitters.

“You can pick up used ones, but they’re few and far between,” she says. “The most expensive part is getting a dog sled and getting your dogs. Specialty dogs can cost \$3,000 each, but some people go to the pound and get nice running dogs.”

A gig, the three-wheeled cart used on sand trails, runs about the same cost as a pair of skis. Training gigs, made of steel, weigh a few hundred pounds but the aluminum racing gigs are much lighter — 75 to 100 pounds. A harness costs about \$20.

## The Critical Factor

The starting point for those new to the sport should be the dogs. “Get good quality dogs,” advises Messinger. “Don’t worry about the equipment as much as finding a good quality team. Check up on the people you’re buying dogs from. Get references. Then go and buy a training rig.”

Messinger, who has bred and trained all of his own dogs over the years and is an American Kennel Club-accredited judge for

Siberian huskies, advises newcomers to start training their dogs in late September when the temperature drops below 60 degrees and the humidity is low. "When it snows, get your sled," he says. "It's a good idea to join a club. They have a lot of different people and you'll get exposure to different breeds."

Breeding huskies with greyhounds and Quebec hounds is popular, especially among sprint racers. But Messinger is a purist and more than a bit cynical about some of the interbreeding. He says the offspring of Siberian Huskies and greyhounds tend to "look like furry greyhounds."

Paul Murarik and his team return to his truck after a run at High Point State Park (opposite page).

Kevin Schrader (below), of Hainesville (Sussex County), and his team of purebred Alaskan malamutes compete at Tug Hill, N.Y.



Once you have your equipment, and your dogs are ready to hit the trail, try mushing in various locations, on different surfaces and with different size teams. "You can do it on sand in South Jersey or drive three hours north for New England's snow," says Sellentin, who has traveled as far as Ontario to race.

"The sport has grown in a lot of ways," he says. "The awareness of it and number of participants have increased, mainly because of the exposure from the Iditarod. Here, we do sprint racing; that's more accessible to the average person. In Alaska, they can race with 16 or more dogs in a team. Here, you can use two or four."

While sled dog racing may not become a mainstream sport, it is more accessible than most people realize. And as people learn more about it, the sport may grow in New Jersey.

*Joe Cavaluzzi is a freelance writer living in South Belmar.*

## For Information on Sled Dog Racing . . .

■ **Kathy Murarik**  
**New Jersey Sled Dog Club**  
 68 Yacht Club Drive  
 Lake Hopatcong, NJ 07849  
 973/663-2164

■ **Betty Carhart**  
**Jersey Sands Dog Club**  
 53 Warner Road  
 Mount Holly, NJ 08060  
 609/267-7680

■ **Hetty Lindeboom**  
**Mid-Atlantic Sled Dog Racing Association**  
 P.O. Box 252  
 Port Republic, NJ 08241  
 609/965-7230

■ **Bev Donovan**  
**Pennsylvania Sled Dog Club, Inc.**  
 38 Bentley Road  
 Kingsbury, NY 12839  
**Website:** <http://users.nbn.net/~jbross>

■ **New England Sled Dog Club (NESDC)**  
 15 Bonner Road  
 Meredith, NH 03253  
 603/279-5063  
**E-mail:** [hplaste@cli-usa.com](mailto:hplaste@cli-usa.com)  
**Website:** <http://www.cli-usa.com/nescd/home.htm>

■ **International Sled Dog Racing Association (ISDRA)**  
 HC 86 Box 3380  
 Merrifield, MN, 56465  
**Website:** <http://uslink.net/~isdra>

## For Information on Skijoring . . .

■ **North American Skijoring and Ski Pulk Association**  
 P.O. Box 240573  
 Anchorage, AK 99524  
 907/349-WOOF

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Water glistens as some of Whitesbog's winter visitors take to the air.





# Whitesbog's Winter Visitors

Story © by Charlotte P. Himer • Photos © by Fred Cantor

The winter sun, no longer obscured by the grey cloud scuttling across the sky, illuminates the flock of white birds sitting in the icy waters of a flooded bog.

Startled by the sounds and movements of children, the avian clique takes wing. The only human sound heard now is a soft, indrawn *Ahhh*, followed by a whispered, "Aren't they beautiful!"

The foregoing is not an uncommon scenario at Whitesbog, according to Martha Windisch, a naturalist with the Whitesbog Preservation Trust.

"Visitors to Whitesbog are very lucky," she says. "Each winter, from November to early March, they may view at close range the beautiful tundra swan, also known as the whistling swan, which migrates to cranberry bogs in the Pine Barrens, such as Whitesbog."

"It's not even so much the beauty of the individual swan as it is the splendor of the scene," adds naturalist Len Little. "There's not much going on in nature at this time of year, and to see this flock of large white birds in a wintery setting — you think you're on an Alaskan tundra."

Originally a large and successful cranberry farm and the place where the first blueberry crop was cultivated, Whitesbog

comprises more than 3,000 acres of both abandoned and cultivated cranberry bogs. These bogs provide the swans with the roots of weeds and vines that they need for the major part of their diet.

The whistling swan gets its name from the sound it makes: a mellow, high-pitched cooing. Its *woo-hoo*, *woo-woo*, *woo-hoo* can often be heard long before the ribbon-like airborne flock can be spotted. The species' other name, tundra swan, comes from the location of its summer home, the Arctic. They breed in the tundra from the Arctic coast south to the Alaska Peninsula and the barren ground of Canada. The swans migrate in the winter to the seaboard of the eastern and western United States.

Whistling swans form pairs in the fall and remain together in a long-term bond. Len Little, a teacher and naturalist who gives tours at Whitesbog, has seen examples of this kinship. When a mate is missing, the other bird will fly wildly about, searching for it. If one of the pair dies, the other may become completely disoriented.

The male, called the cob, chooses the nesting site, which is an elevated hummock of grass and moss. The cob helps incubate the clutch of 4-6 eggs and also

helps raise the young, called cygnets. The cygnets emerge short necked and thickly covered with gray down. They are capable of running and swimming a few hours after hatching. They lose both their mottled gray or brown plumage and their first home when they mature at one year of age. They don't breed, however until they're in their third or fourth year.

Whistling swans feed mainly on aquatic vegetation and the roots of the weeds and plants. They also eat grass, freshwater invertebrates and insects. The Pine Barrens of New Jersey provide red root, a weed that grows in the cranberry bogs. The swans' feeding on this weed would be helpful to the farmers except

that, in their haste to get the red root, the swans also pull up the cranberry vines. In the cultivated bogs, farmers shoot off propane cannons every few minutes to try to get the swans away from the cranberry plants. The swans do move but often return to feed at night.

If the bogs freeze, the swans usually will leave for other places where there is open water — south to the Delaware Bay or east to the coast. As soon as Whitesbog's water thaws, they will return. However, they have been seen sitting on the ice until it thaws, sometimes for a week at a time. The naturalists believe the swans live off their body fat while they remain on the frozen water.

Recently, whistling swans have been

increasing in numbers. "In 1973, when I started keeping records, only three swans wintered at Whitesbog," says Len Little. "More than 1,000 swans visited Burlington County's cranberry bogs last year, with approximately 375 of them staying in Whitesbog. The average over the past few years has been in excess of 200, but I've seen as many as 500 at a time."

The whistling swan is one of two swan species found on the east coast of the United States. The other, the mute swan, does not make a distinctive sound — just a blunt noise.

Considered a pest in coastal communities, the mute swan breeds in New Jersey and has become well established in



the wild. The mute swan is the ornamental park variety that swims with its neck in an S-curve, while the whistling swan swims with its neck straight up. The mute swan has an orange bill with a large black knot on top; the whistling swan's bill is black with a yellow basal knot. Unlike whistling swans, young mute swans often ride on their parents' backs.

Swans are docile and will move away from intruders. However, they will defend their young against large animal predators. The swans have a hook or knot on their wings which they can use to whack an attacker. Weighing 30 to 35 pounds, with a wing span of five to six feet, they are very strong. They are one of the highest flying birds and have been seen flying over the Himalaya Mountains — in fact, airplane pilots have observed them at altitudes of 10,000 feet! They fly at an average speed of 35 to 40 mph and take advantage of the prevailing winds to keep moving.

## Home with a History

Whitesbog Village has an interesting history that goes back to 1857 when Colonel James Fenwick purchased a large tract of land for an experimental cranberry farm. A similar venture was begun in nearby New Lisbon in the 1860s by Joseph Josiah White, who later married Colonel Fenwick's daughter, Mary. After her father's death, Mary and her husband took over the Whitesbog farm and, during the early 1900s, developed it into the largest cranberry farm in New Jersey.

The cranberries were picked by hand, so field workers — mostly Italian immigrants who came with their families — were brought in to harvest them. Housing was built for them; a general store sold supplies; and medical care was provided. Most of Whitesbog Village's buildings remain and are being protected and restored by the Whitesbog Preservation Trust.

Among the highest flying of birds, swans have been observed at altitudes of 10,000 feet.

The inside of the general store is being restored to its original appearance.

It is here that Rowan University conducts environmental education classes for children. An interesting part of this hands-on learning is picking cranberries in the historic bogs using traditional harvesting methods. The students, dressed in hip boots, go into the flooded bogs and gather the cranberries by hand.

Elizabeth White, the oldest daughter of Josiah White, began working on her father's farm in 1893. She spent much of her life at Whitesbog and collaborated with Dr. Fredrick Coville, of the U.S. Department of Agriculture, to improve the wild blueberry. By 1916, experimenting with blueberry bushes supplied by local woodsmen, they succeeded in cultivating several large and plump varieties of blueberries. The blueberry fields at Whitesbog are now abandoned, but the visitor can find cultivated bushes with plump, sweet berries.

Today Whitesbog is administered by the New Jersey Department of Environmental Protection as part of Lebanon State Forest. The Whitesbog Preservation Trust is a non-profit organization dedicated to the preservation of Whitesbog Village. The Trust sponsors building restoration projects, weekend nature walks and ecological interpretation programs, including, for the past five years, a February whistling swan tour.

In 1997, there were 38 visitors on the tour, who came from Pennsylvania, Red Bank, Princeton, Hamilton and other parts of New Jersey. "They weren't professional environmentalists — just people who love animals and nature," says Windisch, who has scheduled the swan tours for the past four years.

Despite cold, dampness and even snow, the tour is well worth the trip. It takes visitors along sand-covered roads to inactive bogs where the cranberries grow between weeds. Several reservoirs throughout Whitesbog hold water which is released through wooden gates to flood the bogs in the winter. The swans visiting the bogs can be seen from the roads.

In 1998, the event will be held on Saturday, February 14, with tours beginning at 10 a.m. and noon.

The New Jersey Turnpike is the major highway leading to Whitesbog. From Exit 7 (Bordentown), follow Route 206 South to Route 530 East (approximately 10 miles). Drive approximately 12 miles on Route 530, to mile marker 13, which marks the entrance to Whitesbog Village. Then get ready for a fascinating walk through nature's sandy animal and bird sanctuary.

*Charlotte P. Himber, who lives in Cranbury, is a first-time contributor to **New Jersey Outdoors**.*



Naturalist Martha Windisch, at Whitesbog.

Despite cold, dampness and even snow, the tour is well worth the trip.



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# Trappers: Our Modern-Day Mountain Men

by Oliver Shapiro

Fur forms, or stretchers, are used for holding treated and cleaned skins for drying. Pictured above are the forms for raccoon (longest), mink (middle) and muskrat (shortest).

Morning, early winter. A lone figure, clad in heavy clothes and hip-high boots, is standing thigh-deep in a stream. Snow lines the banks, and the man's breath comes forth in periodic clouds. Each puff lingers for just a moment before wafting gently away on the all-but-nonexistent breeze. The darkness is just giving way to some silver and gold on the eastern horizon, and the stillness of the surrounding woods is tranquil, almost reassuring.

The man is a trapper, plying his trade even as his forebears have done for hundreds of years.

This picture might be interpreted as one lifted from a 17th century setting, but it could just as easily describe a scene in New Jersey today. While the activities of trappers bear much resemblance to their counterparts of yesterday, there are a number of significant differences. And, although trapping has always been an important wildlife management tool, its need now may actually be more important than ever before.

Many people today picture fur trappers as the stereotypical "mountain men" who lived a life of isolation and primitive struggle. Wrestling a living from the elements, braving nature's conditions as they were encountered, relying on a keen instinct for survival, and depending on the profits from their valuable furs to pay for new equipment and ammunition, these men were considered the epitome of rugged individualism.

They still are.

Of all the "classical" outdoors activities — hunting, fishing, and trapping — the latter requires a time commitment that fewer and fewer people today are able to muster. Thorough knowledge of target species' habits, constant surveillance for the animals' movements, painstaking attention to equipment functioning, intimate familiarity with current regulations and wildlife management theory, and a willingness to dedicate time on a daily basis are all requirements for the successful trapper.

Although the trapping season itself is limited (November 15 to March 15 in the North Zone, — the dividing line runs along Route 1 from the NJ-PA border to Route 287, then east along Route 287 to the NJ-NY border — and December 1 to March 15 in the South Zone), a serious trapper is busy with his pastime throughout the year. "During the off season," says Jim DeStephano, vice president of the New Jersey Trappers Association, "there are areas to be scouted, landowners to approach for permission, traps to be cleaned and prepared, baits to obtain . . . It never stops."

## Work for All Seasons

"A successful trapper is working 12 months out of the year," echoes John Shamro, a full-time trapper who serves as the association's delegate to the N.J. State Federation of Sportsmen's Clubs. "After the end of the season in March, there are the fur sales and auctions, and then it takes a few months to clean and prepare all the equipment. By June, new traps are made, old ones are repaired, and all of them are dyed. By August, traps are all ready and it's time to start collecting bait and scouting out areas for the autumn. For me, it's not a sport; it's a way of life."

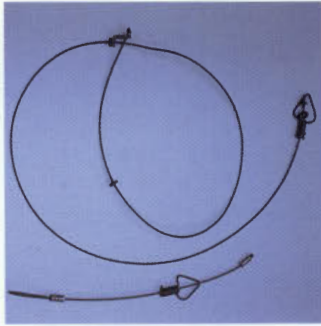


Frank Ridgway, pictured here, traps muskrats on the nearby Delaware River.

“For me,  
it’s not  
a sport;  
it’s a way  
of life.”

— John Shamro

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© MARY O'CONNOR



New Jersey trappers are required to complete an additional education course before they may use these snares (above left).

Ridgway, of Elsinboro (Salem County), moves along the Delaware to check his traps (above right).

A typical day on the trapline will vary from one practitioner to another, and will depend on the species being targeted. Land mammals such as fox, coyote, raccoon, skunk, weasel and opossum will, of course, be pursued in dry land environments using snares or wire cages (box-style live traps). Muskrat, mink, otter, beaver and other aquatic mammals will be sought in wet or marshy areas, using divers, conibear traps, or underwater snares in some cases. Beaver and otter are protected by seasonal limits — five beaver per season, and one otter per season — and additional permits are required.

Unlike hunting or fishing, it isn't necessary to up at or before dawn, but many trappers will be up early nevertheless, depending on the extent of their trapline. Those like Shamro, who may have as many as 150 traps to attend (state law requires that traps be checked at least once every 24 hours), may be out in the field for as long as 10 hours. Even those with only a dozen or so traps to attend may be up early, in order to finish this activity before getting to their "regular" day job. Those traps that have been disturbed, or perhaps tripped without any animal to show for it, may need readjustment; any animals obtained need to be collected.

At the end of the run, another facet of the work begins in earnest: preparation of the pelts. Even before the skins are isolated, the fur must be cleaned as much as possible, and this can include multiple steps. It might be necessary to treat the skin with an insecticide (often true with fox, coyote and raccoons); thorough brushing is also generally necessary. In some cases, particularly if the animal is especially dirty or muddy, a complete washing is indicated.

After the animal has been sufficiently prepared, the skin is then removed, and excess tissue and fat are removed from the interior. It's important during this stage to have the exterior fur scrupulously clean, according to DeStephano, because any bumps or imperfections on the skin's exterior will interfere with proper "fleshing" activities. When this is done, the skin is then mounted on a fur form, sometimes called a stretcher, to keep the skin's shape and size intact while it dries.

## You Have to Love It

Are the rewards worth it? That depends on how one measures the rewards. On a strictly monetary basis, it's somewhat debatable. The market for wild furs has been a veritable roller coaster over the past fifty years. Trapper Wesley Smith (real name withheld by request) recalls the days he started trapping, during the early 1940s. The war was on, and the government was paying good money for muskrat furs: \$2.75 apiece. A good mink fur could be sold for \$90, and a prime beaver pelt for \$75. Compare that to today, when a good muskrat will fetch between 3 and 5 dollars, mink \$10, and beaver \$25. And during the interim years, muskrats have sometimes sold for as little as 25 cents apiece.

Although fur markets have been problematic in recent years — and the European demand has fallen off tremendously — there are signs that quality fur is still in demand. Bob Hooper, an accomplished fur trapper and nuisance control professional, says that other international markets have come along to replace the Western ones recently lost. Former Iron Curtain nations like Russia and Germany have shown some interest in these resources, and Asian and Greek



For Frank Ridgway, like other trappers, checking and resetting a trap is a daily chore.

