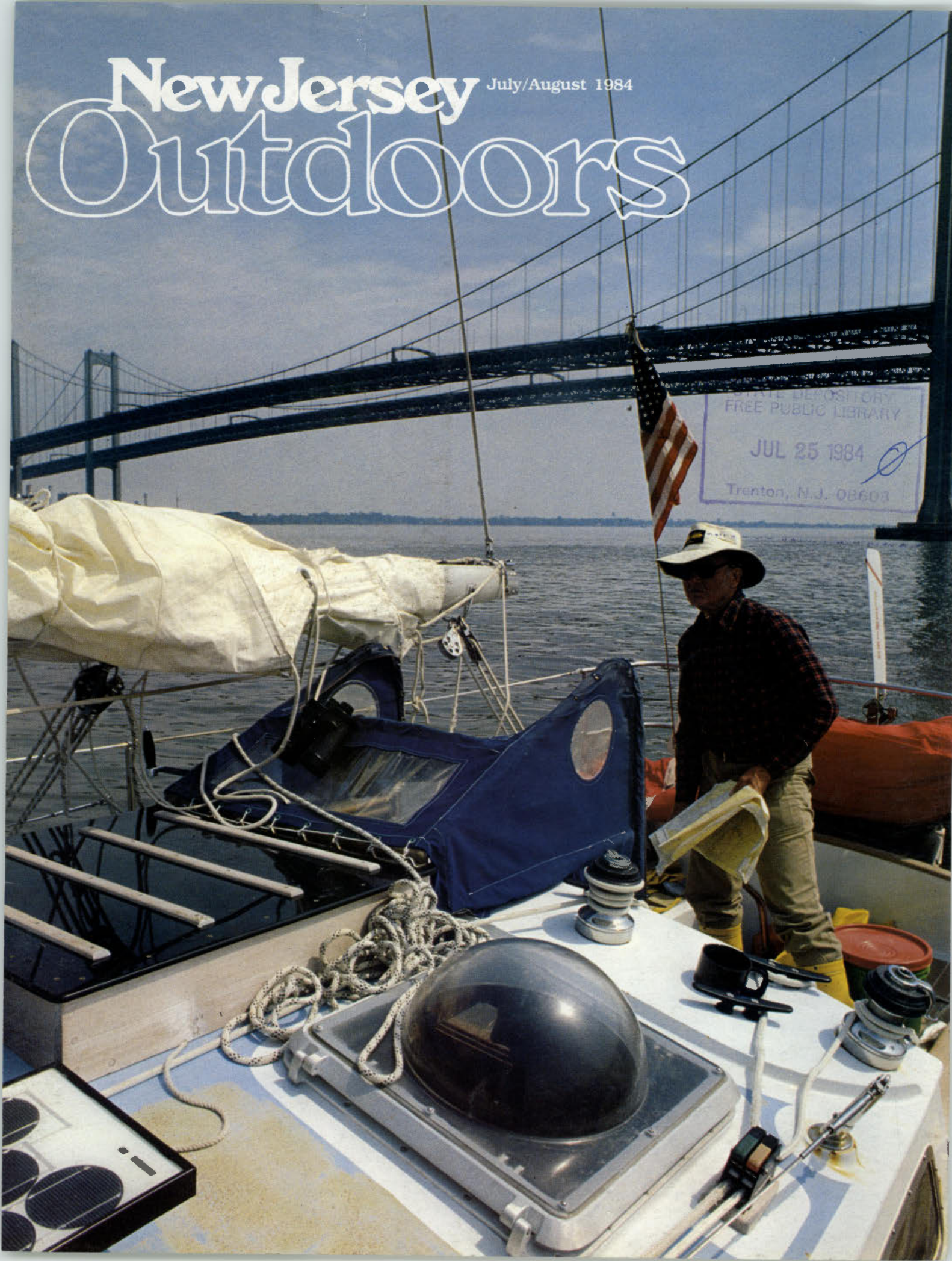


# New Jersey July/August 1984 Outdoors





# New Jersey Outdoors

- 2 Voyage of the Globe Star • *Paul & June Trace*  
*Creamer's quest ends*
- 4 Head Boats and Kids Mix • *Dennis J. Cleary*  
*Continuing a family ritual*
- 7 Summer Weakfish in Delaware Bay • *Brion Babbitt*  
*Weakfish return in late July*
- 9 Bobbing for Eels • *Walter G. Ribeiro, Sr.*  
*A Huck Finn episode some 50 years ago.*
- 12 Hacklebarney State Park • *Fran Wood*  
*Where time stands still*
- 15 Summer Concert Series • *Cathie Cush*  
*Concerts under the stars*
- 16 New Jersey's First Waterfowl Stamp  
*Signed prints and stamps for collectors*
- 18 Inlet Inhabitants • *Herb Segars*  
*Colorful world below the surface*
- 20 Boardsailing at Assunpink • *Thom Olszak*  
*No crowds at Assunpink Lake*
- 22 Birding for Beginners • *Peter Dunne*  
*So what do I need to get started?*
- 26 Guarding New Jersey's Coast from the Sky • *Billie Jo Hance*  
*The EPA Helicopter Monitoring Program*
- 28 Surface Collecting Indian Artifacts • *Joanne Van Istendal*  
*Site history in your own backyard*
- 30 Blueberries at Whitesbog • *Francis J. Banisch & Michele Byers*  
*And a Blueberry Festival, too*

## Departments

- 33 Letters to the Editor
- 36 Wildlife in New Jersey/The Black Skimmer • *Larry Niles & Mimi Dunne*

## Mini Features

- 15 Parks '84 Summer Events
- 34 Picking in your own backyard • *George Strasser*
- 34 N.J. Championship Tomato Weigh-in

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## NEW JERSEY OUTDOORS CREDO

This publication is dedicated to the wise management and conservation of our natural resources and to the fostering of greater appreciation of the outdoors. The purpose of this publication is to promote proper use and appreciation of our natural, cultural, and recreational resources, and to provide information that will help protect and improve the environment of New Jersey.

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# FROM THE EDITOR

## The Right Stuff

On a pleasant Sunday morning on the 20th of May, I drove south to Red Bank Battlefield Park by the Delaware River to welcome New Jersey's own globe-circling blue-water sailor, Marvin Creamer. It was a festive occasion. There was a welcoming crowd of about 2000—families, children of all ages, a high school band in uniform, some dignitaries, television camera crews, reporters with pencils and pads, and hundreds of camera-toting spectators.

Just before 10 a.m. the blue and white 35-foot sailboat, *Globe Star*, motored into view and anchored offshore; the high school band played a Sousa march, and the crowd

surged toward the beach as Captain Marvin Creamer and his crew stepped ashore. This was the symbolic ending of the round the world sailing adventure by Marvin Creamer and crew.

In this age of manufactured television and movie heroes, this 68-year-old retired geography professor is the real thing. He had the courage to pursue a dream—to sail around the world without the aid of any of the instruments that navigators use. And he had the skill and determination to make it. He found his Holy Grail. And we discovered a genuine, 24-carat New Jersey hero.

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## IN THIS ISSUE

*Voyage of the Globe Star* was written by June Trace and photographed by Paul K. Trace of Woodbury. Paul has been a photographer for 23 years and has had a wide range of assignments including VIP portraits, a season with NFL films, a Disney World, Florida assignment, and 12,000 8 x 10 color photographs of the USS *Saratoga* for the U.S. Navy.

In the article *Head Boats and Kids Mix*, author Dennis J. Cleary takes his kids fishing and carries on a family ritual started by his father. And they caught fish too.

Author Brion Babbitt reminds us in the article titled, *Summer Weakfish in Delaware Bay*, that the weakfish do return to Delaware Bay in July.

*Bobbing for Eels* is the account of a Huck Finn adventure Walter G. Ribeiro had some fifty years ago on the Delaware River. It's like a page out of a Mark Twain tale. The color illustrations are by Anthony Hillman.

Author Fran Wood's father took her to *Hacklebarney State Park* when she was five years old and she can't get this "pristine woodland" out of her system. Ms. Wood is an experienced writer and editor, having been employed in both capacities in the newspaper business for over 10 years.

Free lance writer/editor Cathie Cush writes about the *Summer Concert Series* in the Garden State. Bring a blanket or a lawn chair and enjoy.

The article titled, *New Jersey's First Waterfowl Stamp* announces that stamp and signed waterfowl prints will be available for collectors.

Underwater photographer Herb Segars gives us a colorful glimpse of the *Inlet Inhabitants* of the Shark River Inlet in Avon.

Author Thom Olszak avoids the summer crowds by *Boardsailing* at Assunpink Lake in the Assunpink Wildlife Management Area in central New Jersey. Illustrations are by Lorraine Dey.

*Birding for Beginners* by Peter Dunne, Director of the Cape May Bird Observatory, is a how-to article for the birder-to-be—the equipment required, recommended guides, and when and where to go.

Free lance writer Billie Jo Hance, a former U.S. Environmental Protection Agency employee, writes about the EPA helicopter monitoring program in the article titled, *Guarding New Jersey's Coast from the Sky*.

Read *Surface Collecting Indian Artifacts*

by writer Joanne Van Istendal, a member of the Archeological Society of New Jersey. Then you'll know what to do with the 4,000 year-old grooved stone axe you found in your own backyard.

The article titled, *Blueberries at Whitesbog* by Francis J. Banisch and Michele Byers, discusses blueberry history and the Blueberry Festival on July 28. Michele Byers, Special Projects Coordinator for the N.J. Conservation Foundation, and Francis J. Banisch, a planning consultant for several pinelands communities, are working with the Whitesbog Preservation Trust.

You can save money and enjoy fresh fruits and vegetables by *Picking in your backyard garden*. The author, George Strasser, tells you how, when and where.

Our Wildlife in New Jersey series features *The Black Skimmer* by non-game biologists Larry Niles and Mimi Dunne.

Check the Parks 84 events on page 15 and don't forget the N.J. Championship Tomato Weigh-in stations on page 34. Pick your biggest tomato and take it to the weigh-in. Top prize is \$1,000.

*Steve Penner*





Departure: December 1982



## CREAMER'S QUEST

# Voyage of the Globe Star

An authentic American hero was given a hero's welcome on Sunday, May 20, 1984, at Red Bank Battlefield Park by more than 2,000 New Jerseyans, including his wife Blanche, who lined the river bank and the rise overlooking the Delaware.

The hero was retired Glassboro State College Professor Marvin Creamer, 68, of Pitman, captain of the 35-foot steel-hulled *Globe Star*, returning to his port of departure from a 17-month, 31,000-mile circumnavigation of the world which began in New Jersey on December 15, 1982.

Marvin Creamer might best be described as a modern day Christopher Columbus. He is an intrepid blue-water sailor with a dream—which has now been realized—to circle the globe, but without any of the instruments used by modern navigators. Certainly many sailors have circumnavigated the globe and rounded the treacherous Cape Horn. But this voyage would be set apart. Creamer would challenge the seas without instruments, something no one had ever done before. He would set sail without the aid of a compass, a sextant, or a chronometer. Not even a wristwatch would be on board.

Creamer would navigate by observing the positions of the stars, using a centuries-old method of parallel sailing, which follows courses along meridians and parallels. Distances covered would be determined by observing the wake of the boat and the speed of the bubbles passing by. The *Globe Star's* progress was tracked by the Tiros/Argos Satellite system, monitored by Doctor Lee Houchins of the Smithsonian Institution.

The entire voyage of the *Globe Star* will be chronicled in an upcoming book by Marvin Creamer himself. His account of the first leg of this journey was printed in the May 1984 issue of *Cruising World*.

TEXT BY JUNE TRACE  
PHOTOGRAPHED BY PAUL K. TRACE



#### CREW OF THE GLOBE STAR:

GEORGE BALDWIN, 69

National Park, N.J. to Cape Town, South Africa

N. JEFFREY HERDELIN, 23

National Park, N.J. to Hobart, Tasmania

RICK KUZYK, 19

Cape Town, South Africa to Sydney, Australia

JESSE EDWARDS, 34

Hobart, Tasmania to Sydney, Australia

NICK GILL, 33

Hobart, Tasmania to Port Stanley, Falkland Islands

ROBERT ROUT, 34

Whangaroa Harbor, New Zealand to Port Stanley, Falkland Islands

BOB WATSON, 33

Port Stanley, Falkland Islands to National Park, N.J.

DR. ED GIBSON, 69

Port Stanley, Falkland Islands to National Park, N.J.

DAVE LANDSDALE, 67

Port Stanley, Falkland Islands to National Park, N.J.

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*A special note from photographer Paul K. Trace:*

As a professional photographer I'm constantly searching for interesting assignments and people. On this assignment I found both, and much more. I was privileged to sail with Marvin Creamer to Cape May when he departed on December 15, 1982; then I again sailed with him when he returned home after 17 months. After many hours of conversation with Marvin, I have concluded that this man is one of those few people who is made of the RIGHT STUFF.



Return: May 1984







## Head boats and kids mix!

BY DENNIS J. CLEARY  
PHOTOS BY AUTHOR

*Kids waiting for the engine start and ready to fish. Left to right, Becky Cleary, 12, Toms River, Byron Cleary, 9, Toms River, Tara Souder, 12, Sewell, NJ.*

To the average adult, a promise of a fishing trip doesn't sound like much. But promise your children that you are going to take them deep-sea fishing and you're a marked man at least until the fishing trip is over. Well I promised my kids, Becky, 12, and Byron, 9, that I would take them on a half-day trip out of Manasquan Inlet. Sea bass and flounders were biting. Well you can always tell a kid who's going deep sea fishing. The eyes get brighter and you'll see enthusiasm that is hard to find the rest of the year.

Since I had been fishing since the age of 6, it wasn't hard to plan the trip. When you live on the Jersey Shore you have a fishing paradise at your back door. My favorite haunt has always been the Pt. Pleasant Inlet area with its variety of head boats that go out for everything from bluefish to winter cod. But this particular weekday in summer the target was good bottom fishing. This meant flounder and sea bass.

The night before the trip the kids were pretty excited. They had invited their cousin Tara age 12 up from South Jersey for the trip. My dad had volunteered to try his luck again. It would make another family tradition come alive. A father and children fishing trip. Now the grandchildren were part of the tradition. My kids were getting those funny-looking goose bumps that come with an announcement of a deep sea trip. I checked the supply of sinkers and bottom rigs so the wrecks wouldn't clean out my tackle box.

Just like a kid, I couldn't sleep either. You always have that nightmare that you'll miss the alarm and oversleep and end up at the Inlet watching the stern of the boat disappearing near the horizon. I couldn't bear the thought of disappointed kids!

I can't think of a better family pastime than taking the kids out on a head boat for four or five hours to search out the elusive flounder or sea bass. And of course you always manage to snag a few sharks, sea robins, skates, and sundials. And the gulls manage to follow you the entire trip waiting for discarded bait or the half-eaten sandwich.

When the alarm went off at 5:30 A.M., you're half tempted to sleep in and forget a few flounders. But then you would have to answer to the kids. The average father just can't say no to kids. I'm an average father. A quick breakfast of eggs, bacon, coffee and cereal for the kids and the fishing trip was off and running. A good breakfast is always good luck. There's an old legend that fish can hear a stomach growling on a head boat. So take heed. Eat breakfast!

When we arrived to the Inlet area, we were greeted with three distinct images at 6:30 A.M. Early morning joggers, gulls exercising in the light morning breezes, and boat mates trying to hustle cars into parking spots. We chose the 80-foot *Shamrock*, owned by Capt. John Bogan, a member of the famous Bogan clan noted for sea captains par excellence. Since I'm Irish, I thought the *Shamrock* was the perfect good luck image. Capt. Bogan met us personally as we got out of the car. He's the perfect image of a sea captain. Ruddy, sea-red face and a friendly manner to help make our trip a real experience. All we needed now was some fish.

The first thing you have to do when you arrive at the boat is tie your rods in some strategic place for the best fishing advantage. Well the stern was already taken so we decided on the mid-section, starboard. Most dedicated fishermen get down the night before, tie their rods in choice places, and



sleep in the car. Great shades of childhood when I had to sleep between my uncle and my dad. Dad and I had both mellowed when it came to giving up too much sleep time to get a good rod position.

Once the rods were tied safely on the *Shamrock*, it was time for the lifesaving cup of coffee and a few fish stories. The coffee bar near the dock was famous for braggarts. With kids sitting on both sides of me in the coffee shop, I opened my ears trying to pick up a few hints and encouraging stories to find and catch the ultimate trophy-sized fish. In between sips I took mental notes. The kids listened to yesterday's tales of luck with big eyes. Besides my fatherhood was at stake. I had to catch some fish to keep my credibility with my kids.

Today, Capt. John Friedel was going to take out the *Shamrock*. The sky was overcast and the temperature was about the mid-seventies. The captain commented that he had been fishing since age 4, first on the Passaic River in North Jersey and then for the past 19 years in the Pt. Pleasant area. He was the kind of person you really had confidence in. And I needed confidence! The kids looked at him with something akin to hero worship. He was a sea captain. It was like a Moby Dick story unfolding minute by minute.

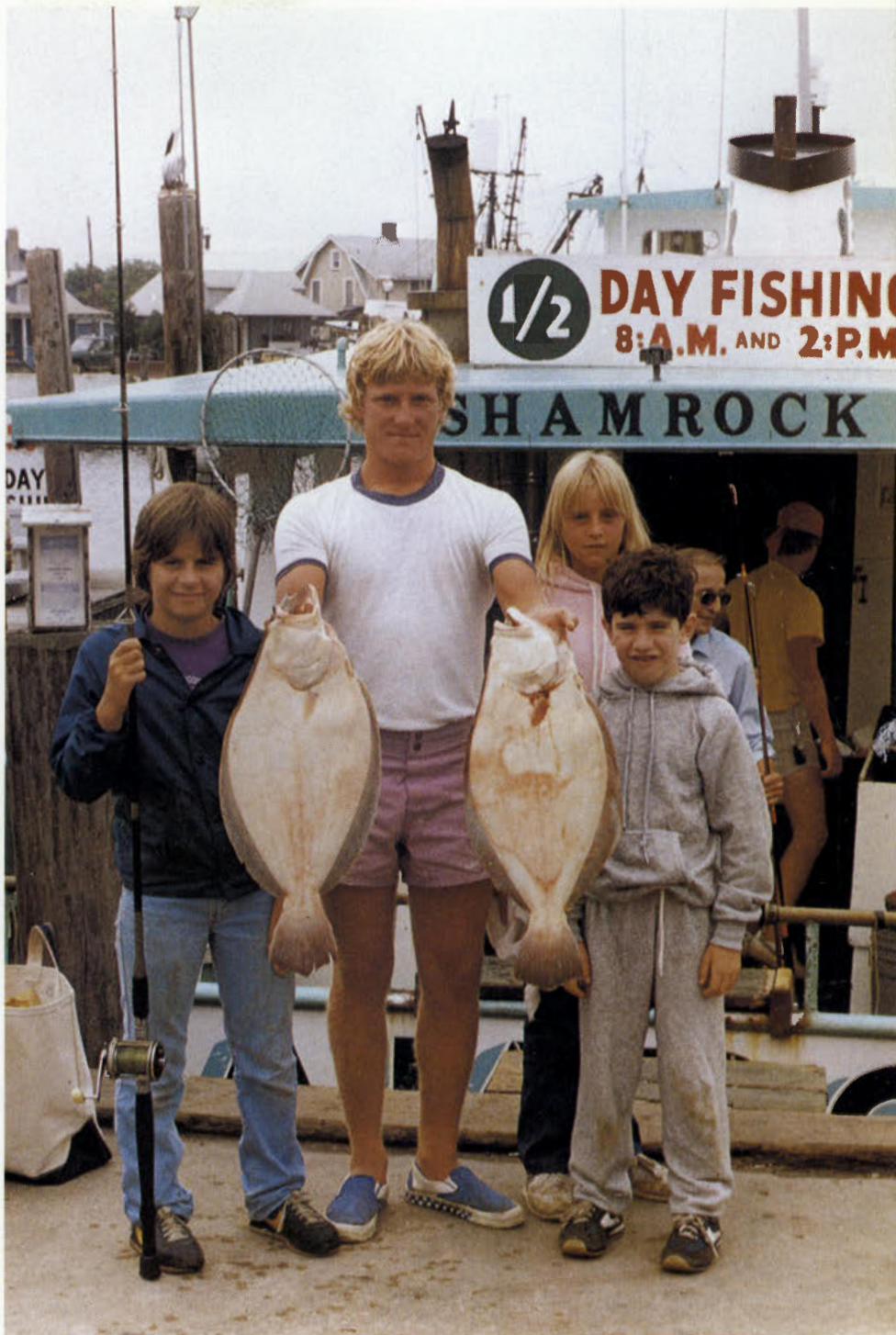
The ride out the Pt. Pleasant Inlet was exciting for the hundredth time. It was about 8 A.M. and the rock piles were already crowded with early morning fishermen. The beaches were also starting to fill up with walkers and early bathers. There was that wonderful calm that the early morning fishing trip is was noted for. The world hadn't quite come awake yet. I hadn't either. As I rigged up the lines, the kids were glued to the whole seascape as the *Shamrock* plowed through the slightly rolling seas to search out the first images of quarry on the fish finder.

We had no sooner gotten about one half mile off the coast when the mates plunked down small plastic containers of bait-of-the-day, sliced squid and small sperring. I wondered what the best bait would be today. In ten minutes we found out. We heard the lowered throttle of the engine and then the familiar "honk" on the captain's horn. Lines shot overboard like hot potatoes. As usual the kids had figured out how to be the first lines in the water.

It's still a mystery to me how you get the first fish. I suppose fathers are expected to lead the way when it comes to catching fish. But I was secretly praying either Becky, Bryon, or Tara would hit pay dirt first. We had no sooner felt the lines klunk on the bottom when Becky and Bryon had hits on their poles. I already knew the fishing trip was going to be a resounding success.