© MARY O'CONNOR

markets have increased in strength over the past decade or so as well. The trend of trapping license sales typically follows the strength of the fur market (see sidebar).

Besides the volatility of the fur market, another event came along which hit the trapping fraternity hard — namely, the 1984 state ban on the use or possession of leghold traps. This single event had a profound effect on New Jersey's trappers. "Lots of guys were very knowledgeable on the use of these traps," observes Hooper, "and when legholds were banned they couldn't adapt to the use of other types. We saw a significant decrease in trapping just as a result of that."

Those who were willing to stick it out were forced to become more efficient at the remaining styles of traps available. Hooper was one of those prepared to deal seriously with snare-related techniques, and has found that, although leghold traps will work in many situations where snares won't, the opposite is also true. His overall success rate is now comparable to what it used to be before the 1984 ban.

### Habitat Loss Has Many Consequences

Other factors have conspired to diminish trapping's attraction. Shamro and Smith agree that habitat loss in the Garden State is the number one reason for the decline in trapping. "It's hard for a kid to get started, because there's so little open (lands available)," Shamro points out. "If New Jersey was like it used to be during the '60s, it would be a lot easier."

Beside cutting down on the land space available, habitat loss has had other effects. "You've got two or three things going on at once," points out Smith. "First, the loss of habitat makes it harder to find trapping grounds. It also concentrates the animals on those areas remaining. So, you've got the loss of people trapping, the resulting rise in animal populations, and the subsequent overcrowding of animals on the habitat that's left."

Ask these people if this has had an adverse effect on the animal populations themselves, and you'll get a unanimous answer.

"It's had a tremendous impact," says Hooper.

DeStefano adds, "When there's a reduced density of animals, if an individual gets infected, there is less of a chance of transmission. But when fur harvests drop, you have the opposite effect. Rabies and distemper take off, because the animals are in such close proximity to each other that they give each other diseases very easily."

### Trapping Licenses Sold, 1973-1997

Year	Licenses Sold
1973	2888
1974	3185
1975	3468
1976	3526
1977	4189
1978	4227
1979	4322
1980	4047
1981	3482
1982	2843
1983	2201
1984	1874
1985	1450
1986	1143
1987	1267
1988	1143
1989	768
1990	526
1991	458
1992	498
1993	438
1994	453
1995	539
1996	475
1997	453

(as of 9/4/97)

Statistics provided by the Division of Fish, Game and Wildlife

More and more, trappers are spending part of their time in the nuisance control business.

Oliver Shapiro is a freelance writer, living in Passaic, whose work has appeared in previous issues of *New Jersey Outdoors*.

“By all means, there are problems,” concurs Shamro. Animals can only coexist near human habitations up to a certain point before they begin to interfere with human activities or overpopulate beyond the area’s ability to support them properly.

“If I go into a new area to trap fox, I might get a dozen in the first season, and nine of them will be so sick that they’re almost unrecognizable. The next year, I might take eight or nine, and a few of them will be sick like that. Finally, in succeeding years, I’ll see four or five each season, and they all seem healthy.”

“People like to watch foxes,” he added, “until they become a nuisance or until they become sick. Then, they want them removed.” Besides distemper, trappers are also seeing mange in both fox and coyote populations.

Disease isn’t the only adverse effect these pockets of animal overpopulation can cause. Beaver are one of the few animals that can bring about direct, immediate changes to local environments, and when their numbers are unchecked, the number of beaver-related damage reports and complaints increase dramatically. Hooper reports that one trapper in Warren County who deals with beaver damage receives more than 200 complaints in a year because of these industrious rodents. Habitat destruction and flooding are some of the effects that can result. And, unfortunately, trapping by itself may not bring about an end to the problem — if the complainant requests that the offending animals be live-trapped and transported to a different locale, the question arises: to where? Few locations are available in our fair state where such relocated animals won’t have the potential to disturb other residents.

### “Why” May Change, But Challenge Remains

Yet, despite all these issues plaguing today’s trapper, most of them won’t give it up until they’re forced to. The challenge and constant interest inherent in the practice keep most of them going, despite the reduction of fiscal remuneration. “I give the same attention to each muskrat pelt that I handle,” says Hooper, “whether I’ll get five dollars for it or 25 cents. I enjoy the activity.”

Hooper is typical among dedicated trappers in being devoted to all of the sport’s aspects. For instance, whereas some less-committed hobbyists may get by treating their traps with a new synthetic dip that protects, dyes and coats the metal, Hooper and others instead opt for the more traditional — and, some claim, more reliable — methods of dyeing the traps with natural substances like black walnut hulls, and then waxing each trap.

As the landscape and its inhabitants — both human and animal — evolve, so does trapping itself. More and more, trappers are spending part of their time in the nuisance control business. Some do it as favors for their neighbors; others make a business sideline out of it. Smith recalls one instance in which a neighbor called on him for help, and when Smith looked at the situation he saw that some muskrats had chewed holes in the homeowner’s \$1,000 swimming pool cover and then established not one, but two muskrat houses in the pool.

Some see this evolution as the final stage of trapping. “I don’t see trapping going away,” says DeStephano. “It’s such a challenging sport. But more and more trappers will drift into animal damage-related work.” Others agree that trapping, although well past its heyday of 20 or more years ago, will continue to be around in some form or another for the foreseeable future.

But, according to Shamro, “it looks grim. So many people are trying to stop us. The Europeans are almost insisting on removing all leghold traps (still legal in most of the United States), and fur is less fashionable. Few people in America seem to be willing to see how much use a good fur can be. And face it — people just don’t need warm clothes anymore. They go from their heated homes to their heated cars to their heated offices, and back again. Those in other (less developed) countries still appreciate the value of fur, and are willing to purchase it.”

Even if the fur market doesn’t provide an economic future for these modern-day mountain men, it’s becoming increasingly apparent that their skills are becoming more, rather than less, important. As animal populations continue to be crowded into smaller and smaller pockets, and closer to human dwellings, trapping provides one of the few reasonable alternatives to keeping the populations healthy. Only then can the land’s human and native inhabitants coexist in the harmony that we seek.

# Indian King Tavern: Birthplace of a State



A Delaware Valley landmark, Haddonfield's Indian King Tavern will celebrate its 250th anniversary in the year 2000.

Story and photos © by Hoag Levins

What a spectacle it must have been, that evacuation of British forces from Philadelphia in 1778. If they made a movie today, a helicopter camera hovering high above Haddonfield would be needed to capture the epic expanse of it all. But then, those were epic times.

That winter had been a standoff. Confident after seizing New York and its strategic harbor, British commander-in-chief William Howe moved south to occupy Philadelphia, using its homes and government buildings to quarter his troops in the finest style wholesale pillage could afford. Meanwhile, his opponent, George Washington, encamped an exhausted and disheartened army in the bleak hills of Valley Forge, 20 miles west of the city.

But by spring, the realities of the Revolutionary War suddenly changed. Washington's army, newly drilled in the disciplines of large-scale European military engagement, was breaking camp and moving east with a new sense of determination.

More importantly, the French had signed a treaty with the fledgling Continental government, agreeing to provide Washington with military assistance and dispatching a battle fleet toward the American coast.

Afraid those French war ships might blockade the Delaware River and trap them in Philadelphia, British forces began a hasty evacuation of the city, setting out on an overland trek toward their secure fortifications in New York. Crossing in clumsy boats to the eastern shore of the river, they trudged along the King's Road and into the heavily-forested hinterland of southern New Jersey.

That ragged column of 13,000 British and Hessian soldiers, along with several thousand prostitutes, loyalist collaborators, servants, scavengers and other assorted hangers-on, ultimately stretched more than 50 miles end to end. About twelve miles out, the horde tramped past the Indian King Tavern at the cen-

ter of the village of Haddonfield. The windows, doorway and front steps of that three-story inn, eatery and social center were crammed with locals watching the incredible procession.

One written reminiscence describes how “the army was four days and nights in passing through the town. Bakeries, laundries, hospitals, and smith shops were on wheels, as well as boats, bridges, magazines, and medicine chests. The female camp followers were the greatest annoyance to the residents of the place. They would enter dwellings and premises of the people, carry off such things as they might select, and if interfered with, would insult the owners by lewd conduct and obscene language. Being outside of military control, with little protection to be had from the officers in command, the camp followers appeared a lawless and repulsive feature of the army. Cattle had to be driven to secret places. Ware and breakable furniture were generally buried in the ground, and everything eatable carefully kept out of sight ...”

## A Military Crossroad

It wasn't the first time the British army — or the chaos of the war — had enveloped Haddonfield or the Indian King. In fact, the town was a crossroads for battles waged between Washington's skirmishers and Howe's Hessian dragoons for control of the stores of grain, livestock and other provisions throughout this “bread basket” farming region. The previous fall, 1,200 Hessians had used Haddonfield as a headquarters for their disastrous attack on Washington's river fortifications at Red Bank. After being repulsed, the wounded and dying German mercenaries retreated to Haddonfield, trailing blood across the cold stones in front of the Indian King as they straggled toward a makeshift hospital in the nearby Quaker meeting house.

Alternately, the Continental Army had taken over the village, with generals like “Mad” Anthony Wayne and the Marquis de Lafayette clapping up and down the same stones of the King's Road, rallying their own masses of troops.

Today, when groups of Revolutionary-era military re-enactors mass along that same King's Highway as part of Haddonfield's many parades, or gather in front of the Indian King as part of that museum's ongoing historical programs, there is something particularly poignant about the scene. Perhaps the feeling has something to do with the authenticity of it all.

The Indian King Tavern is rare because it is the real thing. Unlike other colonial tavern attractions such as Philadelphia's City Tavern or those of Williamsburg, Virginia, it is not a reconstruction. It is the original building twenty-two decades later. If one could probe deep enough with delicate instruments into the timbers and bricks and mortar here, he could find actual chemical traces of the ale and blood and sweat and gunpowder spilled in these rooms more than two centuries ago as the people of New Jersey played a major role in the creation of an independent state as well as a new nation.



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Unlike other colonial tavern attractions it is not a reconstruction. It is the original building twenty-two decades later.

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## Heritage Honored

The Indian King Tavern Museum is a state historic site that seeks to create the atmosphere of a typical colonial tavern, although it does not serve food. Operated by the New Jersey Department of Environmental Protection's Division of Parks and Forestry, it is the centerpiece of an equally historic Camden County borough whose main street is dominated by a rare collection of 18th- and 19th-century buildings.

Settled by Europeans more than 300 years ago, Haddonfield is one of North America's oldest towns, having been established by associates of William Penn. Now a major legal center for the southern half of the state, it houses the offices of more than 390 attorneys.

Famed for one of the state's most aggressive historic preservation programs, the town center still has the feel of a cozy, old-world village. A stroll from the front door of the Indian King



Military re-enactors (opposite page), massing in Haddonfield for one of the town's many parades and festivals, gather on the steps of the Indian King Tavern.

The main dining room's new furnishings (above) give visitors a sense of what the room was like when officers of both the Continental and British armies dined here during the Revolutionary War.

The basement (left) of the Indian King Tavern is believed to have been used as a convenient, temporary jail by both sides during the Revolution.



takes a visitor along herringbone brick walkways past antique centers, flower shops, clothing boutiques, an English tea room with lace curtains and Wedgewood place settings, several gourmet coffee shops and two dozen small restaurants offering everything from Greek to Vietnamese specialties.

Known for its pageantry, Haddonfield annually hosts the region's largest Fourth of July parade and regularly sponsors weekend festivals that alternately turn a mile of Kings Highway into an outdoor mall of vintage automobiles, antique shows, classical symphony concerts, marching Revolutionary and Civil War military re-enactors, and high-quality crafts fairs. The high-school band, "The Colonials," dresses its members in the tricorne hats and uniforms of 18th-century soldiers, thus infusing even football pep rallies with the flavor of a historical celebration.

"When it comes to civic pride and the appreciation of things historic, it doesn't get much better than the people of Haddonfield," says Bill Mason, the "innkeeper" of the Indian

King. He can often be spotted meandering through the mid-day lunch crowds in the Ben Franklin spectacles, leather apron, gray breeches and buckle shoes typical of a colonial citizen. Officially, he is a historic preservation specialist and employee of the Division of Parks and Forestry.

A life-long area resident, Mason is widely credited with rekindling local interest in, and support for, the Indian King Tavern at a time in the early 1990s when it was on the brink of being closed. He is also the driving force behind the campaign to officially recognize and formally celebrate the 250th anniversary of the Indian King Tavern in the year 2000.

A private, self-effacing man, Mason waves away such praise as preposterous: "Look, I get paid to lead tours and talk to people about historical events that have always interested me. The folks who really make all this happen are the volunteers who give their time, money and skills all year long. They're the ones who should be interviewed for this article, not me."

Twice a year, when he is given a full page in a local borough newspaper for any type of tavern promotion he wants to publish, Mason fills the space with the names and individual stories of the dozens of volunteers and donors who have helped the tavern museum remain operational.

The Indian King now hosts more than 4,000 visitors each year. It often has impromptu demonstrations of colonial crafts such as spinning and weaving. During the Christmas season, in tavern rooms festooned with holly and pine, musicians entertain visitors with performances of period music played on traditional harps, dulcimers, flutes and fiddles. The tavern also boasts the largest World Wide Web site of any New Jersey historical institution.

Perhaps most incredibly, Mason, working just with volunteers and contributions has, over the last three years, filled the once-empty rooms of the building with the furniture and accouterments of an 18th-century tavern. His plan is to have the interior of the three-story structure completely restored in time for the 250th anniversary celebration — an event that has as much significance for the state as it does for the small town of Haddonfield.

## A State Is Born

In the winter of 1776-77, following the Continental Congress' approval of the Declaration of Independence, legislatures in each of the thirteen colonies were required to meet to formally establish their own sovereignty within that new union. But, in Trenton, this proved difficult as the northern half of New Jersey was engulfed in some of the largest battles then being fought between the Continental and British armies.

New Jersey's leading politicians deserted the capital, heading south by horse, wagon and on foot in search of a more secure location. They ended up in what had long been a rural hub of commerce and travel in the southern half of the colony: Haddonfield. Roads converged on its center from all points and, of necessity, it had five tavern houses, including the Indian King. Not only was the Indian King the largest such establishment, it also had the area's largest non-church meeting hall. It temporarily became the capital.

It was here, in that second-floor meeting room of the Indian King, that the Declaration of Independence was formally read into the minutes of the New Jersey Assembly. It was also here, with great oratory and compromise, that the reconvened legislature debated and adopted the Great Seal of New Jersey; here, in the flickering glow of candles and hearth embers, that the status of "colony" was officially abandoned; here, enveloped from below by the odors of warm mutton, strong ale and fresh tobacco, that the State of New Jersey was legally created.

Those 1777 events alone make the Indian King one of the most historically significant buildings in the entire state — a fact that was officially recognized in 1903 when the tavern was selected to be New Jersey's first officially-designated state historic site.



William Mason, a state historic preservation specialist, manages the Indian King Tavern and leads tours of the building dressed in the period garb of a colonial innkeeper (opposite page).

Museum manager William Mason (above) displays some of the finished and nearly-finished reproductions of typical colonial tavern furnishings being crafted by local volunteers.



## Where There's a Will . . .

"The Indian King is a really important site," explained William D. Brookover, the chief historical architect of the Philadelphia Independence National Historical Park. "I remember years ago when I first went there, I got a strong feeling as I moved through the rooms. Lots of the parts of the building are original — the sashes, the doors, a lot of trim, the floors. It was one of those experiences that gives you a chill, knowing that people were here in these same spaces 200 years ago, doing things that we're still talking about today."

Like most other state-operated historic sites, the Indian King Tavern has long been strapped for money and unable to carry out many of the interior restoration projects originally envisioned by its supporters earlier in the century. In fact, during its first 85 years as a state museum, the building's major rooms remained either empty or full of modern furniture because there

was no budget to purchase the authentic period pieces that would have been in place during colonial times.

Over the years, local groups made repeated efforts to raise funds for the Indian King's interior restoration, but had little success.

"When I arrived in 1992," said Mason, "school classes would come in for tours but there was almost nothing here. Today's kids are very visual, and I was walking them through totally empty rooms trying to get them to understand what life was like here during the time of the Revolution. At first, I didn't know what else to do, so I had them sit on the floor in the empty dining room as I tried to tell them how food was cooked and served in the 18th century. But all I had were words, their imaginations and all these smooth floor boards we were sitting on. It was frustrating."

"The teachers were disappointed, too. Very polite, but they'd say, 'Gee, it's a shame there aren't at least some artifacts the kids could handle and pass around or look at' so



In this room (opposite page), the status of New Jersey was legally changed from that of a colony to that of a free state in an independent union.

Period benches and tables near completion in one of the tavern's side dining rooms (above).

The Indian King also has gathered a collection of original antiques — such as the plate, tankard and silverware shown at right — routinely used in taverns of the time.

they could visualize what I was talking about," he said. "That was really the beginning. I felt I had to do something, but I didn't have any money to pay for anything."

Mason first approached various area groups that maintain collections of 18th-century furniture. None were interested in letting him use pieces from their valuable collections.