The first fish on the boat still gets rave reviews on any head boats. It's like a fever spreading from passenger to passenger. Sure enough Becky and Bryon each had a fish on the line. As the kids struggled to reel in the line, about twenty pairs of eyes gawked down at the water hoping for the trophy fish to emerge. And there they were! Two nice-sized sea bass firmly hooked and fighting hard. I was literally off the hook. The kids had caught a fish. I was home free!

Now that I was embarrassed by my own children's fishing prowess, I was determined to catch at least a sea robin so I could be called a fisherman. Within several minutes, the fish started hitting regularly all around the boat. One man six places to my left caught the first "doormat" on the boat. This, I soon learned, was slang for a very large flounder. It was a pool contender at 6 pounds on the weigh-in. Fish-



ing success was in the wind. The scene was a very happy head boat. But I was still looking for my trophy fish. I had to show my kids who was boss.

Fishing technique is always part of the boat talk. The familiar question still is "what kind of rig and bait are you using?" You see people diving into their tackle boxes and changing rigs and bait faster than money. Today the secret was two sperring to a hook. The kids kept catching fish while I was trying to catch my breath. We continued to search out a few wreck sites as we drifted and cruised slowly down from Bay Head, Mantoloking, Lavallette, and Ortley Beach about a mile off shore. The kids were so excited I just knew I was going to be the best-loved father for at least the next month. →

*Boat mate Darren Gorski holds the two top fish for the day surrounded by (left to right) Becky Cleary, 12, Toms River, Denise Brendli, 11, Clifton, NJ, and Jonathan Mutter, 7, Philadelphia.*





*Becky Cleary smiles triumphantly as she displays two flounders caught by the kids. Becky Cleary, 12, Toms River, N.J.*

Darren, one of the *Shamrock's* mates, made the trip pretty relaxing as he helped the kids, and even myself, with line snags, and two deeply swallowed hooks. The sea bass were especially taking the hooks too deep. Darren was always ready with the big net when we hooked into each of our five flounders. No pool winners but nice-sized fish. It suddenly became apparent that the mate was the new hero in the kid's lives. I'm not a fishing expert like the mate but I do know when I have a fish on the line.

As the trip progressed through late morning, a few light showers appeared but the kids didn't even notice them. I was still trying to catch my trophy fish. Throughout the trip the kids were pretty excited about the frequent sightings of large, menacing

jellyfish that were all over the ocean surface. To add a bit of stimulus to my dream of a trophy fish, Darren the mate showed me a picture taken years ago of a 17½ lb. flounder caught by a woman fishing on the *Shamrock*. Now I was really determined to break the world record.

The kids kept tabs on every part of the boat as fish were pulled in on a regular basis. By 11 A.M. we had over five or six large flounders just under pool size. But the real fever was created by at least seven fish that seemed to be pool contenders with their doormat-sized bodies. It was great to see big fish. It's like your neighbor winning the lottery. You're really happy for him.


Near the end of the trip I thought I had the pool winner. I was determined to win. The line pulled straight down. The tip bent over firmly. I could feel a continuous tugging. I had visions of Big Moby Flounder and the \$30 pool. Becky, Bryon, and Tara were looking at me as I contended with the rod and the mystery fish. Even Dad thought I had the winner. The mate was ready with the big net. And suddenly the "winning fish" emerged. A three-way snag! I had picked up two other lines making the weight in sinkers about 14 oz. And the two lines from the other side of the boat thought they had big fish too. Another disappointing fish story!

What a perfect fishing trip for the family! We had some nice flounders and sea bass for the freezer, a nice boat ride along the beautiful coast, and a healthy day on the ocean. Deep sea fishing was a divine leveller for me and the kids. Especially when the kids caught the most fish on the entire boat. I prayed to King Neptune for the successful day. I could hold my head proud when I returned home. I didn't even have to sneak off to the nearest fish market to buy flounder and sea bass so my wife wouldn't challenge my manhood.

When the boat returned to the dock, the kids had already dozed off a bit on the homeward-bound cruise. I still had a few pictures to take of the pool winners. It was about 12:30 P.M. as the boat finally tied up. The excitement mounted as the mates searched the boat for challenging pool winners. One large doormat was already hanging on one side of the hand scale. One by one challenging "doormats" took on the emerging winner.

Sarge Ordecki of Toms River came away with the whopping doormat flounder at 6 lb. and 2 oz. while the runnerup weighed in a 6 lb. and 1 oz. What a difference an oz. makes! I never saw the kids eyes so big. I didn't win the pool but I had one of the best days of the summer with the kids. And reports from the boat radio indicated that we were indeed the "lucky boat" of the day with good catches of flounder and sea bass. I seconded the motion! After all that's what bottom fishing is all about. Fresh fish and happy kids!

As I packed the rods in the truck, I was more than satisfied with our half day adventure on the *Shamrock*. It was a day of Irish luck. We had plenty of fish. My wife would be happy since I was the rare husband returning home with real fish. It also dawned on me, as I looked at my father, that I was continuing a ritual that my father had started with me when I was about six years old. He took me out on a head boat for the first time. Now dad was fishing with his grandchildren. This made me feel real good.

But there was still one thing I hadn't counted on! When I got home, I still had to clean the fish. But I guess it's all part of the Luck of the Irish! 



# Summer Weakfish in Delaware Bay



*A good landing net is mandatory for boating these spirited but tender-mouthed summer weakies. Note extra-long leader.*

BY BRION BABBITT  
PHOTOS BY AUTHOR

The annual spring rite of the return of the weakfish (*Cynoscion regalis*) to Delaware Bay receives much attention by New Jersey anglers. Fish in recent years have attained monstrous, unprecedented weights with 15- and 16-pound specimens necessary to win local contests. Since 12- and 13-pound "tiderunners" have become a relatively common sight in coolers, it's easy to see why this springtime run has become so heralded.

Serious recreational fishing in the Bay begins about May 1, and usually, by this date, the initial

hook and line catch is history. Typically, "jetty jockeys" working the rockpiles dotting Cape May Point are the first to cash in, followed by boaters somewhere near Brandywine Shoal at the entrance to Delaware Bay.

Action will continue unabated—barring a sudden drop in water temperature—from the early part of May into early June as big weakies enter the Bay in wave after wave in their yearly spawning ritual. By late June most spawning is complete, heavy-weights have departed, contest entries have been



tallied, and it's wait until next year—or is it?

What many weakfish-lovers may not realize is that outstanding fishing returns to Delaware Bay around late July and continues into early fall. Many of these summer residents are considerably smaller than spring weakfish but what they lack in size is more than compensated for by spirited light-tackle fight, quantity and—perhaps best of all—delectable fillets!

The bucktail-plastic tail or worm combination is now standard equipment among early-season anglers. However, for reasons known only to higher powers, summer weakies shun these bottom-bouncing lead-headed lures. Reports occasionally filter in of a bucktailed weakfish or two, but far and away more “trout” succumb to fresh cut or live bait. In further contrast, spring fish almost without fail are taken from a drifting craft, while summer fishing entails a firmly anchored boat. A complete change in tactics is required to catch these fish on a regular basis. Hot-weather anglers soon learn that you must meet these late arrivals on *their* terms. Failure to do so will almost always result in an empty cooler and a badly damaged ego.

I'm always leary about fishing “rules” carved in stone, but if one bait is to be selected as the most consistent year-in-year-out fish-taker, the nod has to go to the shedder crab. Summer after summer, weakies find this soft-shelled appetizer the most appealing—often to the exclusion of all else.

Unfortunately these tempting baits are expensive, usually selling for about a buck apiece. Luckily though, several baits can be garnered from a single crab by splitting it in half and then into smaller pieces by dividing each half into sections which each include one leg. Thus every shedder crab can be stretched fairly far and several crabs will provide enough bait for many hours of fishing.

As the summer weakfish season wears on other baits seems to work very well also, eventually matching the effectiveness of shedder crab by late August. These baits are mainly squid and live spot. Squid can be purchased as frozen blocks of about a pound each, while live spot usually must be caught by the angler prior to a day's fishing. A spot is a baitfish quite plentiful in Delaware Bay in summer and is easily caught by means of traps for minnows or similar small fish. These traps are baited with scraps of bunker (menhaden) and set in tidal creeks adjoining the Bay. On a flood tide, small spot and killifish (“minnows”) will stream into the bait collector. By the way, as a second choice for live bait killifish work well too, although they are not quite as popular among weakfisherman as spot.

As with just about everything else associated with summer weakies, rigging up has its own specialties. August weakfish are selective about bait and just about as finicky when it comes to presentation. You'll get the best action by using unusually long leaders attached to hook and bait. Whereas a 12- to 18-inch leader will suffice for most Bay species, it isn't uncommon to see a 36-inch leader employed by those calling themselves experts. These fish, at times, can be unbelievably spooky, requiring a bait presented well away from other terminal tackle. If you don't believe it, fish two lines—all else being equal—with one having a long shot of line and the other a shorter leader!

Furthermore, some anglers swear by the gold-plated hooks they use to tether their baits. Whether it is true that these glittery hooks add more appeal to the offering or not, they're worth a try strictly on the basis of their success record. I know of anglers

who always account for sizeable catches of weakfish who use nothing but the gold plated variety. Plenty of fish, however, are taken on hooks in other finishes, so whether gold holds a distinct advantage or merely instills self-confidence is open to argument.

A typical weakfish rig comprises the following: to the running line is attached a medium-sized three-way swivel which is in turn attached to a connector snap and bank sinker at one eyelet and a three-foot leader and hook at the other eyelet. Sinker sizes range from one to three ounces depending on the wind and tidal currents prevailing. Hook patterns vary, with O'Shaughnessy and Carlisle being very popular. Some even prefer the newer wide-gap hook design, which have the hook point actually curving inward toward the hook shank. Users claim increased “hookability” and there is no evidence to contradict these reports. Hook sizes ranging from four up to one should handle most fish encountered.

Live small spot should be lightly pinned just fore of the dorsal fin for maximum movement and balance in the water. In this case a hook with a shorter shank is ideal. When fishing cut bait such as squid, cut the bait into narrow strips about three inches long at most. Form a pennant-shaped strip for optimum flutter in the water. And hook the bait only once so it streams cleanly from the hook and doesn't bunch up. Remember, these fish can be extremely picky so attention to a few details can be the deciding factor between only a couple of fish and a nice catch.

Equipment aside from bait and terminal tackle should include light spinning or conventional gear. One-handed rods six to seven and a half feet are best suited to this type of small-game fishing, allowing the quarry to give the best account of itself. Lines in the 10- to 12-pound-test category are ideally matched for this sport.

Weakfish are named from the fact that their mouth tissues are easily torn. A good landing net is mandatory to prevent a last-minute tear-off at boatside. A hook can easily rip through tender tissues when the fish makes a sudden last-moment surge. Leading a spent fish quickly but gently—*head first*—into a net will consummate the battle.

Boaters leaving New Jersey ports will find best summer weakfish action in such spots as Bug Light, Maurice River Cove, and in the area off Fortescue. Hot spots vary somewhat from year to year within a given area but as a rule of thumb top sport is found relatively close to shore—sometimes extremely close to the shoreline. That's why smaller rental boats do about as well as anyone else during peak season. Red-hot excitement may only be a scant few hundred yards from dry land!