Then, at a time when TV programs like "This Old House" were generating new levels of enthusiasm for do-it-yourself woodworking, he thought about trying to find someone who could build reproductions of furniture and tavern artifacts. He wrote letters to the local newspapers and TV stations. One of those stations — Philadelphia's Channel 6 — sent a crew to do a local color feature. Standing before the camera in a barren tavern room, Mason explained why he wanted to find a few volunteer craftsman. To his amazement, twenty-three carpenters, cabinetmakers and a blacksmith responded to those brief TV and newspaper stories. Those volunteers were the start of the Indian King Tavern Craftsmen's Guild.

### A Treasure Trove

But while the idea was to have authentic furniture for the tavern, there were no records of what the building actually contained in the 1770s. Using his own money and time, Mason began a research project to document the typical kinds of furniture that would have been used in period taverns. He studied and photographed the interior furnishings and pored through the ar-



chives of other restored colonial taverns, such as Fraunce's Tavern in Manhattan, City Tavern of Philadelphia, Gadsby's Tavern in Alexandria, Va., and — the mother lode of tavern specifications — the Internal Furnishings Department library of the Colonial Williamsburg Foundation.

As part of its own efforts to precisely document the architecture and artifacts of colonial life, Williamsburg's research department has amassed a huge collection of colonial tavern lore, including tavern inventory records, period manuscripts describing the operation and furnishings of taverns, drawings, archeological analyses and reports, and other resources.

"The Williamsburg people were incredibly helpful," said Mason. "They took me through their own taverns and let me take photos in places you normally can't, and they gave me access to their 'tavern library'— it was an amazing collection."

Using data from the various sources, Mason developed construction drawings for the typical chairs, benches, gaming tables, dining tables, porridge tables, candle holders and ratchet stands, clay pipe racks, chests, cabinets and other items routinely found in colonial-era taverns.

## Labors of Love

Haddonfield resident John Morris was one of the first craftsmen to volunteer. Director of a local office of cardiovascular physicians, he has long been an avid woodworker in his spare time. He remembers the volunteers' first meetings with Mason. "Nobody knew what to expect," he said, "but everyone there enjoyed history and their craft and Mason brought those two things together in a new way. He got us all caught up in his sense that the children visiting the Indian King deserved a better historical experience."

"He knew exactly what he wanted to accomplish and what

## If You Want to Visit . . .

**The Indian King Tavern Museum hours are:**

- Saturday — 10 a.m. to noon; 1 to 4 p.m.
- Sunday — 1 to 4 p.m.
- Wednesday through Friday — 9 a.m. to noon; 1 to 4 p.m.

**Special provisions can be made for tour groups.**

**For additional information contact:**

- William Mason  
Historic Preservation Specialist  
Indian King Tavern Museum  
233 Kings Highway East  
Haddonfield, NJ 08033  
609/429-6792

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Now armed with construction plans as well as a corps of volunteer carpenters and cabinetmakers, Mason still lacked a critical ingredient: wood.

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pieces of furniture were needed in every room," recalled Morris. "In the end, I think the group got fired up with the idea that this tavern is a community treasure, and excited about how neat it would be for each of us to use our skills to really bring it back to life."

Now armed with construction plans as well as a corps of volunteer carpenters and cabinetmakers, Mason still lacked a critical ingredient: wood. So he went, hat in hand, to see Thomas Baird, owner of the nearby Haddonfield Lumber Company.

"I told him my idea was to furnish the whole Indian King. He asked 'How big is it?' When I said 8,500 square feet, he gasped. But then he agreed to supply all the lumber the carpenters would need."

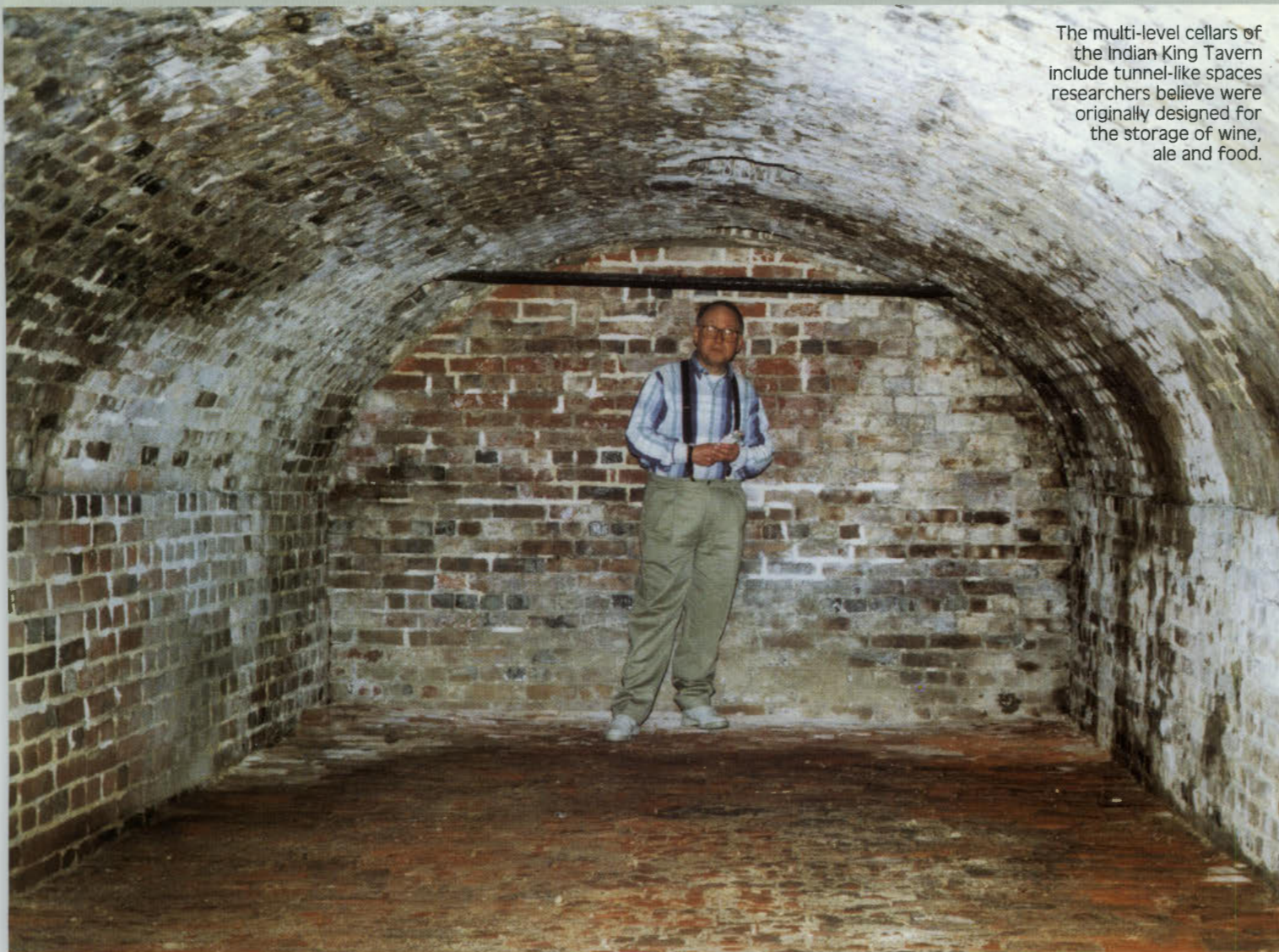
To date, Baird's company has quietly provided more than \$10,000 worth of oak, cherry, walnut, poplar and pine that has been transformed into furniture by the Indian King's volunteer craftsmen. Meanwhile, a blacksmith has turned out the authentic, hand-made hinges, knobs, latches, lanterns, "tavern puzzles" and other bric-a-brac used in a colonial eating establishment.

In just one of the dining rooms, there are four gateleg tables and 19 Windsor chairs. "We're still missing a few things — the bar itself is still in the works and there's a round drinking table coming for the bar room," said Mason. "But the furniture building phase is almost done. Now the volunteers are doing the finishing, painting, distressing and detail work on all the items."

The end result is a colonial tavern interior that actually looks and feels like one. "Some of the people who take the tour, and who were here years ago, are really surprised to see how it looks now," said Mason.

*Hoag Levins, a life-long resident of the Haddonfield area and creator of the Indian King Tavern Web site (<http://www.levins.com/tavern.html>), is an editor with the Editor & Publisher magazine company in New York City.*

The multi-level cellars of the Indian King Tavern include tunnel-like spaces researchers believe were originally designed for the storage of wine, ale and food.



## Origin of the Inn

Commissioned by wealthy Philadelphia Quaker merchant, Mathias Aspden, construction of the building that would later be called the Indian King Tavern was completed in 1750. The new inn in the crossroads hamlet of

Haddonfield was designed to profit from the increasing flow of travelers passing between Philadelphia and southern New Jersey's far-flung farming communities, craftsmen villages, logging camps, fishing outposts, bog iron foundries and Pine Barrens river landings.

In 1775, before abandoning the rebellious colonies for England, Aspden's son, a

staunch supporter of the Crown, sold the tavern to local Haddonfield merchant Thomas Redman. Redman also was a clerk of the local Friends Meeting. In January 1777, as a result of his pacifist readings in the Meeting House, Redman was charged with seditious acts, arrested at his tavern by an officer of the Continental Army, and consigned to jail in Woodbury,

then the county seat.

Following his release that spring, Redman sold the building to Hugh Creighton, who operated a smaller tavern nearby on the King's Road. As he took over, Creighton also transferred the landmark name from his smaller establishment to his new one, making the largest tavern in Haddonfield the "Indian King."

# A Man of Many Talents

by Christine Krupka

Gardening and armed robbery don't go together in most people's minds, but at Rutgers University, they are a match made in heaven. Just ask butterfly expert Rick Mikula, who worked with young lawbreakers through the Cook College Office of Continuing Professional Education (OCPE) and the New Jersey Juvenile Justice Commission.

The Careers in the Green Industry program was created in 1991 to bring intensive training in environmental, animal studies and horticultural job skills to young people sentenced to juvenile correctional facilities throughout New Jersey. From 1992 until 1996, Mikula's Butterflies and Entomology course brought an array of urban youths — convicted of everything from car theft to assault with a deadly weapon — into close contact with a world of nature that most had never seen before, emphasizing the practical skills needed to start a small butterfly-raising business. (A related program was also presented for "at-risk" youth from economically disadvantaged households in New Jersey.) Classes were held at the Rutgers Gardens in New Brunswick.

With his distinctive ponytail, laid-back attitude and extensive knowledge of the subject, Mikula was able to make a strong connection with his students. "Rick had a way of getting the kids interested — they looked at him like he wasn't a stuffed shirt, but someone they could relate to," says Christopher Anderson, former program coordinator at OCPE and now a teacher of animal science at a New Jersey juvenile correction facility. "He taught them that they could be entrepreneurs, that they could start small and really achieve something."

He wasn't intimidated by their backgrounds, and found that butterflies brought out the best in students who sometimes never really

had a chance to be young. "I got to see the metamorphosis every day. They went from streetwise people to little kids," he says.

Evidence of the success of the Careers program came in the form of one student who went on to work for Mikula in 1995, and was hired as a teaching assistant for the program in 1996. "This kid really knew what he was talking about," says Anderson. "He worked out well because he had been in the same situation a year ago as the kids he was teaching."

Although Mikula is no longer directly involved with the Rutgers program, his legacy lives on. "He touched many people who came through the Careers program," says Karen Tizzano, administrative assistant at OCPE. He got through to so many of those kids."

## A Serendipitous Sighting

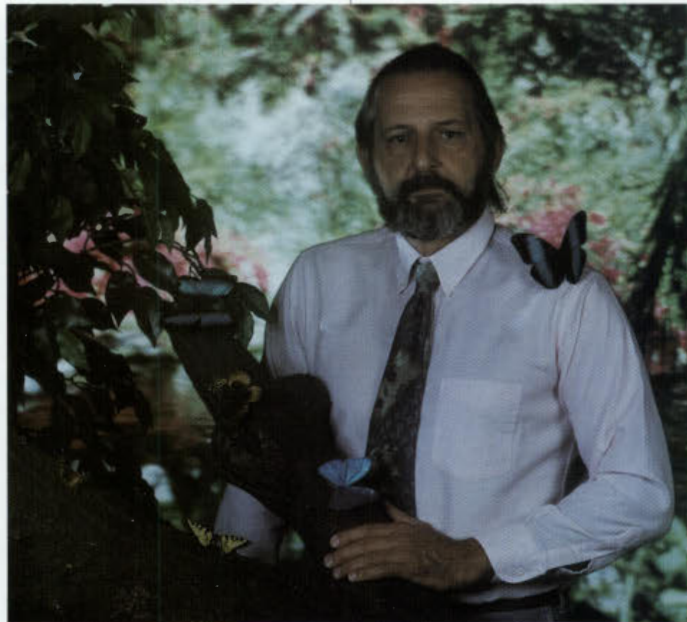
So, who is Rick Mikula and how did he get involved with butterflies?

It happened about twenty years ago, by sheer chance. "I was out fishing one day with a friend, and a butterfly flew past me," he recalls. "For some reason I noticed it and kept thinking about it.

Since I didn't know anything about butterflies at the time, I went to a local bookstore and bought a book about them. That was when I fell in love."

Following his heart, Mikula read everything about butterflies he could get his hands on and then founded Hole-in-Hand Farm about two years later with his wife, Claudia. The name is drawn from the Inuit proverb: "Go out and gather what you need, but let some slip through that hole in your hand."

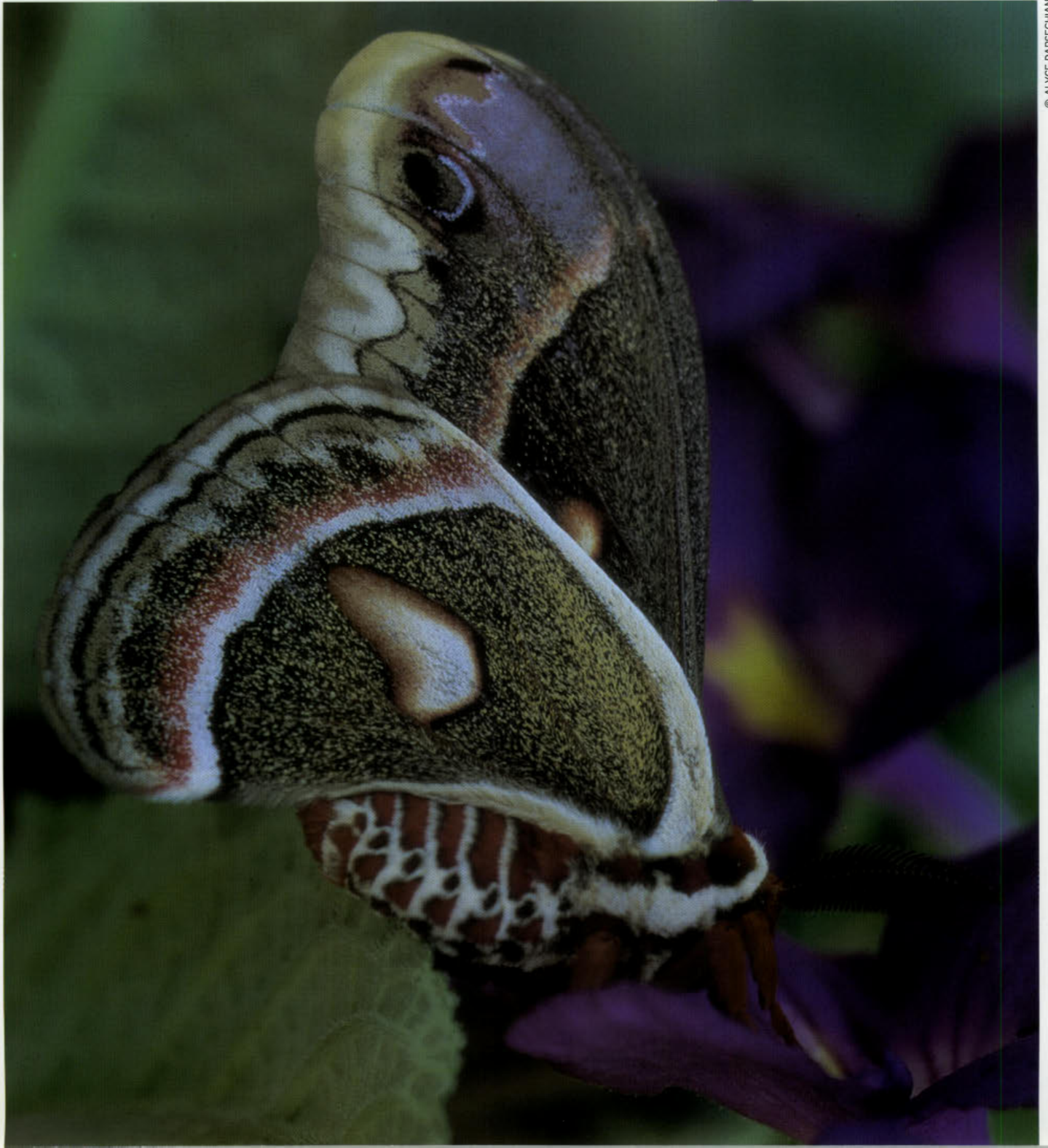
Located in Hazleton, Pennsylvania, the farm is home to both the Mikulas and the hundreds of hand-raised butterflies and moths that are sold to the public or used in lectures and



Butterflies alight on Rick Mikula at his Hole-in-Hand Farm.