Best bet before making a trip is to gather some information by calling ahead to a marina located along the upper northeast portion of Delaware Bay. Such ports dot the Maurice River and the well-known Fortescue area. Since party, charter, and private boats sail regularly from these marinas, information will be the most up-to-date.

Summer weakfish weigh about two to four pounds. Smaller “spikes” are common and should be returned to the water unharmed to provide for our future fishery. There is a sprinkling of larger fish—fish of five pounds and greater. Enough 10-pounders are reported every year to add that extra bit of spice.

If you enjoy spring weakfishing in Delaware Bay you might want to give it a try again in the summer. Fast sport with these light-tackle scrappers just may help you extend your weakfish season.







# Bobbing for eels

In a past issue of *New Jersey Outdoors*, there was an article on fishing for eels along the Jersey coast, in which eels were caught by spearing them in shallow waters. I would like to relate another method of catching eels which is much more productive—I call it "bobbing" for eels.

Fifty years ago, when I was a boy of 17, I had an experience that I have never forgotten, nor have I had a similar experience since that time. Like all good fishermen, when you find a productive fishing "hole" or method of catching fish, you don't tell everyone about it for fear of losing your "secret spot" and all the fish around it, but I am now ready to tell my story.

Being a Boy Scout and having a bit of wanderlust in my blood, during a summer vacation from high school I decided to go camping at the Delaware Water Gap for a week or two. Unable to get any of my buddies to go along (their parents wouldn't allow them), I went myself with nothing more than a couple of blankets, my trusty scout knife, an axe, and plenty of matches. My mother drove me to the monument at the foot of Rt. #31 in Trenton (about 30 miles from home in East Camden), which was as far as she could go; she kissed me goodbye, and I was on my own for the next week or two. After a series of short "hitches" from local farmers driving by, and a lot of hiking, I finally arrived at my destination—Dunnfield Stream, on the Jersey side of the Gap, across from the present Ranger's Station on Rt. #80, just below the Stroudsburg bridge (there was no highway or bridge there at that time). I found a level spot along Dunnfield Creek where I made camp, using the ice-cold water of the stream for an icebox. I lived on some food packed by Mom, and also caught trout with my bare hands, trapping them under overhanging rocks in shallow pools in the stream.

One day, while browsing down along the Delaware River, I met a boy of my age who was staying in an old shack along the river that he said was owned by his uncle. He said his name was Dave, and we got to talking, and he asked if I wanted to go bobbing for eels in the river that night. I confessed that I didn't know what he was talking about, but it

BY WALTER G. RIBEIRO, SR.  
ILLUSTRATIONS BY ANTHONY HILLMAN



New Jersey State Library





sounded like fun, and I accepted his offer. Dave said, "We have to get worms—lots of worms." We spent the afternoon turning over rocks and clumps of weeds to find worms, which we put in cans for later on. I did not realize at the time that there were a lot of copperhead snakes in the area, and especially along the river around rocks, but fortunately I didn't encounter any. When we had a few large cans filled with juicy worms, we went back to the cabin to prepare for the night's bobbing. This is how it works:

We attached the worms to two 6-ft. strings using a needle-and-thread technique. This is done by running the needle thru the body of worm after worm until the line is full with worms. I didn't particularly like this part of it, but I made out like I didn't mind, as it didn't seem to bother Dave at all... apparently he wasn't a "city boy" as I was! After the worms were threaded on the line, Dave got two poles about five or six ft long (they may have been bamboo or limbs from trees...I don't recall), and by some method which I have long since forgotten, each string of worms was rolled into a ball about the size of a grapefruit, and attached to the bottom of a pole.

Dave said that we had to wait until it got dark, when we would row to the opposite shore of the river where the moon would cast a shadow on the river as it came up behind the opposite mountain (Mt. Minsi). For some unknown reason, you had to bob on the dark side of the river—I assume so that your shadow and that of the boat would not reflect on the water.

Before leaving in the boat, Dave put on his hip-boots, and as I had none, he told me to wrap rags or newspapers around my legs, holding them in place with string. I asked Dave why I had to do this, and he said, "To keep the eels from crawling up your legs!" Somewhat skeptical, but nevertheless obedient, I did as instructed—looking much like a gladiator of old! At this point I was beginning to have my doubts about this kid whom I had only met that day. If my mother only knew that I was going out on the Delaware River in a leaky boat, after dark, with a kid I didn't know, she would have passed out!

Dave's boat was nothing more than an old scow which leaked considerably, as we rowed across to the other side, anchoring in about 4-5 ft of water. Dave explained that eels have small fang like teeth, and when they bit into the ball of worms, you will feel them tugging, and then you pull the pole out of the water and swing it over the boat. The eel's fangs are momentarily caught on the string (they are hanging by their teeth), but once out of the water they let go, and if you do it fast, they will drop into the boat!

I wanted to watch Dave first, and he put his pole down into the water. Soon it started shaking, and he pulled it up and over the boat, and sure enough, there was an eel hanging on, which dropped off into the bottom of the boat. Dave got excited and hollered, "Put your pole down (in the water)... they're here!" I put my pole into the water and soon felt it shaking... something was tugging at it! I pulled it up out of the water and over the boat and another eel dropped off! Before long, the jerking and tugging at the bottom of the pole got so violent, it was all I could do to hold onto the pole—I was bringing them up two and three at a time! It seemed that by whatever mysterious signal eels send out, every



eel from Port Jarvis to the dam at Trenton was on its way to the Delaware Water Gap! No doubt the blood from the worms, drifting downstream, was bringing them to us. There was no letup, and we both had to stop to rest our tired arms and catch our breath. Meanwhile the eels got deeper and deeper in the bottom of the boat. They were squirming up my legs and got inside the wrappings. The water had soaked the paper and disintegrated it, leaving my legs practically bare, with nothing more than a pair of sneakers on my feet! I was sorry I didn't take more time to wrap my legs better. With water from the leaking boat, the eels were practically swimming around. You couldn't lift your feet to walk in the boat as you would be stepping on eels when you put your foot down!...you had to shuffle your feet to move around.

It wasn't long before the boat was more than ankle deep in squirming, slippery eels, and there was less than 6 inches of boat out of the water due to the weight of the eels, leaking water, and the fishermen! Dave called a halt to the bobbing, and I picked up the oars and started rowing for the opposite shore. Here I was, in a leaky boat, full of slimy, slippery, and squirming eels, that insisted in crawling up my legs, across my lap and sometimes out of the boat! I prayed the boat wouldn't sink or capsize before we made shore! (Oh, Mom, why did you let me go?)

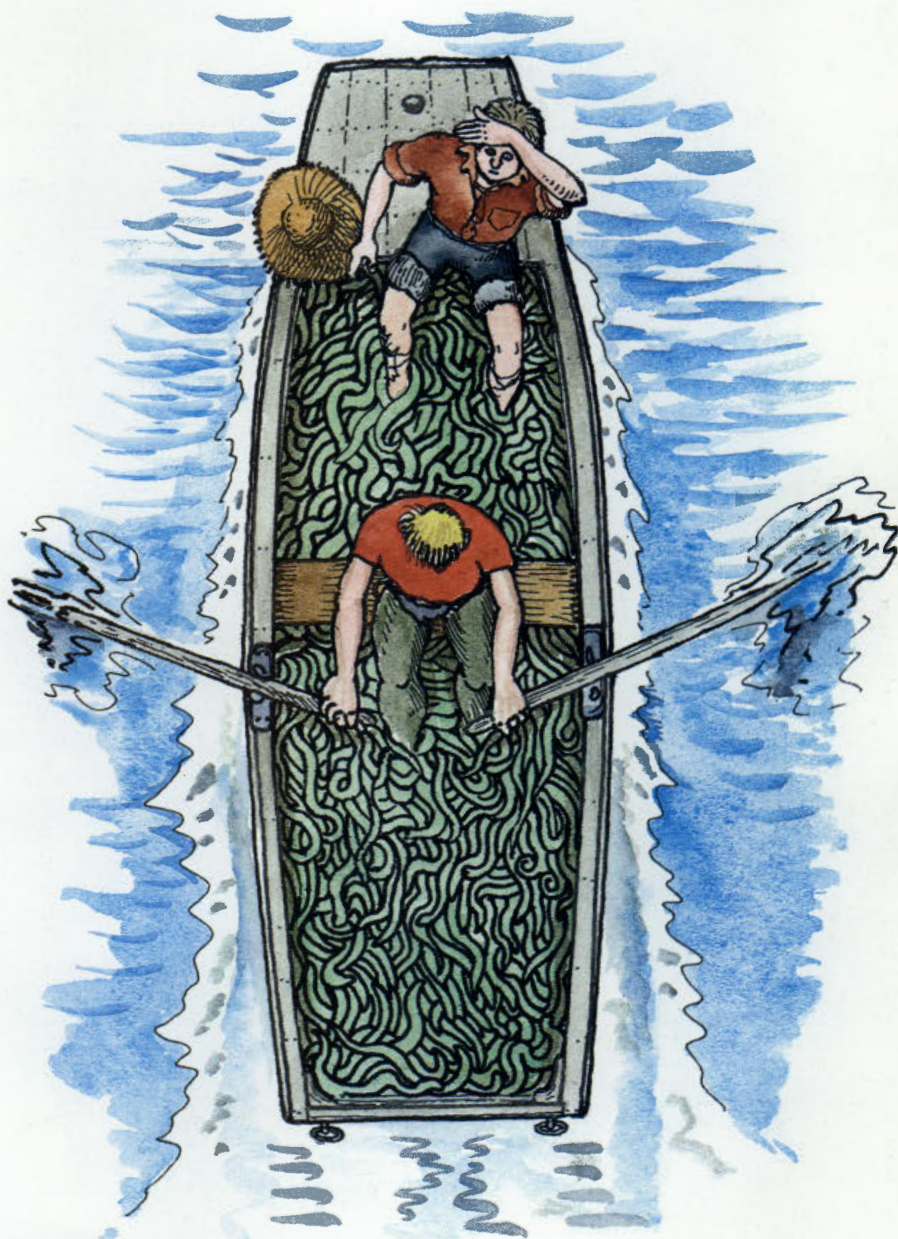
When the boat hit shore, we jumped out and by the light of the moon, now higher in the sky we just stared at the boat full of live, squirming eels. Dave said we would leave them in the boat and determine what to do with them in the morning, which was OK with me.

In the morning we went back down to the river and there were the eels—it looked like hundreds of them—all dead in the bottom of the boat! Dave said we would take a few to give to some friends he knew downriver, but that we would have to bury the rest, as they would soon stink, and he needed the boat, so we turned the boat up on its side and the eels spilled out onto the bank. We then dug a hole and buried them. We counted them, and there were close to 200 eels! All taken within a few hours on the river!

I never ate one of those eels then, nor have I eaten one since! I still hope to go back to the "Gap" someday and duplicate this experience, but this time it will be with hip-boots, a good boat, and an outboard motor!