PHOTO BY DIANA PHOTOGRAPHS PROVIDED COURTESY OF RICK MIKULA

Pictured below is a cecropia, a large North American moth.



# Bring Your Passion for Butterflies Indoors

Butterflies have always symbolized metamorphosis and rebirth. They also bring beauty and serenity into our lives with their bright colors and graceful movement. Perhaps those qualities are what tempt so many of us to try to lure these creatures near our homes — and sometimes *into* our homes.

For many gardeners, the appeal of planting to attract butterflies lies not only in the aesthetic qualities of the insects and plants, but in the ease of planning and maintaining the garden. Butterfly gardening can be done very successfully with a relatively small plot and a handful of appropriate plant species.

But what if you don't have even a small outdoor space? Don't despair, says butterfly expert Rick Mikula, a man whose passion for members of the order Lepidoptera seems boundless. A simple butterfly garden can be set up on a stoop, on a porch, or even in a room, providing close-up enjoyment of the graceful creatures.

Mikula has written several books on butterflies, consults with various colleges and universities, and has appeared on numerous television and radio programs. He is a nationally recognized lecturer and butterfly consultant who originally received a degree in business from Penn State. He then did a stint in the Navy before going on to

study ornithology at Cornell. Designing A Butterfly Habitat — Indoors Or Out

According to Mikula, the requirements for any butterfly habitat are simple: the butterflies need a place to lay eggs, food plants for the caterpillars, a place to form a chrysalis, and nectar sources for the adult.

The first three considerations are sometimes overlooked by budding gardeners, but without them, attracting butterflies to your potential oasis is a hit-or-miss proposition. "If you only provide nectar sources, a butterfly may stop by to take a drink, but chances are it won't stick around," Mikula says.

Even a small space has the potential for attracting a variety of lepidopterans. All it takes is a few small containers filled with a selection of both host and nectar plants, perhaps in an enclosed porch.

Try dill, parsley, borage and other herbs as host species; caterpillars like to eat them and adults will lay their eggs on them.

One definite must for any butterfly garden is buddleia, also known as butterfly bush. "Many times, people will set it out in a pot before transplanting it, and the butterflies will cover it before it's even in the ground," Mikula says.

Lantana (*Lantana camara*) runs a close second to buddleia as an ideal nectar source,

followed by pentas (*Pentas lanceolata*). Other excellent choices include coreopsis (*Coreopsis auriculata*), hollyhock (*Althaea rosea*), cosmos (*Cosmos bipinnatus*), impatiens (*Impatiens balsamina*) and nasturtium (*Tropaeolum majus*).

Although different species of butterflies prefer different types of plants, keep in mind that butterflies searching for nectar are generally attracted to red, yellow, orange, pink or purple blossoms. These should be grown in open, sunny areas to allow the butterflies to warm themselves while feeding. (Adults rarely feed on plants in the shade.)

Some butterfly gardeners provide a sugar water solution for their resident insects, but Mikula doesn't recommend it. Ultimately, he says, once a garden is planted the butterflies need little human intervention to flourish. "If they have the right plants and the right habitat, they'll do it by themselves."

## Almost No Place Too Small

Even if you have extremely limited space, you can still raise your own butterflies indoors. You can also use Mikula's "desktop butterfly farming" techniques to enjoy the beauty of butterflies all year round, even during the winter.

You'll need to find a host plant that you can put in a

pot and bring indoors. Then, you can use wire and mosquito netting (any sort of gauzy material will work) to construct a mini-butterfly house over the plant.

The next step is to locate a female butterfly of the species that you want to raise; you may need some guidance from a field guide or butterfly enthusiast to identify the correct butterfly for your host plant (and vice versa). The butterfly should begin to lay eggs within a few days (most adult females in the wild will already be fertilized when you catch them). After you find the eggs on your host plant, you can release the adult.

During the next few weeks, you will be able to watch the eggs hatch, the caterpillars eat and increase in size by many times, and finally the formation of the chrysalis, which should be kept out of direct sunlight and at room temperature.

At the end of the cycle, you will be able to enjoy the miraculous emergence of a beautiful butterfly from its chrysalis. Feed it, either with flowers or with a Q-tip soaked in sugar water, then release it, allowing the cycle to begin again.

You may also feel your tension leave you with each butterfly you release. "It seems appropriate for today," Mikula says. "It can be used as a kind of executive stress reduction."

Raised indoors, the caterpillar (far right) emerged from its chrysalis a monarch, much to the joy of Morgan Panzenhagen (below, right) who, with her photographer grandmother, monitored the metamorphosis.



PHOTO BY RANDE STEINER PROVIDED COURTESY OF BUTTERFLIES OF SKIPPACK



demonstrations.

Hole-in-Hand Farm is guided by the principle that butterflies should be experienced alive, and Mikula will not sell to anyone who would hurt them. "Although there is a mounted specimen market, I won't do it," he says. "Personally, I can't see selling the butterflies if they're going to be harmed."

Before making a sale, he also considers the impact it will have on other species. "We once had someone who wanted 100,000 butterflies to release into an outdoor area, which was a ludicrous idea," he says. "With an amount that large, approximately half would be females, which would lay an average of 200 eggs each. The resulting caterpillars would have devastated the local host plant population."

His love of wildlife photography is evident in his latest publication, *Garden Butterflies of North America* (Willow Creek Press, 1997). The book is rich with full-color photographs — many of which are credited to the author — of 40 species of butterflies.

### *Wishes on the Wing*

One of the most unique — and successful — aspects of Mikula's business is raising and selling live butterflies to be released at special events, especially weddings.

The butterflies are packaged in individual, specially coated envelopes and boxed for shipping to customers, who then distribute the envelopes to their guests. At the appropriate time, the envelopes are opened and the butterflies are set free.

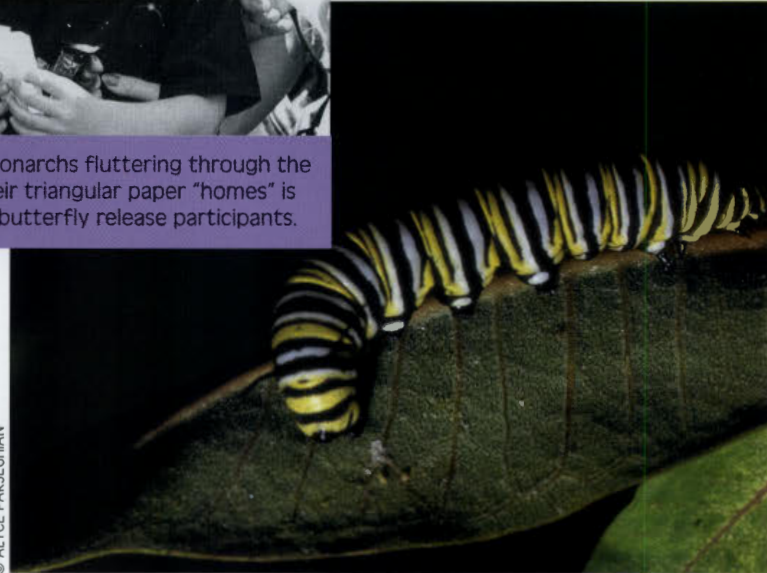
The idea came from a Native American belief that releasing a butterfly would allow it to carry your wish on its wings up to heaven and the Great Spirit.

Mikula began selling "wedding butterflies" by mail more than fifteen years ago. Ironically, his first customer was not a soon-to-be-married couple, but a pantomime troop from Philadelphia who needed the butterflies for a skit. Why? To symbolize unrequited love.

Soon, the increasing demand left Hole-in-Hand with pages of unfilled orders. In response, Mikula developed his butterfly rearing class, where would-be butterfly farmers can learn the

Delight at the spectacle of 200 monarchs fluttering through the air after being set free from their triangular paper "homes" is reflected on the faces of these butterfly release participants.

© ALYCE PARSEGHIAN



© ALYCE PARSEGHIAN

It's easy to see why this moth (below) is called a hummingbird clearwing.

A dun skipper (bottom) feeds at a purple coneflower in Fredon Township (Sussex County).



COURTESY OF THE SOMERSET COUNTY ENVIRONMENTAL EDUCATION CENTER



© WADE WANDER

## For New Jersey Flights of Fancy . . .

Libraries and bookstores are good sources of information about butterflies; check especially for Rick Mikula's latest publication, *Garden Butterflies of North America* (Willow Creek Press, 1997). The book is rich with full-color photographs — many of which are credited to the author — of 40 species of butterflies.

An extensive list of outdoor butterfly gardens, indoor habitats, museums, and other places of interest can be found at the Butterfly Website (<http://butterflyweb site.com>). But if you're not an Internet enthusiast, here are a few to start with in the New Jersey area:

■ **Cape May Point State Park, Cape May (609/884-2159)**

In addition to providing refuge to hundreds of shore birds, this 300-acre preserve is home to its own volunteer-maintained butterfly garden. Visit in late September to October for spectacular sightings of migrating monarchs.

■ **Hole-in-Hand Butterfly Farm, 147 W. Carlton Avenue, Hazleton, PA (717/459-1327)**

According to Rick Mikula's brochure, butterflies are hand-raised at his farm for shipment to "weddings, graduations, corporate events, divorces, anniversaries, grand openings, births and funerals." He and wife Claudia also offer many classes, seminars, workshops and demonstrations of butterfly behavior, care and rearing.

■ **Rutgers University Display Gardens, off Ryders Lane, New Brunswick (732/932-8451)**

The entire garden area is an eye-catching display of butterfly-friendly vegetation. Catch it anytime from late April to early October for gorgeous blooms.

■ **Somerset County Environmental Education Center, Lord Stirling Park, Basking Ridge (908/766-2489)**

After viewing the Butterfly Zone, stay and check out over nine miles of trails that run through wetland, meadow and forested habitats (be on the lookout for monarchs — eggs, caterpillars and adult butterflies — among the abundant milkweed plants).

■ **Spring Home Gardeners' School, Cook College Office of Continuing Professional Education, Rutgers University, New Brunswick (732/932-9271)**

This annual event features a wide variety of horticultural workshops, including butterfly gardening and landscaping for wildlife. Call for a current listing of topics and speakers.

ins and outs of starting their own business. The farm also hosts a wide variety of other programs, ranging from “the beauty of butterflies” to constructing butterfly habitat.

The market is so undersupplied that Mikula has no fears about increased competition from new butterfly farmers. “I had to turn so many customers away that I wanted to start a course in every state,” he explains.

Mikula also gives lectures and seminars all over the country and the world. He is known nationally for his consulting work with other butterfly farms, including three in Florida, two in Texas and two in California, as well as the largest butterfly farm in the world in Kauai, Hawaii. In addition, he advises butterfly farmers in Costa Rica, El Salvador and Peru.

Business shows no signs of slowing down. “We’re only starting to tap into the market in some places,” he says. “In Hawaii alone, there are 7,000 weddings a month — we’re getting maybe two percent of that.”

### *Popular from Parks to Schools*

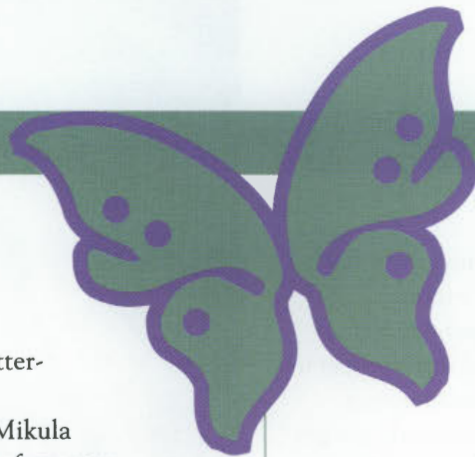
“Butterfly zoos are going up like crazy,” says Mikula. They started in the mid to late 1980s, with examples such as Butterfly World in British Columbia, the Day Butterfly Center in Pine Mountain, Georgia, and Papillion Park in Westford, Massachusetts.

When Mikula learned of Dolly Parton’s love of butterflies, he wrote to the entertainer with the idea of doing a butterfly zoo at her Tennessee theme park, Dollywood.

She agreed, and the Butterfly Emporium was born. Visitors can walk through a 32-foot-long, 24-foot-wide and 27-foot-high Victorian-style building and admire a palette of colorful flowering plants and up to 24 species of butterflies. Butterflies were brought from Florida and imported from England, Costa Rica and Belize for the project.

Next on Mikula’s list of projects is Pennsylvania’s Hershey Park, which will soon host its own butterfly zoo in the Hershey Gardens. Although currently in the early planning stages, the zoo promises to be a popular addition to the park’s immaculately landscaped grounds.

Mikula has also been involved in the design of many



smaller indoor habitats, including the one at Steckle Elementary School in Whitehall, Pennsylvania, where first, second and third graders can observe butterflies through the glass walls of an indoor two-story structure.

Students and teachers at the school grew all the plants for the habitat, then brought in monarchs, swallowtails and some tropical butterfly varieties. When the female butterflies lay eggs on the host plants, the plants and eggs are brought into the classroom. Students eagerly anticipate the emergence of the caterpillars, which is videotaped.

“The kids would charge off the school bus every morning to see if the butterflies had hatched yet,” Mikula says. The school recently won a blue ribbon for the indoor butterfly habitat from the Pennsylvania Department of Education.

In addition to providing easy access to viewing the butterflies as they fly gracefully from plant to plant, one of the advantages of an indoor butterfly garden is the ability to watch the insects go through their life cycle: from egg, to caterpillar, to chrysalis and finally to butterfly. This advantage is underscored by the fact that, for many species, the entire process takes only a few weeks. The zebra swallowtail, for example, develops from egg to adult in only 21 days.

Mikula is sometimes asked whether keeping butterflies indoors is inhumane, since they are essentially imprisoned for their entire life cycle and never released into the wild. “Butterflies actually live longer in an indoor habitat, since they are protected from predators and parasites,” he explains. “In the wild, nine out of ten eggs on average would be destroyed before hatching.”

He doesn’t condone collecting the insects in the wild either, citing the dangers of spreading disease from infected butterflies to his healthy, hand-raised stock.

### *Butterflies On The Web*

In keeping with the technological advances of the ‘90s — when even outdoorsy butterfly gardeners can be found “surfing the net” — Mikula developed the Butterfly Website (<http://butterflywebsite.com>), the first home page of its kind in the world.

It is a bountiful source of information, where you can find out how to plant a butterfly garden of your own, how many species

The striking markings of the polyphemus moth stand out against the green leaves (top).

A butterfly bush in Cape May plays host to a painted lady butterfly (bottom).

of butterflies can be found in North America (more than 700), and how to order butterflies for your upcoming wedding.

The site now receives up to 3,000 visitors and 400 E-mail messages a day, necessitating a full-time staff of three people to answer questions and do regular updates and maintenance.

Many of the questions involve how to plant butterfly gardens and help butterflies by creating habitat. Mikula even receives questions about what to do with a butterfly with a broken wing. ("Just tape it, hand feed it and take care of it," he advises.)

The home page has numerous links under topic headings such as *Calendar of Events*, a listing of national and international butterfly-related activities; *Picture Galleries*, a collection of moth and butterfly images; and *Public Butterfly Gardens*.

*Links and Other Resources* takes the net surfer to a variety of butterfly-related links, including other organizations, entomology education and job opportunities in entomology.

The site also features a clearinghouse where butterfly seekers and butterfly vendors can be matched by geographical area or other criteria, as well as a chat room and discussion group.

Of course, no visit to the Butterfly Website would be complete without a stop at the *General Store*, where you can print out an order form for educational materials, books, t-shirts, jewelry, music, videos and more.

The far reaching impact of the Information Superhighway was brought home to Mikula once when he was consulting in Costa Rica. Two young butterfly farmers from Peru flew up to thank him personally. "They had learned most of my methods from the Website," Mikula recalls.

Whether on-line or in the garden, Mikula takes a pleasure in his work with these beautiful creatures that few people are lucky enough to experience. When asked to sum up his feelings about his chosen career, he says with obvious satisfaction, "This is perfect. This is what I want to do."

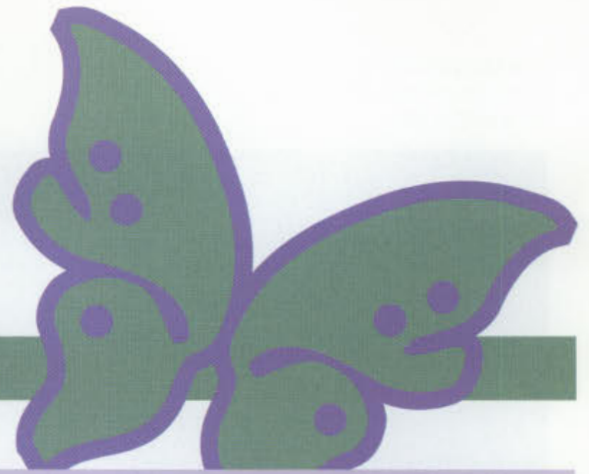
"This is heaven on earth."