I spent the remainder of my vacation at the Gap hiking up to the top of Mt. Tammany on the Jersey side, then to Sunfish Pond, then to the Fire Tower on the Pennsy side (no longer there), and into the town of Del. Water Gap to buy some food. I had to walk across the old railroad bridge below Camp Karamac (R.R. bridge and Karamac no longer there (who remembers Karamac?), as there was no other way across the river other than the old covered bridge at Columbia/Portland (no longer there)... all have long since disappeared... an era that this and future generations will never know to enjoy.

*P.S. Did you ever try to pick up a wet, slippery eel? Let me tell you, it's like squeezing a banana... you can't hold it, and it slips out of your grip the tighter you squeeze. The way to pick up an eel bare-handed is to put your index finger and the third finger (next to the little finger) under the eel's body; then you put your middle finger over the eel's body and exert downward pressure, squeezing the eel. This puts a "V" in the eel's back, thus preventing him (or her) from squirming out of your grip. Try it—it works!*









WHERE TIME STANDS STILL

# Hacklebarney State Park

Funny, the memories which linger from childhood: the sour taste of rhubarb leaves in a neighbor's garden; the bow-shaped spot on the dining room wallpaper; the sound of sleet against the porch screens; riding in the car to Hacklebarney Park...

Hacklebarney Park, you ask? Oh, no place special. Just a bit of wilderness, really. That's all. A place we went for picnics when I was little. Near enough for a day's outing; far enough away to lend a sense of adventure to the drive.

Sometimes we'd go with cousins or friends; more often it was just the immediate family. Occasionally, my father would fish; usually, though, we just went for a cold supper or a Sunday cookout.

Yes, I know, everybody has their special place for summer picnics—and I'm not saying this place is any more special than anyone else's. But it must have had a special significance for us. I'm convinced of that because on cold winter days, when it was too wet or bitter to play outdoors, my brother and sister and I would go down to the basement to play "Hacklebarney Park."

My mother would pack us a picnic lunch in a brown paper sack, and we'd take it downstairs to the playroom where we kept our bikes in winter. We'd put the picnic in one of our bicycle baskets (probably mine, since I had the biggest tricycle and tended to be the bossiest), climb on our bikes and ride round and round the basement—"driving" to Hacklebarney Park.

We'd park our bikes in the parking lot (a space next to the furnace), make our way gingerly across the stream (an imaginary area which divided the basement in half), grabbing onto saplings (lally columns) to avoid slipping off a rock and getting our feet wet, and take our lunch to a picnic table (my father's workbench). After we ate, we'd climb around the rocks (the stored summer furniture) for a bit, then retrace our route back across the stream, climb on our bikes and "drive home."

Admittedly, not a game Parker Brothers is likely to snap up. It stacked up poorly even to our own real excursions to Hacklebarney Park. I only mention it to point out that the mere fact we indulged in this game of pretending reflects the special significance the place had for us.

As I see it, New Jersey's parklands fall into two categories: high profile and low profile.

High-profile parks are easy to find. Signs on major roadways announce their whereabouts; roads leading to and through them are well-maintained and inviting; articles highlighting their beauty, accessibility and special attractions pop up in periodicals both in and out of the state.

Low-profile parks, on the other hand, are well-guarded secrets. Tucked away in the nooks and

crannies of the state, they tend to be hidden from the notice of weekend explorers. These parks are off the beaten path of your average Sunday driver—who, if he knew of their existence, would probably render their low-profile status invalid in short order.

Hacklebarney State Park unquestionably falls into the latter category. Anyone traveling along Route 24 between Chester and Long Valley might easily miss the sign for the turnoff. Even some who spotted it might take it for a directional turned the wrong way, after covering a mile or so of unimproved country road winding through sparsely settled farmland and occasional development.

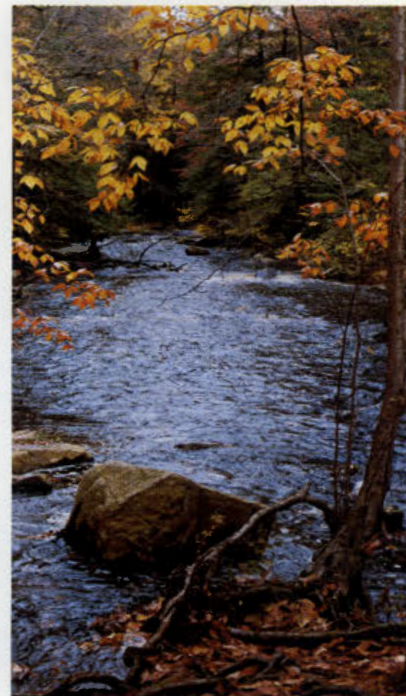
Those who made it might even find they were too late. For Hacklebarney is not a large park, and its parking lot swells to its 180-car capacity early in the day on weekends and holidays during the warm months.

The park was a gift to the state of Adolph Edward Borie in memory of his wife and granddaughter ("two women of rare vision, character and courage" according to the bronze table at the entrance). He specified the initial 32-acre parcel, given in 1924, was to be "forever preserved for the benefit of youth." Apparently, New Jersey concurred with his objective, for after he donated an additional 91 acres in 1929, the state began acquiring contiguous parcels of property to expand the facility.

Through Green Acres purchases and gifts, Hacklebarney Park today comprises 574 acres of woodland in Chester and Washington townships. (It's probably fair to assume that figure won't change much, as housing developments are rapidly replacing the farmlands and apple orchards which once skirted the park.)

There is some question as to the origin of the name Hacklebarney. Indeed, it once applied to the whole area southwest of Chester, and comprised an early industrial settlement (subsequently known as Milltown and Millvale) which included a sawmill, woolen mill and Hacklebarney Forge. Its primary industry, however, was the Gulick-Hacklebarney Mine, which produced bar iron before and during the Revolution.

Folklore has it that homesick Irish miners working in the mines named the settlement after their village in County Cork, Ireland. Another explanation is that a mine foreman named Barney was the subject of much teasing by his crew, who encouraged one another to "heckle Barney." (I thought that an improbable explanation until I ran across a Federal Writers' Project volume entitled "New Jersey: A Guide to its Present and Past," which claims "the land was once owned by an Irish settler named Barney Hackle.")



*Black River meeting Trout Brook*

BY FRAN WOOD  
PHOTOS BY THOMAS ALTAVILLA



The most romantic theory, supported by Charles Philhower, author of "Indian Lore of New Jersey," is that the name is derived from the indian words "haki" and "bonihen"—haki meaning "ground," and bonihen meaning "to put or lay wood on a fire." Hence, "haki-bonihen"—or "to put wood on a fire on the ground."

"Don't take that literally. Cook-out fires are permitted only in the raised grills provided in the park.)

It is Hacklebarney Park's topography that ensures the preservation of its natural character—and which makes it a place of geological fascination. The glacial valley is the result of the last ice age, and the deep, rocky, river-crossed gorge make roadways out of the question. Because it is accessible only on foot, the area seems all the more a "forest primeval," a place where time and visitors seem to have had no impact on the terrain in these many years. The only clue to the present is the presence of people—hikers, picnicking families, children scampering over prehistoric-size boulders. Were it not for humanity, the gorge might be in a time warp, its inhabitants dinosaurs and such.

I don't mean to imply it is quiet. Secluded, yes; quiet, never. The meandering Black River cuts through the park, and the waterways that feed it—Trout and Rinehart brooks—cascade over rocks and boulders, echoing up and down the gorge, providing an endless chorus of background music. Add to that the sound of the birds (it's a birdwatchers' paradise, where one is apt to spot orioles, mockingbirds, finches of all hues, pileated, hairy and downy woodpeckers, and pine siskins as the more commonplace blue jays, cardinals, robins and sparrows), and the chattering of chipmunks and gray and red squirrels, and you have a veritable woodland orchestra.

Inexplicably, though, this "joyful noise" is peaceful.

The only good vantage points for an overview of the gorge are the root-crossed paths along the ridges—and then only in winter. In spring and summer, when shrubs and hardwood trees are in full leaf, these overlooks are screened.

There is a wealth of native plant material throughout the park—flowering dogwoods, laurel and wild azalea; mature hardwoods like oaks, elms, maples, beeches and tulips; shrubs such as viburnum, spice bush, ironwood; and, underfoot and at path's edge, wildflowers, ferns, partridgeberry and ground pine.

I suppose most visitors would insist summer is the only worthwhile time to visit. That's a misconception those of us who find it equally appealing in winter would not campaign hard to dispel, for it is the loneliness of such places in the off-season that lures oddballs like us to wander the state's beaches and parks in cold, rainy or snowy weather.


In winter and very early spring, Hacklebarney Park has another kind of beauty, another palette of colors: The water flows more rapidly and river and streams are dotted with white caps; one is apt to see a pair of raccoons lumbering along a path, or a herd of white-tail deer; tobacco-colored leaves cover the ground; the deep earth tones of tree trunks are broken by smatterings of pole yellow leaves still clinging to young beeches and occasional outcroppings of mushroom-hued lichens; and, of course, there's the rich, green foliage of the ancient hemlock (some of the largest in the state) and furry white pines.

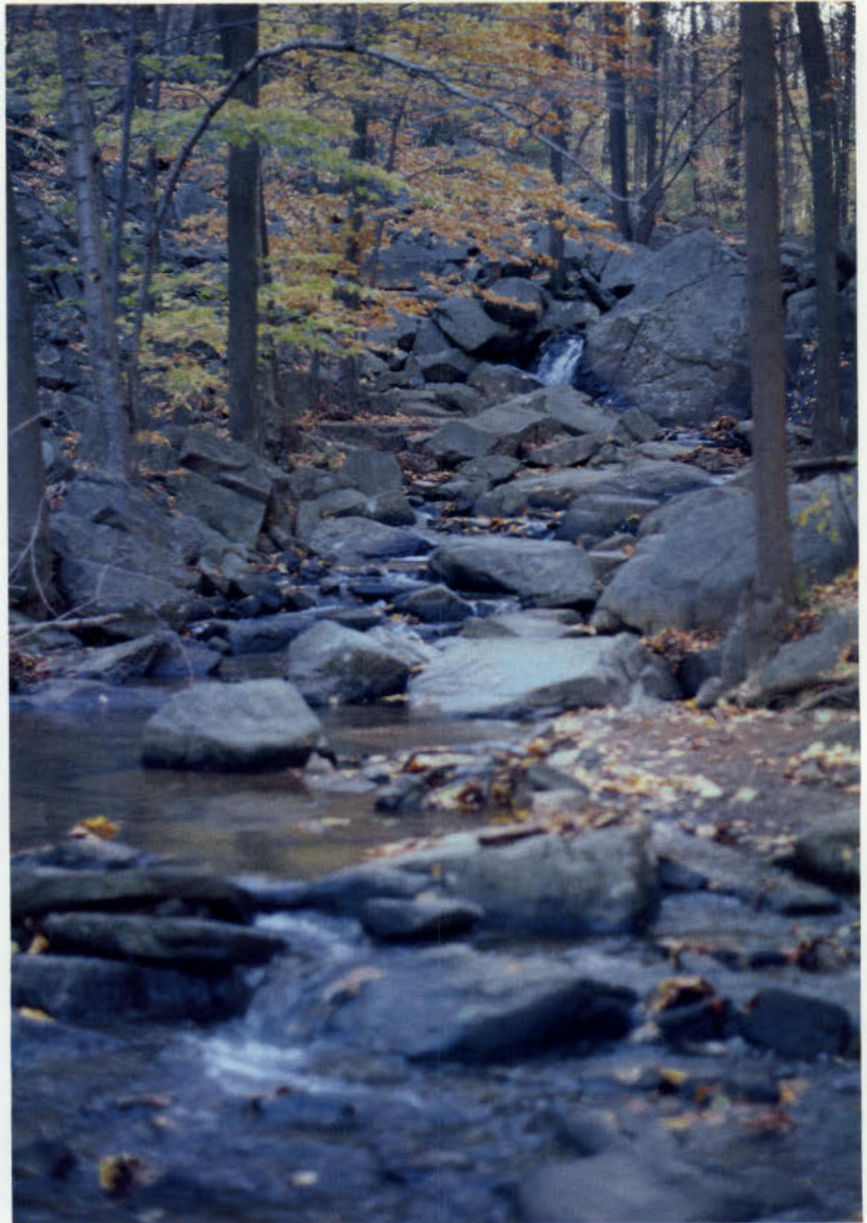
But I'm running on. As I said, it's nothing special.