Christine Krupka, who lives in Martinsville, is an assistant director with the Cook College Office of Continuing Professional Education at Rutgers University.



PHOTO BY BRECK KENT PROVIDED COURTESY OF SOMERSET COUNTY ENVIRONMENTAL EDUCATION CENTER

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## The Butterfly Zone

Seen through filtered sunlight, leafy vegetation surrounds you as you walk along the narrow path. A burst of orange startles you as an unidentified flying object flutters past your ear and disappears into a spray of green foliage. You stare after it in wonder for a moment, then turn and walk out, closing the screen door carefully behind you. You have now left the Butterfly Zone.

This outdoor world is actually a local example of the kind of indoor butterfly habitat Rick Mikula's work inspires. Here in the confines of the Somerset County Environmental Education Center in Basking Ridge, naturalist Rich Hoffman has created the Somerset County Park Commission's first indoor butterfly garden.

The bright flash of color you saw during your fictional excursion was none other than one of New Jersey's most familiar winged visitors, the monarch butterfly (*Danaus plexippus*). Most often seen darting among the milkweed plants that grow abundantly along the park's many ponds and wetland areas, these beautiful specimens of Order Lepidoptera were viewed up close and personal within the confines of a small enclosure that Hoffman and his group of "AWESIM Kids" constructed in early July along an outer wall of the education center.

"It's one thing to open up a book and look at a one-dimensional image, but it's another to see something come to life," Hoffman said of his motivation for the project. "Once they do see something up close, like these butterflies, then they go back and read the book!"

Hoffman's young partners in butterfly keeping are members of the "Animal House," one of five sessions in the AWESIM Kids program. The summer course (Animals, Wetlands, Environment, Science, Incredible, Machines, Knowledge, Interdependence, Discovery, Solutions) is billed as a summer adventure in science, technology, field study and the environment for students ages 10-14.

The kids were intimately involved in every stage of the

project, from designing and constructing the wood-and-mesh enclosure to daily maintenance, care and feeding of both butterflies and plants.

Their first step after building the Butterfly Zone was, well, filling it with something. On the advice of the Bronx Zoo's Ed Spievak (who maintains the zoo's 160-foot-long caterpillar-shaped indoor butterfly habitat of the same name), native plant species were selected on the basis of their attractiveness to both caterpillars and adult butterflies.

Butterfly bush (*Buddleia alternifolia*), joe-pye weed (*Eupatorium maculatum*), purple coneflower (*Echinacea purpurea*), marigold and milkweed were placed in pots inside the enclosure. A variety of grasses and herbs were also used to provide contrast and additional surfaces for butterfly eggs. Because of the light-filtering quality of the mesh walls, plants were rotated in and out of the habitat to ensure successful photosynthesis.

Next, chrysalises and cocoons were purchased from Myers Butterfly Farm in Readington. The group chose species native to the local area, including the luna moth (*Actias luna*), stunning for its large size and bright green coloration; giant swallowtail (*Papilio cresphontes*), aptly named with a wingspan of nearly six inches; the diminutive, bright yellow common, or clouded, sulphur (*Colias philodice*); and of course the Eastern monarch, well-known for its incredible ability to migrate thousands of miles each year from its summer dwellings in the northeastern United States and Canada to its winter haunts in Mexico — and back again.

Hoffman also led his young students in collecting adult insects within the park, emphasizing the importance of proper "sweep net" technique and extreme care in handling the delicate creatures.

The students researched butterfly behavior and the butterfly life cycle, which they also witnessed firsthand as the insects emerged from their chrysalises and took wing within the enclosure. The group saw only one butterfly laying eggs, which Hoffman plans to leave in a sheltered spot until they are ready to hatch — he hopes in time for next year's "Animal House."

At the end of their indoor gardening project, Hoffman realized that in trying to instill in his students a greater appreciation for butterflies, he had gained one himself. "My knowledge is limited, but my fascination isn't," he says. "It was a good learning experience for me. I just think they're beautiful."

The Musconetcong lures  
Scott Brunisholz, of Califon,  
on a winter day.



# Fish Feed in Winter, Too

Story © by Jim Stabile • Photos © by Robert Brunisholz

Growing numbers of New Jersey anglers are discovering something ice fishermen have known for years — freshwater fish don't stop eating during the winter. So forget thinking that these are days when your holiday gift tackle is limited to testing on the lawn.

Evidence of the popularity of winter fishing can be found at many major trout streams on most winter weekends when the air temperatures top 50 degrees. That's about as warm as it gets on some April trout season openers.

Hardier rod and reelers don't even wait for the best weather. When the lake trout season resumes on December 1, after the annual fall break for spawning, laker fans celebrate by trolling the depths of Round Valley Reservoir.

There are plenty of alternatives to staying involved in fishing without simply watching fishing shows on television, waiting for lakes and ponds to ice over, tying flies or attending an outdoors show every week.

And trout aren't the only species that you can find in open water throughout the winter. Chain pickerel, yellow perch, catfish, walleyes, panfish and even bass cooperate with anglers during cold weather.

For some species, you may have to move your lure, fly or bait a little more slowly, but when you put what a fish thinks is a meal close to its nose, be ready for action.

## The Angler's Choice

When you hit the water, anything can bite, but trout are a favorite winter target of anglers not only because they are a coldwater species — one that prefers cold water to warmer — but also because they are available.

Fall stocking every October replenishes trout into waters from north to south, adding to the leftovers from spring stocking as well as those born in the wild.

During the three weeks of stocking in October 1996, for example, the Pequest Trout Hatchery provided 158,850 for streams,

ponds and lakes. These included 57,335 rainbow trout that averaged 9.7 inches in length, 1,150 that measured 17.4 inches, plus about 100,000 surplus rainbows, brookies and browns.

The surplus rainbows averaged 7 inches, the brookies, 6.7 and the browns, 6.4 inches. Surplus trout are kept at the hatchery in case of any losses of fish, but can be stocked in the fall so they don't take up space and have to be fed. The hatchery was built to produce about 600,000 trout for stocking annually, so when there are enough trout to meet that goal for the following year, surplus fish can be turned loose. Crowding of fish would lower their average size by spring.

Human crowding isn't a problem in winter, although there are usually some cars every weekend in the parking lot alongside the Pequest River off the access road to the Pequest Trout Hatchery.

The Pequest is a fishing favorite all year, so it's not surprising to see anglers wading and casting all year, especially in the Seasonal Trout Conservation Area, which is about a mile of stream from the railroad bridge upstream of the access road down to the Route 625 (Pequest Furnace Road) bridge.

Only artificial lures may be used, spinning or flies, and the daily limit is one trout at least 15 inches long. There's no limit to the number you can catch and release.

Wet flies, nymphs, streamers and bucktails that work with the fly rod in warm weather will do the same in cold. There are two things very important in winter, however. You have to look for fish in the deeper, holding water and you have to work the flies slowly and deep, whether drifting wets or nymphs or stripping in bucktails or streamers in shorter measures.

There's plenty of parking along other stretches of the Pequest — places along Route 46 and side roads from west of Great Meadows downstream toward Belvidere. Worms and spinning lures are fine and the daily limit is four trout at least seven inches in length.

Another winter favorite is the South Branch of the Raritan from Califon all the way downstream to Clinton, including the

Robert Whalor, of Middlesex, angles for trout in the snowy South Branch.



two miles of state property in the Ken Lockwood Gorge, an area of fly fishing only. There are trout scattered through much of the South Branch, most of which is open to lures and bait.

You can usually find trout in the dam right below the town of Clinton and, on warm weekends, you'll have company fishing for them there.

## Think Like a Trout

A little imagination will help you find trout in winter. One year a lakeside resident of Lake Hopatcong suggested it might be worth a try to fish below the dam at the outlet of the lake in Hopatcong State Park.

Sure enough, for whatever reason, there were some big trout, bigger than the ones stocked in streams, caught on worms below the park, where they had apparently come over the dam, perhaps swam downstream to Lake Musconetcong and then came back to the Hopatcong outlet.

Look for lakes with trout. Fish the outlets below them. The same goes for dams on trout streams. Saxton Falls is a stopper on the Musconetcong River upstream of Hackettstown, and scenic stretches like the one through Stephens State Park hold trout all year.

Among the fish that swam past the cameras at the Fish Ladder in the Raritan above Bound Brook last spring were some big trout, so there's a possibility some of these upstream-bound fish might be wintering below the Headgates Dam at Duke Island County Park in Somerset County. This is a dam that fish can get past only during floods.

The Big Flat Brook in Sussex County had visible trout during last August's hottest days when the water flow was low, so you can be sure there will be trout there during the colder months. There's a four-mile fly fishing stretch downstream from Route 206 into Stokes State Forest and plenty of other water where you can use bait or spinning lures.

Worms are deadly stream bait for trout, even though you may have to drift your offering close to a trout's nose to get it to take in winter.

During the winter, in fact every year after May 31, the daily creel limit of trout is four fish, down from the six a day you are allowed to keep from opening day until then.

With a seven-inch minimum length for keepers, a lot of the October surplus trout are released after being caught, giving more anglers a chance to catch them through the winter.

Even trout stocked in the spring escape being caught or are caught and released. This has been proved by tagged trout stocked in the Musconetcong River during May by the Newark Bait and Fly Casting Club and not caught soon after they are released.

The same has been true in the Rockaway River where a local sporting goods store and local merchants buy tagged trout for stocking before the April opening day. Despite what is probably the heaviest fishing pressure in the state on the first

day, some tagged fish last into the cold months.

The Rockaway River in Rockaway Borough has replaced Saxton Falls on the Musconetcong River as the place where there is the heaviest first-day concentration of trout anglers in the state, lured by the annual stocking of trout up to 10 pounds. By August, 22 of the 425 heavyweight trout were still at large.

## Wild Ones

New Jersey also has designated 32 waters as wild trout streams — places with a two-fish daily limit from the April opening until Sept. 15, then strictly catch-and-release until the April 1998 first day of trout season. These streams, most of them only brooks, aren't stocked, and have populations of

Flemington's Len Lizzi is dressed for cold-weather trouting on the Musconetcong.



wild trout that have never been in a hatchery.

Another option for winter trout can be found at the year-round Trout Conservation Areas, three streams where the daily limit is one fish that has to be at least 15 inches long.

One is the 2.25 miles of the Paulinskill River, East Branch, in Sussex County. Another is the Claremont Stretch of the South Branch of the Raritan River upstream from Long Valley, 1.1 miles above Electric Brook, and the third is the mile of the Toms River, in Ocean County, from Riverwood Park to the Route 571 bridge.

During a stream survey before the Claremont Stretch was designated as a year-round Trout Conservation Area, fisheries biologists electroshocked the stream and turned up small brook

Scott Brunisholz nets a rainbow on the Musconetcong.



and brown trout as well as some mature and hefty browns. The fingerlings indicated there was natural reproduction of trout in the river and/or its tributaries.

If you go far enough upstream on any of North Jersey's major trout streams — the ones listed in the *Fish and Wildlife Digest* published every January — you can find natural trout reproduction. That means there are trout in parts of the river all year, including the cold months which used to be considered fishing time only if you fished through the ice.

Winter water temperatures in the rivers often are warmer than the air temperatures, and the fewer hours of daylight mean there's less sunshine to warm both air and water, so you should avoid open water fishing too early or late in the day.

That's when temperatures can get down to freezing.

Ice forming in your rod tip and guides makes fishing less enjoyable than it is when the sun is shining and you can cast freely without ice problems.

For most winter fishing, you don't need to get up early to be sure of getting a prime spot to fish. The competition from other anglers isn't there on most days.

I've found that it's a lot more comfortable to fish when the air temperature is 50 degrees, but other anglers don't seem discouraged when it's colder.

The hardest winter fishermen are found at Round Valley Reservoir, where the season for lake trout resumes after a fall break for spawning. Unless there's thick ice or heavy snow, the boats are launched for lake fishing every December 1, opening day.

When you see guys back boat trailers down the ramp and through skim ice on the reservoir, you know they really want to fish for lakers. Sometimes they have to break their way through thin ice to the main part of the reservoir where deep trolling is the key to success.

Only snow and thick ice seem to keep them from fishing the depths of the deep reservoir where bottom temperatures are about the same all year. Heaters, canvas and clothing warm enough for a winter deer stand keep the reservoir popular in cold months. And there's plenty of parking available.

## Trout Not the Only Fish in the Lake

Largemouth and smallmouth bass — warmwater species — are lethargic during winter, a lot slower on the take than when the water warms, but they keep feeding.

Although bass in the bigger lakes and even ponds prefer depths during winter, they can be found with lead-head jigs baited with Power Worms and other plastic baits.

There's scarcely an ice fishing season that passes without someone pulling a bass through the ice, even though the angler was expecting a chain pickerel or trout instead.

"Trout are much more adapted to colder water, but largemouths will also feed," said Walter Murawski, a supervising fisheries biologist in research and management for the Division of Fish, Game and Wildlife.

"Fish feed through the winter, but at a much slower rate than during warmer times," he added. "It depends. If there's an upwelling of moderate temperature water from springs, this will keep them active to a certain degree."

Diehard bass fans who don't trailer their boats south haven't applied for any winter bass fishing tournament permits on state waters, but some will keep casting, especially on warm days, if there's no ice covering their favorite lakes and ponds.

As ice fishermen know, chain pickerel and yellow perch are winter favorites because they make up much of the catch via tip-ups and jigging. Ice fishing contests also have weighed in trout, catfish, rock bass, bluegills, crappies and other species.

One of the secrets to open-water fishing in the winter is to "offer fish a little delicacy, a morsel that's not moving too fast," Murawski said.

In the Delaware River, February is a good time to fish for walleyes which, like yellow perch, are ready to eat in the period before they spawn.

Late in the winter, yellow perch in South Jersey creeks and rivers often can be found in deep areas right below dams.

"They're on a spawning migration at that time, looking for a good place to spawn, so there's a tailrace fishery," Murawski said. "You can find them in holes below dams."

Walleye season is open all year on the Delaware River, where they have regular hangouts in deep water and an appetite that improves before their early spring spawning. February is a prime time for using nightcrawlers for walleyes below Trenton.

That area, incidentally, is also where St. Patrick's Day marks more than the saint's observance. St. Paddy's Day traditionally marks the time to start fishing for shad at warmwater discharges into the Delaware, weeks before upstream anglers begin looking for shad.

## Catch Those Suckers!

Late winter is the time to fish for suckers throughout the state. Lower sections of the North and South branches of the Raritan and below where the branches join are excellent for sucker fishing.

These hardy fish readily take worms during cold weather and can be found in schools, so if you catch one there are likely to be more in the area.

Suckers are spring spawners, which means you can find them with the trout below dams and waterfalls where their upstream travels are halted.

Most New Jersey rivers have ample populations of suckers, a fish usually ignored once trout and bass fishing heats up, but one worth considering in the cold months because it bites so well, especially late in the winter.

And you don't have to get into the water to fish for suckers. Whatever you fish for in the winter, you should avoid wading whenever you can, no matter how well your boots and feet are insulated. Cold water can quickly cool your enthusiasm.

Hand warmers help. You can stay reasonably warm fishing if the temperature is 50 or above, but if you're successful, your hands will get cold while unhooking fish.

Before going out, you should also be sure there's not excess grease in your reel's gears. Cold weather will gel the grease and make reeling sluggish.

One thing's certain: We have thaws during the coldest winters. Plan your trip, have your gear ready and when temperatures are headed for the 50s, you don't have to wait until spring to fish.

*Jim Stabile, who lives in Mendham, is an avid angler and outdoors writer.*

## NJ Division of Fish, Game & Wildlife's 12th Annual Fishing Essay Contest

# 'Buddies,' Take Note

The theme of the Division of Fish, Game and Wildlife's twelfth annual fishing essay contest is **My Favorite Fishing Buddy**. The contest is open to New Jersey students in grades 1 through 8 and there will be first, second and third place winners in each of the following categories: Grades 1-2, 3-4, 5-6 and 7-8.

Winners will receive an engraved plaque, an assortment of fishing equipment and an invitation to the Pequest Trout Hatchery and Natural Resource Education Center (Warren County) for a VIP tour and luncheon. The tour will take place on opening day of the 1998 trout season (Saturday, April 11) and winners will have a chance to fish at Pequest's Fishing Education Pond.

Essays, which are limited to 200 words, are judged according to originality, style, expression of ideas and proper use of English grammar. Fictional accounts may be submitted by non-anglers or those who prefer to use their imagination.

Entries must be postmarked by Monday, February 23, and must include the entrant's name, address, telephone number, grade and school name. Essays become the property of the division and will not be returned.

Submit essays to: Essay Contest, Division of Fish, Game and Wildlife, Pequest Trout Hatchery and Natural Resource Education Center, 605 Pequest Road, Oxford, New Jersey 07863.