No Revolutionary encampments, no musters, no craft shows or kite-flying contests to draw visitors. It's just a chunk of pristine woodland, actually, nothing more. I don't quite know why I feel so attached to the place.

Perhaps it's because, unlike so many parks which have been planned, manicured and neatly groomed, it is a place where Nature, rather than man, rules. Where natural evolution is only tampered with in the case of trees that fall across a footpath.

Perhaps it's because its surroundings take me back to the real and make-believe visits I made here in my childhood.

Or maybe it is because Hacklebarney State Park is the only place left which looks exactly the same today as it did when I was five years old. 



*Hacklebarney State Park  
Chester Township,  
New Jersey*

*Located 3 miles southwest of Chester; access from Routes 24, 517 and 206. Park hours: 8 a.m.-4:30 p.m. daily, Oct. through April, until 8 p.m. May through Sept.; hiking, fishing and picnicking permitted; no alcoholic beverages; no camping; reservations for large parties (parking places only) may be made 5 days in advance by calling the park at 879-5677. Park Ranger: Nancy Diekroger*



# Summer Concert Series



CORNELIUS HOGENBIRK

BY CATHIE CUSH

It's summertime, and like the song says, the livin' is easy. The days are warm and long, and the nights seem custom made for concerts under the stars.

This summer music lovers can lie on a lawn chair on a grassy knoll and listen to strains of Symphony Fantastique while a cool breeze wafts through the park. Or spread a big blanket and enjoy a picnic while a big band blows its horns. At one spot the show that starts at sundown isn't the latest drive-in offering, but a live Broadway musical—and it's free!

Throughout the Garden State, summer open-air concerts and shows offer something to fit almost everyone's taste in entertainment from punk bands to big bands to Broadway, and just about everything in between. Many communities even offer special children's programs.

"We started out with maybe a dozen concerts," recalls Denise Lanza, director of visitor services for the Morris County Park Commission. That was six years ago, she says, and now the commission's Summer Music Festival presents 21 concerts from Memorial Day weekend until the weekend before Labor Day.

Sunday afternoon programs alternate between Frelinghuysen Arboretum on East Hanover Avenue in Morristown and Schooley's Mount Park on Springtown Road in Washington Township. Shows are presented from 3 to 5 p.m.

On Wednesday evenings from June 21 through Aug. 1, concerts are held at four different county parks, including Heddon Park and Silas Condict Park, from 6:30 until 8:30 p.m.

"All kinds" of music takes the open-air stage, Lanza says. "We go from folk to big band to bluegrass to classical. And the shows are absolutely free."

While funding for the shows themselves comes from the commission's budget, the state has played a role in the Summer Music Festival. "Green Acres has been really helpful with obtaining additional acres at our parks," explains Lanza.

*continued on page 35*

## PARKS '84 HAPPENINGS

### JULY-AUGUST

- Open Air Theater Series  
Thursday, Friday & Saturday evenings  
Washington Crossing State Park,  
Titusville—609-737-0623
- Zoo Music Concerts  
Sundays  
Turtle Back Zoo,  
West Orange—201-731-5800
- Urban Fishing Clinic  
Essex County Parks—201-228-2210
- Qualifying Races for Governor's 10K Race  
Various locations—609-292-3541

### JULY

- 14 "NIGHT IN VENICE" BOAT PARADE  
Ocean City's lagoons and Great Egg  
Harbor Bay  
609-399-6111, ext. 222
- 14 SYMPHONY, DANCE AND YOU  
Liberty State Park  
Jersey City 201-435-0736
- 21 5TH ANNUAL CRAFTS FESTIVAL  
Allaire State Park  
Farmingdale 201-938-2371
- 22 RAGTIME MUSIC FESTIVAL  
Senator Farley Marina  
Atlantic City 609-441-3600
- 24 HUCK FINN DAY  
Grover Cleveland Park  
Caldwell 201-226-3621
- 26-29 TENTH ANNUAL MONMOUTH COUNTY  
FAIR  
East Freehold Park Showgrounds  
East Freehold 201-842-4000
- 29 FOLK & BLUEGRASS MUSIC FESTIVAL  
Batsto, Wharton State Forest  
609-561-0024

### AUGUST

- 4 BOAT PARADE  
Windward Beach/Park  
Brick 201-477-3000
- 5 BROADWAY MUSIC AND "ALL THAT  
JAZZ"  
Monmouth Battlefield State Park  
Freehold 201-462-9616
- 11, 12 DECOY SHOW & SALE  
Allaire State Park  
201-938-2253
- 18 COUNTRY WESTERN & BLUEGRASS  
FESTIVAL  
Atsion, Wharton State Forest  
609-561-0024
- 18 COUNTRY WESTERN & BLUEGRASS  
FESTIVAL  
Belleplain State Forest  
Woodbine 609-861-2404
- 25 PANFISH DERBY  
Swartswood State Park  
Newton 201-383-5230
- 26 EAST BRUNSWICK TRIATHLON  
Community Park  
East Brunswick 201-390-6898

### SEPTEMBER

- Weekend Hawk Banding Demonstration  
Cape May Point State Park 609-884-2159
- 1, 2, 3 ALL SPECIES FISHING DERBY  
Swartswood State Park  
201-383-5230
- 6 BATSTO HONORS PARKS '84 &  
PIONEER DAY  
Batsto, Wharton State Forest  
609-561-0024
- 8, 9 N.J. STATE ETHNIC FESTIVAL  
Liberty State Park  
201-435-0736





## *New Jersey's first waterfowl stamp*

**As of July 1, 1984, New Jersey became the 29th state to issue a waterfowl stamp for waterfowl hunters.**

Two stamps will be issued, one with a face value of \$2.50 for resident hunters, and one with a face value of \$5.00 for non-resident hunters. All collectors will be able to purchase the \$2.50 stamp as a collectors item after the stamp expiration date of June 30, 1985.

The first year stamp design selected is a pair of canvasback ducks resting on the water. The design was created by artist Tom Hirada of Rutherford, New Jersey.

Hirada has been featured as cover artist in *Wildlife Art News* and is listed in Chapman's *Who's Who in Waterfowl Art*. His awards include two gold medals and two silver medals from the New Jersey Art Directors Club. At the Somerset Carving and Wildlife Art Show in 1981, he took "Best of Show" and "First Place." He won "Best of Show" at the Ducks Unlimited National Wildlife Show "Birds of

Prey" in 1982. He received an "Award of Merit," at the Virginia Beach Wildfowl Festival in 1982.

In conjunction with the issuance of the first New Jersey waterfowl stamp, artist signed limited edition "first of state" prints of the stamp art will be available for \$135 each, plus the cost of the stamps which are customarily mounted with the print.

Hirada's "first of state" design for New Jersey was selected from a beautiful assortment of paintings offered by several publishers. The publisher's job is to solicit the art, produce and market the artists signed limited edition prints. For each print sold, a royalty will be received by the state to be used in conjunction with the waterfowl stamp money for the Conservation and Acquisition of Wetlands and Waterfowl Habitat. Royalties from the sale of prints are expected to reach \$500,000 for the "first of state" prints.

Most of the State and Federal waterfowl prints and stamps have become valuable and cherished possessions to those with the interest and foresight to have purchased them. Some of the issues have



Canvasbacks  
Tom Hirada



Mallards  
Dave Chapple



Mallards  
Ned Smith

Pintails  
Harry Antis

increased in value substantially. For example, the 1983 Pennsylvania print was issued at \$140.50 and in less than one year was selling for \$305.

Stamps will be available from regular fish and games issuing agents and from the Division of Fish, Game and Wildlife, CN 400, Trenton, NJ 08625.


Money raised from the sale of stamps will be used for the conservation of wetlands and waterfowl habitat. Annual stamp sales to hunters and collectors are expected to produce \$100,000 annually. All unsold stamps will be shredded six months after the expiration date to guarantee them as collectibles with good investment potential.

A nine-member New Jersey Waterfowl Advisory Committee is responsible for recommending each year's stamp design. They are also charged with providing recommended habitat conservation and acquisition projects. The Waterfowl Advisory Committee consists of two members from the Fish and Game Council, one public member appointed by the Commissioner of the Department of Environmental Protection, and one representative from each of the

following organizations: The Natural Areas Council, Ducks Unlimited, Inc., New Jersey Waterfowlers Association, The Nature Conservancy, the New Jersey Audubon Society, and the New Jersey Federation of Sportsmen's Clubs.

The signed, numbered, limited edition prints can be purchased from your local wildlife art dealer. Matching stamp and print numbers will be offered by most New Jersey wildlife art dealers. A list of dealers in your area can be obtained by contacting the publisher, MIDWEST Marketing, Sullivan, Ill. 61951, or calling toll free 800-382-5723.

Print orders will be taken up until September 30, 1984, for the offering price of \$135. After that, the only prints available will be from the secondary market and the price will reflect the collectible value of the print.

This program offers a unique way for hunters and non-hunters alike to contribute toward conserving New Jersey's wildlife habitat, and it may be an exceptional investment opportunity for those with an interest in wildlife and art. 





*A starfish travels over a piece of rusting metal on the inlet bottom.*

# INLET INHABITANTS

BY HERB SEGARS  
PHOTOS BY AUTHOR

Shark River Inlet in Avon, New Jersey, is used by boaters to reach the Atlantic, by fishermen to obtain a fresh dinner and by scuba divers to explore a new and exciting world. People who stroll the beaches and boardwalks are awed by the Inlet's beautiful panorama. Hidden beneath the surface of the water, however, is another world, a world foreign to the majority of surface dwellers. In this undersea world of everyday conflict, the weak and wounded soon become part of the food chain.

This particular inlet is divided into three distinct habitats. Mussel beds, located directly beneath the Ocean Avenue bridge, stretch from the shoreline to the center channel pilings. Here, a myriad of sea creatures conduct everyday business. The mussel is a picture of beauty as it extends its mantle to feed on microscopic life carried in the current. Nestled between the mussels are tiny sea anemones, whose tentacles sway gentle in search of the very same minuscule morsels. Multi-armed starfish use their tiny tubular feet to move from place to place. Grotesquely fashioned, but camouflaged to near invisibility, sea sculpins perch on the mussel beds awaiting their prey.

Projecting seaward through the inlet, man-made jetties of rock provide a second type of habitat for numerous aquatic species. Scooting in and out of openings in the rocks are blackfish and many baitfish. Smaller holes provide homes for eels and the

nocturnal-feeding lobster. Although most people do not associate the lobster with New Jersey waters, lobsters are harvested in this area by commercial lobstermen and sport divers. Colonies of mussels, barnacles and plant life are also found on the jetties, where they spend their entire life cycle maintaining a foothold on the slippery surface.

The last area of exploration is the sandy flats, where two species predominate. Pancake-shaped members of the fluke and flounder family lie motionless on the bottom, camouflaged by their natural coloring, patiently awaiting their dinner. Unfortunately for them and happily for fishermen, they are often fooled by the baited hook. Shortly thereafter, they will fulfill their destiny in nature's food chain as someone else's dinner.

Suitably garbed for an outerspace encounter or a round of battle in the Colosseum, the crabs are the true gladiators of the inlet. Equipped with extremely sharp and powerful claws, their first reaction to a human intruder is to rear up and defend their ground. They defend themselves from other subsea inhabitants with equal tenacity. The sand flats are home to rock crabs, blue claw crabs, speckled crabs and hermit crabs.

These are just a few of the many inhabitants of our local inlets, where beneath the murky water, life is an awe-inspiring spectacle. **NJ**





Clockwise: A rock crab on a mussel bed.  
Sea anemone on mussels on the rock  
jetty. A lobster showing his weapons.  
Speckled crab displays its beautiful  
coloration.







Thom Olszak on the lake.

# Boardsailing at Assunpink

BY THOM OLSZAK

Boardsailing, or windsurfing, is a great deal of fun; but zipping along a highway with all the sights, sounds and smells of weekend summer traffic is no fun. Everyone knows the three most common ways to avoid this traffic: 1. Stay home—this is a 100% foolproof method; however, it has its drawbacks. 2. Leave early—this works, but dawn is sometimes a lonely and miserable hour. 3. Go somewhere no one else goes—the glaring drawback here is, simply, finding such a place.

Method three is my favorite. Last Fourth of July, state recreation areas like Atison, Round Valley and Spruce Run were closing early in the day, as soon as the parking lots were full. I spent the entire day boardsailing at Assunpink and saw no more than 20 people.

Assunpink Lake is a 225-acre body of water situated in one of the best bird watching areas in central New Jersey, the 5,400 acre Assunpink Wildlife Management Area. It is the largest of three sister lakes located at the border of Monmouth and Mercer counties near Route 539. The island, marshes and huge expanse of fine, open water at Assunpink are known to a few seasonal visitors, primarily migratory birds, fisherman and boardsailors. The area is better known to fish, turtles, snakes, rabbits, woodchucks, territorial birds and conservation officers; they have an office there.

The day at Assunpink was cool and breezy and quiet and peaceful. And very nice for boardsailing, which, I said before, is fun.

Boardsailing is also exciting and exhilarating:







PHOTO BY BARRY LEILICH

*Assunpink Lake and Wildlife Management Area can be reached via Rt. 571 North to Clarksburg, or Rt. 539 N. from Allentown, or Rt. 539 South from Cranbury.*

skimming along the surface of the water, leaning back as far as I can, balancing precariously, while the wind fights my grip. Move too far one way, and I'll end up sitting on the sail as it sinks underwater; move too far the other way, and the sail becomes a parachute depositing me ignominiously in the water. But when I am balanced, that board planes across the waves, ripples and boat waves, and everything hums—the board, the sail, the rigging and me.

The boardsailor is an integral part of the freesail system. Unlike a conventional sailboat, a sailboard has no fixed stays supporting the mast. The sail is upheld and controlled solely by the strength and balance of the standing sailor. On a port tack, for example, the boardsailor's left arm serves as a shroud, holding up the mast. The right arm serves

as a mainsheet, controlling both the trim of the sail and the speed of the board.

As I skim along the surface of the water, scaring birds and turtles, I lose all sense of time. How long ago was it that I started? Who knows? Time on a sailboard has no real meaning; it just passes too quickly. Time has no relevance except in the all-important question, "How long?" How long can I fight this wind? How long can I hold on to these booms? How long 'til I can go boardsailing again?

Learning to ride a sailboard is, basically, wet. It is also great for learning humility.

Expecting something akin to conventional surfing, my first moment of standing on a sailboard was a surprise. It didn't sink; it didn't rock; it was stable.

"This is great," I thought. "I'll put the easy chair in this corner and the wet (ahem) bar over there."

Of course the board was stable; its 59.2-square-foot sail was laying flat, filled with water weighing approximately eight pounds per gallon, counterbalancing by feeble, stiff-legged movements.


The first step was to lift the heavy, water-laden sail from the lake. Planting my feet on either side of the maststep, balancing carefully, taking hold of the up-haul, I pulled...and pulled. The board tilted and turned in the wind. As I pulled, the water spilled from the sail making it lighter and lighter. Still I pulled, and up, up came the sail; down went the fledgling sailor, backwards into the water, still pulling that sail. The mighty splash brought the angry cries of watching birds, the sullen and surprised glurp of turtles as they skedaddled, and the laughter of fisherman and companions. I spluttered out from under the 59.2 square feet of sail that were rapidly filling with water at approximately eight pounds per gallon.

I tried again, suffering from an acute lack of basic knowledge: always stay on the windward side of the board, for example. As I pulled the sail from the water, the wind had silently rotated me leeward 180 degrees. As I set sail, the sail billowed toward me. Once again, my spluttering into the water brought bird cries, turtle glurps and laughter.

I spent the entire day alternating the side of the board from which I would pull the sail into the water. Soon-to-be-learned nautical terms like "leeward" and "windward" had no place in my vocabulary that day; I knew only one direction: "waterward." On the 650th time I hauled that wet beast from the water, with swollen, numb and ragged hands, a thought ignited in my waterlogged brain: "I haven't had so much fun in a long time!"

I was hooked. I still am hooked. Since that first time out on a sailboard, I have spent nearly 200 hours sailing in many different weather conditions, in the rain and in winds so strong the birds were flying backwards. In winds so light that not even the smallest of ripples disturbed the water's surface, I've sat in the middle of the lake, silently—and sometimes not so silently—cursing a 225-acre mirror.

I have also found a method of reliving the hilarity of my first attempts on the board. I try to convince friends that one of the secrets of a happy life lies in going out on the sailboard and making fools of themselves. Now I stand on the beach yelling, "Tilt the mast forward," and "sheet-in," while I try not to laugh out loud.

Spending the day boardsailing on—and, far too often, in—this scenic lake is highly recommended. Adding the thrill of boardsailing to the serenity and beauty of Assunpink can satisfy the adventurer and poet in all of us. 



ILLUSTRATIONS BY LORRAINE DEY



# Birding for beginners





BY PETER DUNNE  
PHOTOS BY AUTHOR

Let me tell you how to add months to your hunting time. Even if you are the kind of person who starts the season up to his lumbar in salt water for rails on September 1 and doesn't case his gun until one half hour after sunset on February 14, you can still double your time in the field. What's more, there are no bag limits. There is no license fee. And you can do it almost anywhere.

If you are a fisherman, it can provide just one more avenue to enjoy the outdoors. If you simply enjoy *being* outdoors, it provides a focus or, if you need one, an excuse.

And, there is one final consideration that makes this activity virtually irresistible: Chances are, you've been doing it all along. I'm talking about bird watching. You want me to do what!

I don't *want* you to do anything; I'm suggesting that you and a very popular, fast-growing activity are running a parallel course—birdwatching (or as it is commonly called today, birding) is the sport of hunting birds with a pair of binoculars. You probably *have* been doing it all along, although you don't make any big thing out of it. Think!

Remember that troop of chickadees that made the midday hours go by on the deerstand last season, or the Great Horned Owl that flew in and perched so close you could catch the smell of skunk clinging to its feathers? If you fish some of the state's faster streams, you've probably enjoyed the antics of the Louisiana Waterthrush, a small, olivebacked bird with a white stripe over the eye and dark streaks below—the bird that bobs along the bank like a metronome. If party-boat fishing is your forte, you have seen those dark, stiff-winged "gulls" that sweep up to the stern with their wing tips slicing the waves like blades—shearwaters.

But there are some outdoorsmen who take the next step. These are the ones whose interest in nature goes well beyond the point that they can cast a line or drop a high passing pintail, to a point as far as the eye can see. My Uncle Pete was one of these, though he never hinted at it and nobody suspected. When he died, his buddies collected his things for a nephew in New Jersey who shared his interest in hunting and fishing and who had promised to keep the tradition alive. Pete's possessions included his prized Browning Magnum 5, a heavy Woolrich jacket, some shirts that were too big, some pants that were too short and, at the bottom of the pile, a well-thumbed book—*A Field Guide to the Birds* by Roger Tory Peterson.

Today in North America there are somewhere between 175,000 and 65,000,000 birders (depending on whom you ask and how tight you draw your specs). The lower figure zeros in on the hard-core, hell-for-leather crazies who will joyously drop \$6000 on a trip to Attu, (barely) Alaska, in order to stand up to his (or her) rump in slush and see feathered Asian waifs that wind up in the wrong hemisphere during migration. The magnum figure probably reflects census bureau estimates on the number of people who throw bread out the back door on snowy mornings. What is probably the best estimate comes from a survey funded by the U.S. Fish and Wildlife Service. They estimate that something like 1.1% of the U.S. population—about 2,750,000 individuals—keep a list of the birds they see, use binoculars, and can identify 100 or more species of birds.

Most of the very active birders are between the ages of 20 and 50 and are male, but two of the best birders in North America—Claudia Wilds from Washington, DC, and Rosanne Rowlett from Texas—are female, and as for age, Roger Peterson, the Grand Master of birding is 75. Race, color, creed, age, sex, belt size and income tax bracket are no determinant and no barrier to birding. In fact, one of the most fascinating aspects of the pursuit is that its proponents cut clear across social and vocational strata. I can think of no activity that does this so thoroughly.

At the Cape May Point hawk watch on any given Saturday in the fall, you might find the dean of NYU's School of Arts and Sciences and a meat cutter from Milville discussing the fine points of *Accipiter* identification; next to them might be a 24-year-old carpet mechanic from Plainfield giving directions on how to find the Golden Plover to the retired curator of the Buffalo Museum of Natural History.

The pursuit of birds has few restrictions this side of a court of law. Some birders will drop literally anything to "chase" a species that they have never seen. In 1975, for example, the North American birding community was turned on its ear when a rare Ross's Gull was sighted in Newburyport, Massachusetts. (That's the birding equivalent of catching a world record blue marlin ... on a fly rod ... in Lake Hopatcong ... through the ice.)