New Jersey State Library

# Jersey Green Giants

by Amy Cradic

A lone copy of *Noteworthy Trees of New Jersey*, published in the late 1930s, remains at the offices of the New Jersey Forest Service in Trenton. With loose binding and time-yellowed pages, the book itself has historic value, not to mention the illustrious trees highlighted within. A few of the trees sprouted to life long before Christopher Columbus sailed across the Atlantic and many outdate our 300-year-old state. More impressively, several still survive and one — a sycamore located in Warren County and historically known as the Washington Buttonball — is still included on New Jersey's 1997 *Big Tree List*.

New Jersey's Big Trees are the monarchs of their species. While the unexpected stature of some of these great giants quickly inspires awe, the history and perseverance of other champions are even more remarkable than their appearance.

Take, for example, New Jersey's largest tulip poplar, in Trenton. Half of the tree was lost in some forgotten storm, and a single live branch, measuring about 70 feet, rises out of its tremendous trunk. Despite its unwieldy countenance, this 300-year-old tree's 20-foot girth makes it not only the biggest tulip poplar in New Jersey, but also the only tree that appears on both the original 1954 and current 1997 *Big Tree List*.

On the slighter side of the scale is the state's champion American chestnut, located in Burlington County. Recently added to the 1997 list, the tree measures only 3 feet 5 inches in

circumference. Though overshadowed by other state champions, including many of its ancestors, this chestnut's modest size is nonetheless notable. Since the 1970s, healthy stands of American chestnut have all but disappeared across the eastern United States. An Asian fungus devastated this once stately species, leaving only a few slender, blight-infested trees in its path.

"Sometimes the size of a tree doesn't tell the whole story," says David L. Johnson, the coordinator for the New Jersey Community Forestry Big Tree Program and a 13-year veteran of the tree and nursery industry. "We're not just recognizing the biggest tree of a species; a lot of times we're looking at a slice of history."

## If Only They Could Speak

Indeed, many of New Jersey's champions have become part of local lore or are found thriving on historic battlefields, in centuries-old cemeteries and on family-owned farms that have been passed down for generations. Many survive in unlikely places in light of the state's continuing development. And some, as Johnson aptly puts it, are just simply "awesome."

The largest tree in New Jersey is a silver maple, located fittingly enough on Maple Avenue in Basking Ridge. Its old gray bark has separated into long thin scales pulled loose at the ends, giving this great giant — with an unsurpassed circumference of 25 feet — a shaggy, distinct appearance. With its

Although not an official "champion," the Mercer Oak serves as the logo for New Jersey's Green Acres Program.



broad canopy, this tremendous street tree straddles and shades the yards of two houses.

The champion sassafras has sat peacefully on the open grounds of the historic cobblestone Quaker Meeting House in Mount Laurel for well over 200 years. The biggest Norway Spruce, with its sweeping boughs and towering height of 74 feet, is one of many magnificent trees — including the celebrated Mercer Oak — that grace the lawns of Princeton Battlefield State Park, located in Princeton.

The nearly 400-year-old Washington Buttonball, in Warren County, is located next to what was once a dirt road (now a paved county road) that General Washington traveled during the Revolutionary War. As legend has it, Washington rested under the shade of the tree on his journey from Philadelphia to his headquarters in New York.

The newly added champion black locust, which shades one of the scenic driveways of the 220-acre Fernbrook Nursery in Columbus, finds its roots in one family's history. "My grandfather purchased the property in 1890 and he had a real interest in trees," says Larry Kuser, who runs the family-owned business and whose late 18th century Victorian farmhouse is operated as a bed and breakfast. Kuser has a degree in psychology but, like his grandfather, has put his hobby into practice. "My grandfather planted an amazing number of trees all around this place and we're trying to carry through his work."

The champion locust was noticed by his cousin, John Kuser, an associate professor of forestry at Rutgers University, during a visit at Thanksgiving. John Kuser is credited for nominating more than a half dozen current champions across the state. "The program inspires the competitive instinct in dendrologists and foresters," says Kuser who has obviously chased a few champion titles himself and won. He keeps a measuring tape in his car "just in case."

It's interest by people like John Kuser who have kept the Big Tree List alive and growing for more than 40 years.

## How the Champs Measure Up

With each new printing of the Big Tree List, champions die; some are destroyed to make way for development and others are superseded as larger trees are discovered. Only those trees that are native to the state or trees that have become naturalized (capable of reproducing themselves under New Jersey conditions) are eligible. Considerable changes were made between the list published in a 1984 issue of *New Jersey Outdoors* and its update in 1991. The 1997 list, which is due by the end of this year, has many additions and modifications, as well as an expanded background summary for each species.

The measurement currently used by the New Jersey Department of Environmental Protection's State Forestry Services is the circumference of the tree at breast height — 4.5 feet from the ground. Most other state lists, including the national cham-



COURTESY OF THE N.J. DIVISION OF PARKS AND FORESTRY

Old age and disease have contributed to the textured appearance of the champion red mulberry in Sicklerville (Camden County).

Champion tree listing, use a method that also takes into account the height of the tree as well as the average live crown spread. New Jersey is in the process of switching over to this three tier measurement system.

The state's only national big tree is a sand hickory on North West Avenue in Vineland, Cumberland County. This inconspicuous champion, with a circumference an inch shy of 12 feet, stands so comfortably in its immensity over a rustic red barn in the backyard of a private residence that without a trained eye it easily could go unnoticed. However, Stephen Fields, a landscaper and lifetime resident of Vineland who reported the tree, remembers the hickory from childhood.

"My father used to drag me along to visit his friend Howard Norton, whose favorite hobby was archery. He hung his target on the barn next to the tree," recalls Fields. "I spent a lot of time in the shade of that tree. It's been over 40 years and I've never forgotten it." Fields has identified several additional big trees, including the largest fringe tree, located in Parvin State Park, about 10 minutes from the sand hickory.

## A Labor of Love

Charged with the responsibility of maintaining and updating New Jersey's Big Tree List, Johnson has spent the past two years verifying more than 100 champions. In addition to collecting



COURTESY OF THE N.J. DIVISION OF PARKS AND FORESTRY

Dave Johnson examines the bark of the champion honey locust in Haddonfield (Camden County). The border tree stands between two adjacent properties.

the traditional data for the list, Johnson is using a Global Positioning System to mark the trees by satellite. Having the exact latitude and longitude of New Jersey's big trees will make it easier to pinpoint their location.

"I enjoy tracking down the trees, even though I'm sure a lot of them won't reach champion status," says Johnson, standing with both hands full of measuring gadgets, a pen behind his ear and a recording notebook under his right arm. "Without people's interest, many of the big trees would have been lost in the shuffle a long time ago. It's amazing the efforts made to recognize these champs."

One particular crusade to save a big tree candidate started one evening when Dr. Paul Kovalski, a dentist and a resident of Marlboro Township, met with his local public planning board to discuss a wooded area adjacent to his home that was pending development. He wanted part of it preserved.

Rattling off some of the benefits of open space, Kovalski reached the end of his list and recalls hesitating. Noted at the bottom of the page, and at the time a questionable ally, was a large river birch on the site. "I didn't want to sound like a crazy environmentalist or a tree hugger," says Kovalski, talking rapidly and pausing only long enough to catch his breath between sentences. "My adrenaline was going and I could just feel I was close to convincing the board." And he did. Today, thanks to Kovalski's efforts, the developer reconfigured the design of the

site to preserve a section of the property. The river birch, which would have been cut down under the original construction plan, is included on the 1997 list as a state champion.

The venerable Basking Ridge Oak, a white oak that shades the grounds of a Presbyterian Church in Bernard Township, has had a lot of help from friends. Years ago, its base was filled with cement for added structural support (an unacceptable procedure by today's arboricultural standards). Its 3,000-pound limbs are strengthened with cables and propped up with poles. It has survived everything from the Revolutionary War to a modern day car accident. Though not on the current champion Big Tree List — the present champ, with a circumference of 23 feet, 3 inches, is located in Pennsville — this notable 600-year-old tree is the oldest in the state.

In some cases, longevity and a tree's tremendous girth and height find their roots in good genes.

The white oak can live to be 700 years old, and therefore grows large in proportion to many tree species in New Jersey. Not surprisingly, there are several white oaks throughout the state having more than a 19-foot circumference and well over three centuries of recorded history. According to legend, Quaker John Fenwick forged a peace treaty with the Lenni-Lenapes underneath the boughs of Cumberland County's 500-year-old Salem Oak in 1675. The tree stands on the site of the nation's first two Quaker meeting houses.

# Join the Campaign for Healthy Forests

Forest stands across New Jersey are showing signs of stress and neglect. Several tree species are threatened. Loss of habitat, urban development, invasive species, exotic insect infestation and disease epidemics are just a few of the factors affecting the health, biodiversity and sustainability of the state's trees.

To help address these forest health concerns, the New Jersey Forest Service is introducing a Healthy Forests Campaign to better communicate to the public current forest health trends, and to identify preventive and restorative actions needed to improve and restore these affected ecosystems.

As one of the beginning steps of the Healthy Forests initiative, the New Jersey Forest Service has compiled the first set in a series of updates containing important, up-to-date information on today's forest health issues. The initial updates highlight the following forest health trends:

## ■ Street Tree Crisis

A three-year study conducted by the New Jersey Forest Service reveals that the street trees growing in the state's cities and towns are under extreme stress and are threatened. More than two million street tree plots are vacant.

Budget cuts, lawsuits, disease, improper tree selection and maintenance methods, and lack of awareness have contributed to their loss and poor condition.

## ■ Eastern Hemlock Threatened

The hemlock woolly adelgid is an exotic pest that is spreading along the central and northwest Eastern hemlock forests of New Jersey, causing a steady decline in this native tree species since the pest was first detected in the early 1980s.

The loss of hemlocks is adversely affecting New Jersey's forest diversity, fish, wildlife and plant habitat, water quality and the aesthetic integrity of the populated areas.

## ■ Atlantic White Cedar Decline

New Jersey's Atlantic white cedar population is steadily declining from its historical average of approximately 115,000 acres to currently fewer than 30,000 acres.

Located primarily in the state's Pinelands region and freshwater wetlands, white-cedar swamps are essential storage areas for rainwater and water runoff. They help maintain productivity of wetland communities; provide essential habitat for wildlife and plant life, including threatened and endangered species; and add to the diversity and beauty of New Jersey's forest resource.

Without conservation and restoration efforts, the Atlantic white-cedar population will continue to decline, eventually causing the loss of pure stands of this increasingly rare tree species.

A major goal of the New Jersey Forest Service is to instill in the public the realiza-

tion that the most effective preservation of our natural resources is often achieved through proper management. With a better understanding of what is affecting our tree resources and the steps necessary to address forest health trends, the Forest Service hopes to encourage the public to promote and participate in forest land management decisions.

Healthy forests are no accident. You can join the campaign to increase public awareness about current forest health problems and opportunities. Through partnerships and public support, the New Jersey Forest Service can achieve greater success in implementing effective, sensible and responsible solutions to today's forest health concerns.

For more information about forest health or how you can participate in the campaign, write to the New Jersey Forest Service, P.O. Box 404, Trenton, New Jersey 08625 or call 609/292-2532.

Asked what impresses him most about the champions on New Jersey's Big Tree List, Johnson, a resident of Collingswood, doesn't cite their antiquity, great height or width, but their potential. "With proper care and a little luck, these big trees will be here for generations," says Johnson. "Who knows what new champions will step into their place?"

**Editor's note:** For more information about New Jersey's Big Tree Program, or to report a possible candidate, write to David Johnson, of the New Jersey Department of Environmental Protection's Community Forestry Program, at P.O. Box 404, Trenton New Jersey, 08625 or call 609/292-2532.

*Amy Cradic, who lives in Lambertville, works with the New Jersey Department of Environmental Protection's Division of Parks and Forestry.*

The champion bald cypress, located in Hancock Bridge (Cumberland County), is a deciduous conifer. In autumn, its needles turn a rich brown and then fall to the ground.

COURTESY OF THE N.J. DIVISION OF PARKS AND FORESTRY



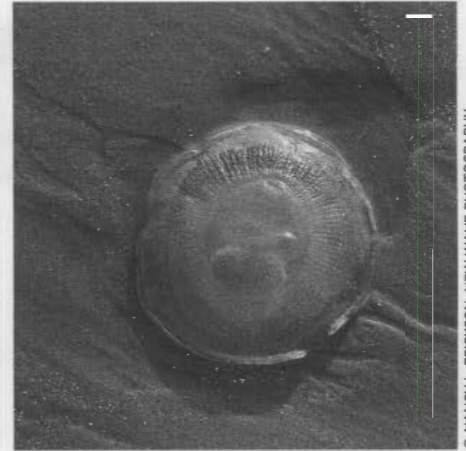
Winter winds left their mark  
on one of Island Beach  
State Park's dunes.

# A Winter's Walk Along the Shore

by Frank Finale

New Jersey's sandy shoreline is geologically older than the rocky coast of New England; here you can almost sense the many thousands of years of gradual give and take between the sea and the land. This is especially true of a deserted beach in winter. The crashing of the breakers; the fine blending of the sky, sea, and sand; and the opulence of space with few intrusions leave you feeling like a traveler in time. It could be a million years ago.

I've always enjoyed walking along a winter's beach, particularly after a northeaster, when a roaring surf and wind have stirred up the sea's silty bottom, and white breakers have driven ashore a multitude of flotsam not ordinarily seen. It was during one recent walk along the protected sands of Island Beach State Park when I discovered several heavy four-by-fours that measured at least six feet; studded with white, volcano-shaped barnacles and tangled with brown seaweed, they had been tossed like toothpicks to rest on the sand. I wondered where this timber came from; once part of the trees in the forest, then destined for some man-made structures, they now



The winter beach serves as a canvas for a collage of clam shells (left).

A solitary moon jellyfish (above) sparkles on the sand under winter's weak sunbeams.

waited for the slow fires of decay. They were to be the first of several discoveries on that desolate winter day's walk.

In the necklace of the tideline lay a variety of shapes, textures and colors, from periwinkles to scallops to jackknife clams; one could spend a lifetime studying them. A few yards down from the timbers, I encountered about a hundred burrfishes, their bodies inflated and almost round, covered with short, stout spines such as a porcupine has. Gazing at them was like looking down from a concert stage at a sea of punk rockers.

And then there were shells — millions of them, stretching as far as the eye could see. Although most were of clams, oysters and mussels, I could also spot moon shells like the shark eye, its half-moon opening partitioned by four whorls. The shark eye is usually colored a glossy brown or gray. It derives its name from the central whorl, which is darker than the others and gives the appearance of an eye.

With the low tide I could see a multitude of blue mussels exposed along the jetty. I thought of the "cultivated mussels from certified waters" that waited in hot

sauce in my freezer at home. How easy it is to walk into a supermarket and take them from the deep freezer. I tried to pry a clump of the mussels loose, but the sinewy threads with which they clung to the rocks would not pull free. I stood amazed at the threads' strength. I had read somewhere that a scientist was studying the glue that barnacles produce; he thought maybe it could be made synthetically and used to mend broken bones or as a cement in dentistry. I don't know if he succeeded, but I'm sure someone will one day find a use for these tenacious threads.

Walking again along the strand, through the shells' clatter and crunch — a sort of graveyard of the sea — I found a thick piece of rope, the kind used to tie a boat to a dock. I found pieces of cork, and the webbing of a fisherman's net. I found crabs' claws and crab shells. Gull feathers. A mermaid's purse of skate. Bits of sponge.

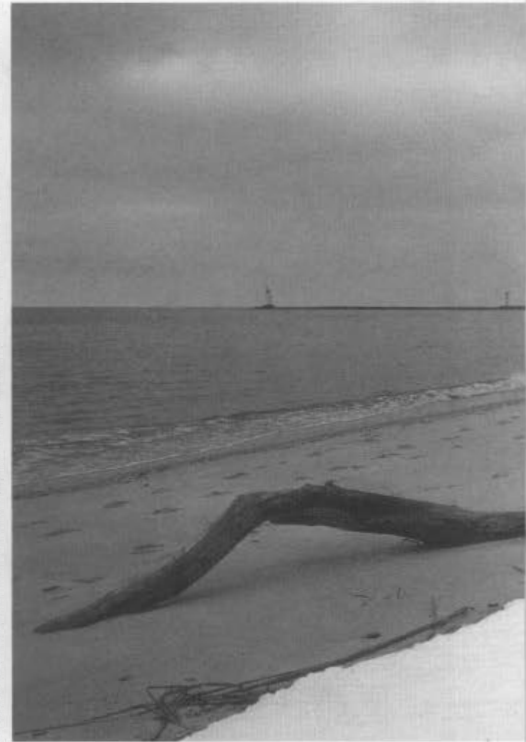
And, of course, there was beach glass: frosty green, amber, turquoise; from sand they came, and on sand they lie, beautiful polished gems twisted with seaweed. Here also were the curves of driftwood carved by the sea and tossed back to the

land. Odd bits of glass and pieces of wood: What artist could deny this found art? Not a few have spent years trying to get that satisfying combination of shapes and colors. And here they lay on this winter beach, at no cost except the time spent in looking. How long before someone began charging admission? If it became valuable enough and profitable enough, I was certain that someone would devise a way to exploit it. For now they remain collectible items for any sharp-eyed beachcomber who wanted to remember a bit of the shore's beauty.

Out of the corner of my eye, I caught a shadow moving swiftly in the sand. I turned to look and it was gone. Above me a gull mewed. Birds are one of the constants of the shore, and winter is a good time to sight some of the more uncommon species. One of the rarer birds found on Island Beach is the snowy owl. One would not think that this bird, which nests on the Arctic tundra, would wander so far south. But during the years when its main diet of lemming is in short supply (about once every four years), this hefty owl with its round, yellow eyes —



© MICHAEL S. MILLER, MSM/WAVELENGTH PHOTOGRAPHY



similar to those of my black cat — finds its way to the Jersey Shore. One need not go out at night to spot them, either, since these owls are used to the round-the-clock summer sunlight of the Arctic.

Another rare bird, the black-legged kittiwake, can also be found on Island Beach during the winter. The kittiwake has a solid black triangular tip on its wings, and is the only gull that hovers like a tern, then dives and swims underwater after its prey. This gull can truly be called a sea gull; it drinks only sea water, and it sleeps on the waves with its head tucked under its wings.

Alone in my reveries, I was startled to suddenly come upon large osprey nests — almost six feet across at the base — rising from behind the dunes and reeds on wooden perches that stood almost as tall as telephone poles. The wooden perches, erected by the state, offer the ospreys an alternative to nesting on power lines. Every year, ospreys add to their nests of sticks, branches, and pieces of sod.

The ospreys were nearly exterminated by pesticides in their food chain, which left the shells of their eggs extremely

fragile. Although they have made a comeback, ospreys still are on New Jersey's list of threatened species.

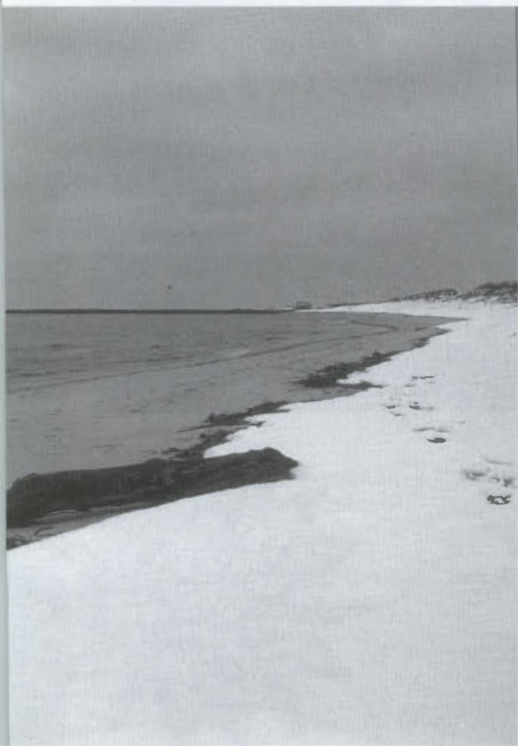
Wandering over to the high dunes, I saw more osprey nests in the cedar forest that stretched along the island's bay side. All of the forest's upper branches, where the osprey nests were lodged, had withered and died off, mainly because sea winds had cracked the branches' bark and allowed salt air to lodge in the fissures. Ospreys will weave almost anything — from fishing gear to fish skeletons to seaweed — into their nests, and maybe even have a family or two of sparrows living in the lower layers of the massive structure.

Returning to the tideline, I searched in vain for frost fish. I have found many starfish and sea horses in my walks on the beach, but only in winter can I find a frost fish. The temperature has to be in the single digits. The fish, usually whitening which have been stranded during a storm, are frozen the instant they wash up on land. Supposedly a frost fish tastes better than the usual catch, since it was not hooked and did not have time to go through the chemical changes that ordi-

narily take place. I would think this natural occurrence similar to our fast freezing peas to retain their fresh taste.

Failing in my search, I decided to walk back. The only footprints I saw were my own and the tracks of various gulls. There were white plumes of breakers on my right and tall, feathery plumes of reed grass on my left. Above me, cirrus clouds streaked the sky. Throughout any winter walk, I am constantly aware of the shore's desolation. The beach at this time of year develops one's capacity for aloneness. Without constant reminders of civilization, one is nudged into confronting the wintry shore as it is, not as an ad for a vacation or a commercial for suntan lotion, seemingly without any useful purpose. But it has a rhythm and life of its own not to be demeaned by fashionable opinions. The shore in winter is much like beach glass, driftwood, and shells: undervalued, passed by and, in its own stark way, beautiful.

*Frank Finale, a Bayville resident, is the co-editor of **Under a Gull's Wing: Poems and Photographs of the Jersey Shore** (Down the Shore Publishing, 1996). He teaches in the Toms River Regional Schools and is poetry editor of **the new renaissance**.*



© LENNY CASPER

Ice coats a jetty along the shoreline (opposite page).

Driftwood and footprints in the snow share this winter beach (above).

Winter waves wash up shell treasures (right).



© DWIGHT HISCANO, DWIGHT HISCANO PHOTOGRAPHY

The beach at this time of year develops one's capacity for aloneness.

# CALL FOR ENTRIES

# New Jersey *Outdoors*

## 1997 Photo Contest

### 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.

### Format:

- Color 35 mm slides, transparencies or unmatted, 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. (The form below may be reproduced as needed.)
- 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.

Entries  
must be  
received by  
April 1,  
1998.

Name \_\_\_\_\_

Address \_\_\_\_\_

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

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

Title \_\_\_\_\_

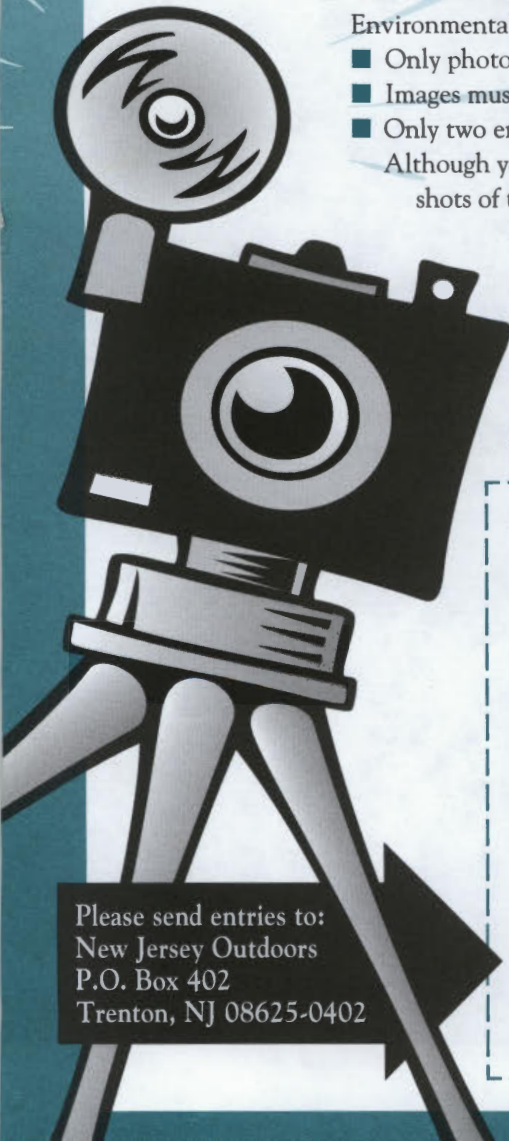
Where taken \_\_\_\_\_

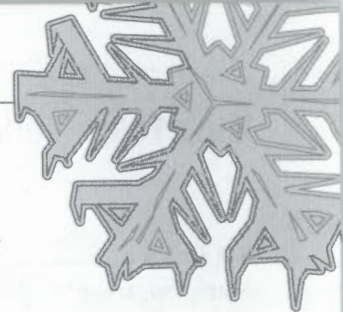
Description \_\_\_\_\_

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

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

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





# Events

## Ongoing

**Curator's Choice** (Weds. to Sun., Jan. 24 through March 8) Selection of pieces from the collection rarely seen by the public; 10 a.m. to 5 p.m.; Museum of American Glass, Wheaton Village, Glasstown Road, Millville; \$6.50/adults, \$5.50/senior citizens, \$3.50/students, free/children 5 and under; 1-800-998-4552

**Buttinger Nature Center Programs** (Tues. through Sun.) Preschool, parent/child preschool, after school and weekend public programs, sponsored by the Stonybrook-Millstone Watershed Association, focusing on some aspect of the environment; 31 Titusmill Road, Pennington; some free, some fee; call for details; 609/737-7592

**Winter Nature Classes** Exciting, fun-filled learning activities centered on farm life and wildlife rehabilitation; PAWS Farm Nature Center, 1105 Hainesport-Mt. Laurel Road, Mt. Laurel; call for details; reservations requested for large groups; \$3.50/class; 609/778-8795

## January

**1** **New Year's Day Hike** Join the 13th annual New Year's Day hike along the Paulinskill Valley Trail in Kittatinny Valley State Park; 10 a.m.; Footbridge Park (take Footbridge Lane, the second entrance to the park off Route 94, designated by a small white sign with black lettering), Blairstown; bring lunch and something to drink; 908/852-0597

**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/age 6 and under; 973/635-6629

**5 - 9** **College Week** Present your college ID and receive a \$10 lift ticket; all sessions; Hidden Valley Resort, Breakneck Road, Vernon; 973/764-4200

**10** **Full Moon Hike** Take the 4- to 6-mile "Tracks in the Snow" hike on moonlit sand roads through the Pines and around the bogs; 7 p.m.; Whitesbog Village, mile marker 13 on Route 530, Browns Mills; \$4/person, \$9/family, free/members; pre-registration required; 609/893-4646



## Events • January / February

### 10 & 11

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

### 13

**Family Day** Bring your family and ski or snowboard all day; 9 a.m. to 5 p.m.; Hidden Valley Resort, Breakneck Road, Vernon; \$40/up to 4 family members; price includes lift tickets only; 973/764-4200

### 17

**Wildflowers and Wildlife of the Pinelands Hike** (also on Feb. 21, Mar. 21 & Apr. 18) A guided, easy-paced, 2- to 3-mile walk that courses through a variety of 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

### 17 & 18

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

### 18

**Paulinskill Valley Trail Hike** Hike the trail from Warbasse Junction; 10 a.m.; Warbasse Junction, Route 663, near the village of Lafayette (Route 15); bring lunch and something to drink; 908/852-0597

**Winter Wonderland Walk** A 2- to 4-mile walk; 7 p.m.; Whitesbog Village, mile marker 13 on Route 530, Browns Mills; \$4/person, \$9/family, free/members; preregistration required; 609/893-4646

### 24 & 25

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

### 24 - Feb. 14

**Collage: A Student Art Exhibit** (Weds. to Sun.) Selection of pieces from the collection rarely seen by the public; 10 a.m. to 5 p.m.; The Gallery of American Craft, Wheaton Village, Glasstown Road, Millville; no admission charge except during special events; 1-800-998-4552

### 25

**Lenape Creation Story** A musical legend with hoops, instruments and costumes; 2 p.m.; N.J. State Botanical Gardens at Skylands, Morris Road, Ringwood State Park, Ringwood; \$5/advance purchase, \$6/at door; 973/962-9534

### 26

**Learn to Ski; Learn to Snowboard** Package includes beginner chair lift ticket, lesson and rental equipment; 9 a.m. to 5 p.m.; Hidden Valley Resort, Breakneck Road, Vernon; \$29/skiers, \$35/snowboarders; must be at least 8 years old; first timers only; 973/764-4200

### 29

**Garden State Day** Lift tickets only \$15 for N.J. residents (ID required); 9 a.m. to 5 p.m.; Hidden Valley Resort, Breakneck Road, Vernon; 973/764-4200

### 30

**T-Shirt Day** T-shirt given to first 50 skiers to purchase a lift ticket (groups not eligible); 9 a.m. to 5 p.m.; Hidden Valley Resort, Breakneck Road, Vernon; \$37/person; 973/764-4200

### 31

**The Great Environmental Magic Show** (also on Feb. 3) Batstone's stage magic helps youngsters aged 4 to 10 understand the wonders of nature; family shows at 10:30 a.m. & 3:30 p.m. on Jan. 31 (second show will be ASL interpreted) and at 6:30 p.m. on Feb. 3; call in advance to schedule school and group shows, which will be presented Jan. 27 through Feb. 6); Somerset County Park Commission Environmental Education Center, 190 Lord Stirling Road, Basking Ridge; \$3/person; preregistration required; 908/766-2489

**Rutgers University Geology Museum Annual Open House** Enjoy new exhibits, presentations on geology and a mineral sale; 9 a.m. to 4 p.m.; Geology Hall, College Avenue, New Brunswick; free; 732/932-7243



**Ice Harvest** Help cut, chop and shave ice, fill an ice house and make ice cream from 10 a.m. to 4 p.m.; *Ice Candles*, a children's craft program which takes 20 minutes to complete, will be offered in the farmhouse from 11 a.m. to 3 p.m.; Howell Living History Farm, Valley Road (just off Route 29, 2 miles south of Lambertville), Hopewell Township (Mercer County); free admission and parking, fee for children's craft activity; 609/737-3299

### 31 - Feb. 1

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

## February

### 3

**The Great Environmental Magic Show** (see Jan. 31)

### 7

**Full Moon Hike** Take the 4- to 6-mile "Tundra Swan" hike on sand roads; 7 p.m.; Whitesbog Village, mile marker 13 on Route 530, Browns Mills; \$4/person, \$9/family, free/members; preregistration required; 609/893-4646

### 7 & 8

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

**Mid-Winter Antiques and Collectibles Show and Sale** Featuring more than 70 quality dealers from the mid-Atlantic; 10 a.m. to 5 p.m.; Museum of American Glass & the Heritage House Banquet Facility, Wheaton Village, Glasstown Road, Millville; \$6.50/adults, \$5.50/senior citizens, \$3.50/students, free/children 5 and under; 1-800-998-4552

8

**8th Ocean County Bluegrass Festival** (snow date: Feb. 14) A live stage concert of bluegrass music by leading bands from the tri-state area, presented by the Pinelands Cultural Society; noon to 5 p.m. (doors open at 11 a.m.); Albert Music Hall, 125 Wells Mill Road (Route 532), 1/4 mile west of Route 9, Waretown; \$8/adults, \$1/children under 12; 609/971-1593

**Paulinskill Valley Trail Hike** Hike the trail from Footbridge Park; 10 a.m.; Footbridge Park (take Footbridge Lane, the second entrance to the park off Route 94, designated by a small white sign with black lettering), Blairstown; bring lunch and something to drink; 908/852-0597

14

**Whistling Swan Tours** See the flocks of whistling (tundra) swans that winter at Wharton; 7 p.m.; Whitesbog Village, mile marker 13 on Route 530, Browns Mills; \$4/person, \$9/family, free/members; pre-registration required; 609/893-4646

14 & 15

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

17 & 18

**February Festivities** School vacation week programs and planetarium shows; Trailside Nature & Science Center, 452 New Providence Road, Mountainside; call for program schedule and fees; pre-registration required; 908/789-3670

21

**Wildflowers and Wildlife of the Pinelands Hike** (see Jan. 17)

21 & 22

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

**Wildlife Art Preview** (also on Feb. 28, Mar. 1, 7 and 8) Enjoy the works of 15 to 20 artists in an unmanned preview exhibit of the May Carving & Wildlife Art Show & Sale; 10 a.m. to 2 p.m.; Somerset County Environmental Education Center, 190 Lord Stirling Road, Basking Ridge; free; groups must schedule for weekdays in advance; 908/766-2489



The new Albert Music Hall, located in Waretown, opened its doors on January 5, 1997, four and a half years after fire destroyed the original building. The 6,000-square-foot music hall, which is air conditioned, smoke- and alcohol free and handicapped accessible, seats 350 people.



Borderline members Mark Cosgrave, Steve Hendershott, Terry Sutor and Bob Sutor play, Pinelands style, on the stage of the Albert Music Hall.

22

**Astronomy Sunday** Featuring rocket launches, solar viewing, laser shows and more; 1 to 5 p.m.; Trailside Nature & Science Center, 452 New Providence Road, Mountainside; \$1 donation includes door prize ticket, \$3.25/person for laser show, \$3/person for other shows; 908/789-3670

28

**Maple Sugaring** (also on March 7) Activities include syrup making, wheat winnowing and flour milling, butter making and pancake sampling, with sap gathering taking place at 10:30 a.m. and 3 p.m. and tree tapping demonstrations at noon and 2 p.m.; *Maple Sugar Cookie Men*, a children's craft program, will be offered in the farmhouse from 11 a.m. to 3 p.m.



on Feb 28, (the March 7 children's craft will be *Maple Sugar Candy*); 10 a.m. to 4 p.m.; Howell Living History Farm, Valley Road (just off Route 29, 2 miles south of Lambertville), Hopewell Township (Mercer County); free admission and parking, fee for children's craft activity; 609/737-3299

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

**28 & March 1**

**Wildlife Art Preview** (see Feb. 21 & 22)

**March**

**1**

**Guided Tours of Historic Skylands Manor** (also on April 5) Featuring antique paneled rooms and stained glass; 1 to 4 p.m.; N.J. State Botanical Gardens at Skylands, Morris Road, Ringwood State Park, Ringwood; \$3/general, \$2/senior citizens, \$1/ages 6 to 12, free/ages 5 and under; 973/962-9534

**Paulinskill Valley Trail Hike** Hike the trail from Footbridge Park; 10 a.m.; Footbridge Park (take Footbridge Lane, the second entrance to the park off Route 94, designated by a small white sign with black lettering), Blairstown; bring lunch and something to drink; 908/852-0597

**7**

**Maple Sugaring** (see Feb. 28)

**7 & 8**

**Quilt Show** A variety of quilts on display in three locations; 10 a.m. to 5 p.m.; Museum of American Glass, the Heritage House Banquet Facility and the Down Jersey Folklife Center, Wheaton Village, Glasstown Road, Millville; \$6.50/adults, \$5.50/senior citizens, \$3.50/students, free/children 5 and under; 1-800-998-4552

**Wildlife Art Preview** (see Feb. 21 & 22)

**14**

**Full Trail Hike** Hike the 30-mile Paulinskill Valley Trail; 8 a.m.; meet at Limecrest Road, at the railroad crossing near Eastern Propane, Sparta; bring lunch and something to drink; 973/728-0110

**Full Moon Hike** Take the 4- to 6-mile "In Like a Lion, Out Like a Lamb" hike on sand roads; 7 p.m.; Whitesbog Village, mile marker 13 on Route 530, Browns Mills; \$4/person, \$9/family, free/members; preregistration required; 609/893-4646

**Dinosaurs** Learn about these prehistoric creatures from a papier mâché dinosaur display, games and crafts; bring a white T-shirt and iron on your favorite dino; 1 to 4 p.m.; Great Swamp Outdoor Education Center, 247 Southern Boulevard, Chatham; free; 973/635-6629

**15**

**St. Patrick's Day Walk** Wear green when you take Whitesbog's 2- to 4-mile "Signs of Spring" walk; 7 p.m.; Whitesbog Village, mile marker 13 on Route 530, Browns Mills; \$4/person, \$9/family, free/members; preregistration required; 609/893-4646

**21**

**Taking Root** A hands-on propagation workshop; 10 a.m. to noon; N.J. State Botanical Gardens at Skylands, Morris Road, Ringwood State Park, Ringwood; \$8/members, \$10/non-members; registration required; 973/962-9534

**NJ Songwriters Show** A live stage concert of home-grown original country, folk and bluegrass music performed by many NJ songwriters, presented by the Pinelands Cultural Society; 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

**Springtime Whitesbog Garden Work Party** Help restore Elizabeth White's historic Pine Barrens garden and learn about it in the process; 9 a.m.; Whitesbog Village, mile marker 13 on Route 530, Browns Mills; bring gloves and pruners; youth groups and scouts are welcome; preregistration required; 609/893-4646

**Wildflowers and Wildlife of the Pinelands Hike** (see Jan. 17)

**22**

**Special Trees of Skylands — A Garden Walk** Discover an exceptional collection of trees; 2 p.m.; N.J. State Botanical Gardens at Skylands, Morris Road, Ringwood State Park, Ringwood; \$8/members, \$10/non-members; canceled if weather (rain or snow) is severe; 973/962-9534

**Paulinskill Valley Trail Hike** Hike the trail from Warbasse Junction; 10 a.m.; Warbasse Junction, Route 663, near the village of Lafayette (Route 15); bring lunch and something to drink; 908/852-0597

**Dog Walk** Dogs and their owners with spring fever will enjoy the "Hooray for Spring" dog walk; 3 p.m.; Whitesbog Village, mile marker 13 on Route 530, Browns Mills; \$4/person, \$9/family, dogs free with owners, free/members; preregistration required; 609/893-4646

**Hiking in New Jersey** Enjoy slides of the most beautiful places to hike in the Garden State; 2 p.m.; Great Swamp Outdoor Education Center, 247 Southern Boulevard, Chatham; free; 973/635-6629

**24 - 26**

**Threatened and Endangered (T&E) Species in New Jersey: Regulations, Identification and Assessment** Learn to access data from the NJ State T&E species list, how to perform and report on a T&E species survey and how reported sightings are authenticated; take either a 2-day or 3-day course (the second two days of class will focus on identifying Northern NJ — March 25 — and Southern NJ — March 26 — species); Cook College Office of Continuing Professional Education; \$325/2-day course; \$395/3-day course; 732/932-93-271, ext. 620

**28**

**Everything You Wanted to Know about Roses — A Workshop** Slide lecture and demonstration; 1 to 4 p.m.; N.J. State Botanical Gardens at Skylands, Morris Road, Ringwood State Park, Ringwood; \$8/members, \$10/non-members; registration required; 973/962-9534

## Tourney Anglers

continued from page 4

Beachwood's **Frank Cagginao**, who pulled in a 26 1/8-incher, was the only winner in the albacore category.

Adult men were the only winners in the weakfish category, also. First place was captured by **Steve Schon**, of Toms River, while **Rick Batesko**, of Whiting, took second place with his 15-inch catch.

Five-year-old **Gabrielle Grasso**, of Nutley, reeled in a 15 1/2-incher to garner first place in the bluefish subcategory for girls. She also caught a 15 1/4-inch blue, as did Toms River's **Elizabeth Dugan**, 9, who took second place. **Joshua Yusko**, a Trenton 8-year-old, **Danny Petrino**, a 9-year-old from Hamilton Square, and 6-year-old **Vincent DiMarco**, of Jamesburg, captured the top three places in the bluefish subcategory for boys with their respective 18 1/2-inch, 18 1/2-inch and 17 3/4-inch blues. That's right — the first and second place catches had identical measurements — and, for the second time in this year's tournament, time was the determining factor! Yusko landed his bluefish at 8:40 a.m., while Petrino reeled his in at 9:20 a.m.

**Jennifer Wallach** was the sole winner in the bluefish subcategory for teen girls.

Wallach, 15, who hails from Morrisville, PA, caught a 14-incher. Seventeen-year-old **Peter Meny**, of Summit, was the first place winner in the bluefish subcategory for teen boys, while second place was won by 15-year-old **Bill Kuryluk**, of Bensalem, PA. Meny's catch measured 19 inches, while Kuryluk's was 17 3/8 inches long.

Two Island Heights residents, **Francine Kaplan** and **Karen Hershey**, captured first and second place, respectively, in the bluefish subcategory for women. Third place went to Wall's **Linda Cafone**, who also placed in the fluke subcategory for adult women. The prize-winning fish measured 16 1/4 inches, 15 1/4 inches and 15 inches.

The 1,260 tournament entrants reeled in a total of 197 fish. Winners received a variety of donated fishing tackle and gear. But whether or not a prize was claimed, all were winners — as were those who will benefit from the funds raised by the event. To date, the event has raised nearly \$50,000 for the construction of a beach access ramp and specialized wheelchairs for the disabled and elderly. The annual tournament is sponsored by the Department of Environmental Protection's divisions of Fish, Game and Wildlife and Parks and Forestry, the New Jersey Federation of Sportsmen's Clubs, Jersey Coast Anglers Association and the New Jersey Beach Buggy Association.

## Black Bear Documentary Wins an Emmy

The New Jersey Department of Environmental Protection's (DEP) Division of Fish, Game and Wildlife and New Jersey Network (NJN) were awarded an Emmy by the National Academy of Television Arts and Sciences for the documentary *Bear Country, New Jersey*. The film, produced cooperatively between the division and NJN, took honors in the Outstanding Health and Sciences Program category.

"We are extremely proud of this production, and the people who participated in making it. It stands as a reflection of the division's commitment to educating New Jerseyans on the needs and issues surrounding wildlife today," said DEP Commissioner Bob Shinn.

The film explains the natural and historic perspective of the black bear in New Jersey and follows division biologists through their yearly cycle of black bear research. Interviews with residents living in bear habitat give local viewpoints and highlight the complexities of wildlife management in such an urbanized state. It was filmed entirely in New Jersey by NJN production staff with technical consultation provided by division personnel.

## New Jersey Outdoors (NJO) is Now on the Internet

New Jersey Outdoors' Web site is up and running! Check it out at <http://www.state.nj.us/dep/njo>.

Also surf over to:

■ **Atlantic White Cedar Information Repository**  
<http://loki.stockton.edu/~wcedars/index.html>

■ **Outer Coastal Plain/Pinelands Research Symposium**  
<http://loki.stockton.edu/~coastal/index.html#menu>

■ **Haskin Shellfish Research Laboratory**  
<http://vertigo.hsrl.rutgers.edu/>

■ **Powhatan Renape Nation**  
<http://www.powhatan.org>

■ **New Jersey Parks**  
<http://www.bgwebmasters.com/east/prkpanj.htm>

## New Jersey Outdoors 1997 Photo Contest

See Page 58  
for Contest  
Details

Entries  
Due by  
April 1, 1998



# White-tailed Deer

by Susan Predl

No other species of wildlife evokes as wide a variety and intensity of emotions as the white-tailed deer. Whether you enjoy seeing deer on a drive through the countryside or you're a hunter pursuing a trophy buck, white-tailed deer are exciting to see. Whatever your perspective, white-tailed deer enrich our existence.

White-tailed deer, *Odocoileus virginianus*, belong to the family of animals known as Cervidae, which are best characterized by the presence of antlers. Annual antler growth begins in male white-tailed deer in April. The growing bone is full of blood vessels and nerves and is covered with a hairy skin called velvet. Growth continues through August or September, when calcium is deposited along the blood vessels. The bone then hardens and the velvet dries up and sloughs off or is scraped off by the deer rubbing its antlers against trees and shrubs. By November, all of the velvet is off and in January, the antlers are shed.

Deer breed for a limited period of time, known as the rut, between October and February. In New Jersey, breeding usually occurs in November. The gestation period is approximately 200 days, making late May and early June the peak fawning period. The litter size is from one to three fawns, with twins being most common. At birth, the fawns weigh approximately 7 1/2 pounds. A coat of white spots on a reddish-brown background enables the fawn to blend with patterns of sun and shade in a tall grassy field. Both fawns and adults replace summer hair with a brownish-gray coat of insulating fur before winter. The tail is fringed with white and is pure white below, giving the white-tailed deer its name.

The white-tailed deer is most frequently described as a browser, a consumer of woody vegetation and leaves. However, from early spring until the first killing frosts of autumn, they are primarily grazers, feeding on the variety of succulent vegetation including grasses, herbs and agricultural crops. In the fall, the fruits of apple, crab

apple, wild cherry and black gum trees are readily eaten. Mast (fallen tree nuts), especially acorns, is an important food source throughout the deer's range.

A mature white-tailed deer requires from 2 to 7 pounds of browse per day to maintain good condition. It is especially critical that these needs be met in the winter, when weather and temperature extremes — and, in females, pregnancy — place additional stresses on the animal.

The species develops its largest populations in areas where forests and fields abut. Although the land-clearing done by early settlers created such habitat, over-exploitation by the growing human population resulted in declining deer populations.

At the turn of the current century, deer were almost eliminated from much of the northeastern United States as a result of years of over-hunting and habitat destruction. From 1902 through 1908, deer hunting was prohibited in New Jersey. During this period, the New Jersey Board of Fish and Game Commissioners restocked the state with deer from Virginia, Pennsylvania and Michigan. The restocking efforts proved successful and the deer population increased rapidly.

By the 1950s, the deer population had reached carrying capacity in many areas of the state and population control through a more extensive harvest, such as instituting a hunting season for deer of either sex, was warranted. The harvest of antlerless deer became necessary to effectively control population growth.

Approximately 105,000 hunters enjoy pursuing the wily white-tail during New Jersey's six deer hunting seasons: fall bow, permit bow, six-day firearm, permit shotgun, permit muzzleloader and winter bow. Together, these seasons provide approximately 100 days of outdoor recreational opportunity.

New Jersey can support a healthy and productive deer herd of at least 150,000, the size of the current herd. Proper wildlife management techniques and law en-

forcement efforts have allowed the deer population to grow to its present level. Deer currently inhabit all but one of New Jersey's 21 counties in the state, the exception being Hudson County. The density of deer exceeds 60 deer per square mile in some areas of the state.

The same deer that inspire awe in hikers and photographers may inspire a farmer's rage. Depredation of farm crops and backyard gardens is a very serious and expensive problem in some areas of New Jersey, such as the urban fringe of farmland in Morris County. The major problems usually occur in areas where concentrations of deer exist and hunters' access to the deer is limited.

Deer management zones — areas with similar deer herds, habitat and hunting pressure — allow biologists to direct hunting, particularly the harvest of antlerless deer, to specific areas, where damage to crops and gardens is a problem. The 36 deer management zones that existed in 1974 have been modified and added to; today, the state has 67.

A substantial harvest of the herd by sport hunting helps keep deer-related problems to a minimum. New Jersey's annual harvest is nearly 60,000 deer. However, managing deer in urban and suburban fringe areas has become a difficult task, because hunters are sometimes denied access by landowners with safety or liability concerns.

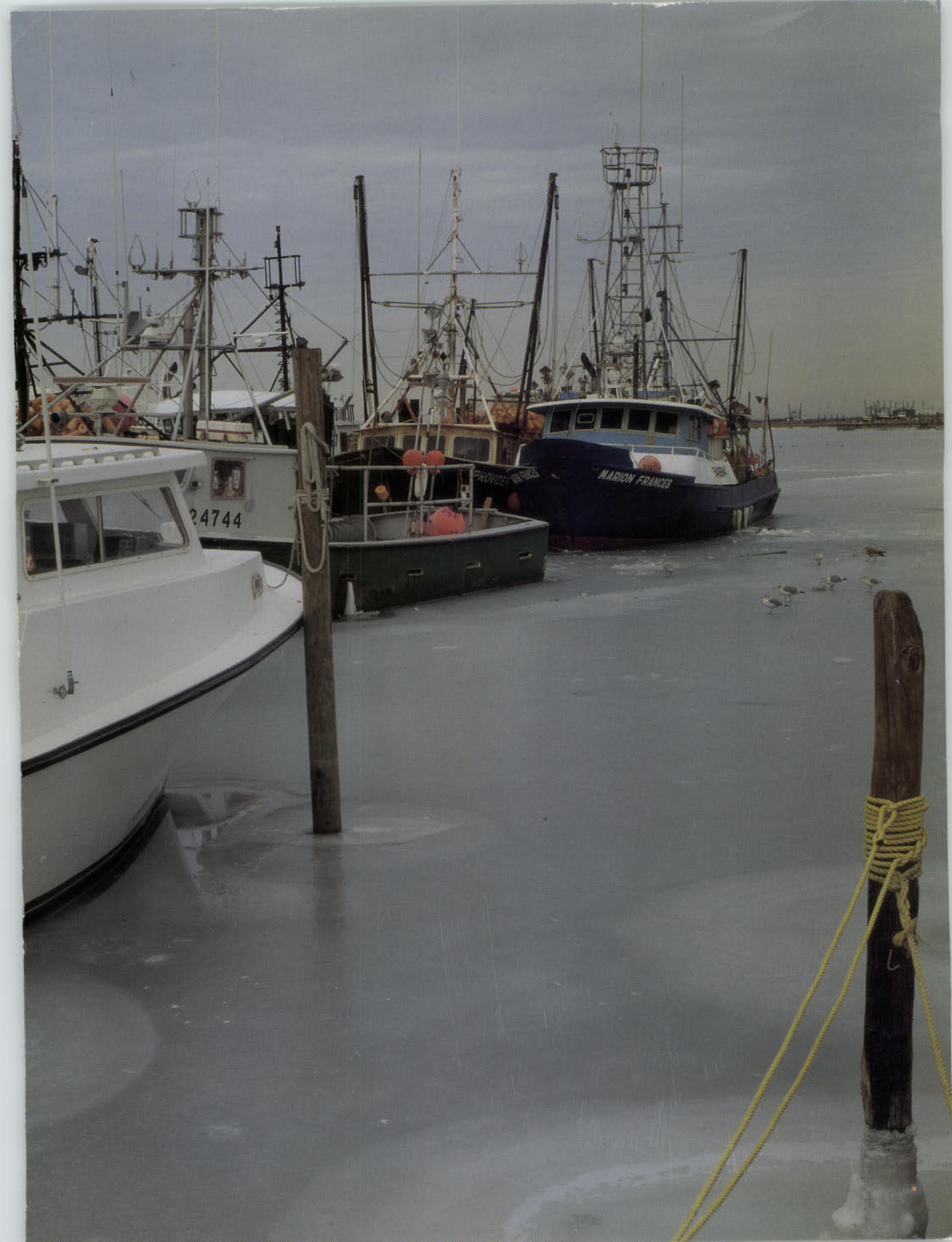
Landowners, as well as sportsmen, need to be informed of the need for deer population management. Only through a progressive and responsive deer management program can the Division of Fish Game and Wildlife minimize the economic loss to owners of farms, ornamental shrubbery and automobiles; provide quality outdoor recreation time to sportsmen and women; and, most importantly, maintain a healthy and productive deer herd throughout the state for years to come.

*Susan Predl is a senior wildlife biologist with the Division of Fish, Game and Wildlife.*



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