One of the most attractive things about the sport is that you can do it anywhere, anytime, and at any level you choose. I have made traffic jams on many an Interstate bearable (if not enjoyable) by watching the small falcons called kestrels hunting in the median strip. If appointments are running late at my dentist (which they always are), I check out the migrating shorebirds at a swell little sewage treatment pool within hailing distance from the receptionist's window. Keeping count of low-flying Common Nighthawks has taken up the slack at dull family picnics.

A banker I know keeps a count each fall of the number of migrating Sharp-shinned Hawks that fly down Wall Street, using the updraft off the buildings for lift. A retired teamster living in Blairstown boasts that he has spent 2000 hours studying gull plumages in the Hackensack dumps, and a surf fisherman at Stone Harbor Point wields an 8-foot rod, throws a 6-ounce lure, and wears a pair of 8x binoculars slung bandolier fashion over his neck and under his arm—just in case.

Anytime. Anyplace. At any level you choose. That's birding.

#### But, what's the attraction?

Well, it's like what Louis Armstrong once said to a reporter who asked him to define "jazz." Said the dean of trumpet players, "Man, if you gotta ask, you'll never know."

If you've read this piece this far, chances are pretty good that you already have a fair interest in birds. Most outdoors people do, simply because they enjoy nature, and enjoying nature means being interested in its assorted elements. Birds are among the most conspicuous of these. Birding, like hunting and fishing, sharpens your senses and makes you an active participant in the drama around you. But it has one great advantage over most forms of hunting and fishing—the object of attention can be shared and reshared.

Birding is something that can be done alone, with







a small group of friends, or in the company of a small army (like the 500 members of the New Jersey Audubon Society who gather each fall in world-famous Cape May for their annual autumn weekend). It is something that husbands and wives can do together on equal footing and something that husbands and wives can do to get away from each other for a time (when footing gets treacherous). It can be a family thing, a club thing, a private thing, an obsession or an off-and-on pastime. It can be anything you want it to be and *that* may be its greatest attraction.

#### So what do I need to get started?

You need surprisingly little, actually. Most of us are fortunate enough to have a pair of eyes that function at or near par. A set of finely tuned ears is a bonus, but locating and identifying birds by sound is a talent that most birders develop over time.

One piece of essential equipment is a *field guide to the birds*. There are several on the market, and each has its good points and its shortcomings.

For the beginner, Peterson's *A Field Guide to the Birds East of the Rockies* is excellent. The text is highly readable, the bird pictures are marked with tiny arrows which point out the nest "field marks" for distinguishing one species from another, and the book covers *only* those birds most likely to be seen in New Jersey.

Another excellent guide is Robbins' *The Birds of North America*, which also has excellent text and illustrations. This book has the advantage of covering all of North America, so if you travel for business or pleasure you can use it any place in the country. Robbins' guide also has range maps right next to the description and picture for each species (so you can tell at a glance whether the bird is found in New Jersey).

A new guide put out by the National Geographic Society—*A Field Guide to the Birds of North America*—represents the combined efforts and talents of a number of artists and bird experts and is, I believe, the finest identification guide available today—but it is too technical for the beginner. You will be better off with one of the other two guides for starters.

Binoculars are almost as essential as your field guide. In fact, you aren't going to see much beyond the point of frustration without them. If you own a pair of binoculars, that's terrific; if not, try borrowing a pair from a friend before investing a hefty sum of cash.

It is possible to buy serviceable binoculars for under \$30, or you can buy the Boss Shotguns of the binocular world for about \$1,800. The trouble with the \$30 binoculars is that most of them *aren't* very serviceable. Much of the frustration encountered by beginning birders may stem from binoculars that are so bad they barely warrant being thrown away. Plan on paying between \$100 and \$200 for a decent pair. Brand names to look for include Bushnell (Bausch and Lomb), Nikon, Swift, and Pentax. Do not buy the economy models of the line—these are built for the person who dusts off the old binoculars twice a year at a football game or a concert. Aim for the middle grades, which tend to be more field worthy.

But to see what suits you, before buying your own binoculars, see what other birders are using. Ask to examine them—most birders will be happy to oblige and to offer helpful advice. (By the way, don't expect

much assistance from the sales people; most of them don't know a whole heck of a lot about binoculars and they know even less about their application to birding.) To find out about binoculars, talk to birders—or better yet, call or visit a New Jersey Audubon Society facility and ask one of the staff people for advice.

One last thing—do not, under any circumstances, buy a zoom binocular. I repeat—DO NOT BUY A ZOOM. You will only hate yourself later for falling prey to a nearly worthless gimmick.

#### How do I get started?

That's easy just go birding. Head for a nearby park, woodland, marsh or pond with your binoculars and your guide. You will quickly discover that getting a satisfactory look at a bird is more challenging than you might have thought, and that matching the object of your attention to the right picture in the guide is not always easy.

Start with common birds, backyard birds, larger birds (like waterfowl) and marshbirds (herons and egrets). Larger species do not move as quickly and are not as hard to study as some of the woodland species. In a very short time, you will become familiar with your binoculars and with your book. In just a few trips afield, you will be able to recognize the common species and these will provide the foundation to your growing knowledge.

After a trip afield, write down your sightings (most refer to this as a "life list"—the total number of bird species you have seen during your life). Include in your notes things like date, weather, location, behavior and anything else you remember about the bird or the circumstances. There is rhyme and reason to birds and their occurrence at certain times and in certain types of habitat. Your field notes will make these patterns more obvious.

In the evening, thumb through your guide, look at the plates, read the descriptions and just plain gain familiarity with the book. This "background" reading will be a big help in the field—you may not be able to instantly identify a new bird, but you'll probably observe some field mark that will remind you of some bird pictured in your field guide, and this will certainly speed the identification process.

It's a great help to the beginning birder to join a birding club or organization and to go out on a few field trips or take a bird identification course or two. Not only does this facilitate the learning process and let you know where the best birding spots are, but it is a way to meet people who share your new-found interest.

Don't ever feel intimidated by your lack of knowledge in the face of all those "experts"—just remember, an expert is just a beginner who has been at it longer than you have. If birding were something that could be mastered in a week, it wouldn't be worth bothering with—we'd all have to go out and find something else to do. There isn't a person alive who knows everything there is to know about birds and there isn't an expert alive who doesn't learn something new each time out. That's why so many people get so much fun out of birding.

If you'd like to learn more about birding, plan to take advantage of *Birding for Beginners Day*, a Parks '84 event sponsored by the New Jersey Department of Environmental Protection and the New Jersey Audubon Society on Sunday, September 16. At five sites scattered around the state, in the morning





and the afternoon, New Jersey Audubon staff will present 1½ to 2-hour programs that include general information about birding and a short birding trip.

**Locations:**

Campgaw Mountain Reservation, Mahwah  
Scherman/Hoffman Wildlife Sanctuary,  
Bernardsville

Monmouth Battlefield State Park, Tannet  
Rancocas State Park, Mt. Holly  
Cape May Point State Park, Cape May Point

Registration required: \$2 for each adult over 16;  
children and seniors free

Deadline: September 10, 1984

Questions? Call 609-261-2495 or 201-891-1211

To register for *Birding for Beginners* fill out and mail the coupon to Rancocas Nature Center, R.D. #1, Rancocas Rd., Mt. Holly, N.J. 08060. Be sure to check off the location and time you prefer. Directions and instructions will be sent to you after your registration is received.

**Birding for Beginners Sunday, September 16**

Name \_\_\_\_\_

Street \_\_\_\_\_

City \_\_\_\_\_

Zip \_\_\_\_\_

Adults \$2, children under 16 and seniors free

Enclosed is \$\_\_\_\_\_ for \_\_\_\_\_ adult places.

Please also reserve places for \_\_\_\_\_ children and/or seniors.

Time: \_\_\_\_\_ 10 a.m.; \_\_\_\_\_ 2 p.m.

Place: ☐ Campgaw Mountain Reservation, Mahwah  
☐ Scherman/Hoffman Wildlife Sanctuary, Bernardsville  
☐ Monmouth Battlefield State Park, Tannet  
☐ Rancocas State Park, Mt. Holly  
☐ Cape May Point State Park, Cape May

Return to:  
Rancocas Nature Center  
R.D. #1, Rancocas Road  
Mt. Holly, N.J. 08060

Make checks payable to N.J. Audubon Society.





BY BILLIE JO HANCE  
PHOTOS BY AUTHOR

## Guarding New Jersey's coast from the sky

*EPA sampling stations of the New Jersey coast and in the Bight Apex. Not shown are 40 beach stations that stretch from Sandy Hook to Cape May.*

If you have vacationed at the Jersey shore over the past seven years, you have probably had your beach serenity temporarily disturbed by the United States Environmental Protection Agency's huge helicopter as it swooped down and hovered only yards away from where you had been swimming minutes before. You might have seen an object being lowered from the bottom of the chopper, raised again, and, just as suddenly as it appeared, the helicopter retreated down the beach. Or you may have been gazing out over the ocean and seen the same helicopter spiraling down in apparent distress from 1000 feet until it dipped below the horizon, only to pop back up again and fly off.

Ever wonder what exactly the EPA is doing out there? While it is obvious to most that EPA is "testing the water," few people understand what the tests are for, and the role that the EPA's helicopter monitoring program plays in the overall water quality surveillance in the New York Bight. The key to the program, according to Dr. Roland B. Hemmett, chief of the Surveillance Section at EPA's Edison, New Jersey facility, does not lie in sophisticated testing of exotic substances, but rather in the regular observation and frequent measurement of standard but crucial parameters: dissolved oxygen (DO), the oxygen in the water that is necessary for the respiration of aquatic life; bacteria, specifically *Escherichia coli*, which indicates the presence of human waste, i.e., sewage or sewage sludge; and phytoplankton, floating plants that make up the "blooms" frequently seen in the Bight. "These simple parameters," says Dr. Hemmett, "are the prime indicators of problems in the coastal waters."





*Environmental Protection Agency's helicopter hovers just beyond the surf zone in preparation to take a water sample.*

*EPA field personnel John Alonso (l) and Joe Chabak (r) unload bottles and sampling equipment after a monitoring run for the Interstate Sanitation Commission.*

Sampling by helicopter permits the collection of such information on a daily basis. "The thing to remember about the program," says Hemmett, "is that it is the best way to collect samples in the large New York Bight area in a short time ... a boat is unable to do this; the most we are able to sample in one day with a boat is two transects [rows of stations], but we can do two transects in half an hour in the helicopter. If we need to, we can snapshot the entire Bight in one day."

Why would the EPA need to sample such a large area in such a short time? To answer this, let's first consider the water being sampled. The New York Bight is the area of water between the coast of Long Island (east to Montauk Point) and the coast of New Jersey (south to Cape May). It is heavily influenced by meteorological conditions, acting more like a big lake than the ocean. The Bight receives heavy pollutant loadings from its metropolitan areas, including the sewage sludge and dredge spoils that are dumped directly in several ocean disposal sites and the flow from the Hudson and East Rivers, into which much of lower Manhattan's untreated sewage is discharged. The breakdown of such pollutants reduces the dissolved oxygen level of the water. During the winter, the Bight is able to hold its own against these agents; strong winter winds, cold temperatures, and short days inhibit the growth of algae and cause the Bight waters to be well-mixed and full of life-supporting oxygen.

When summer rolls around, however, the story is quite different. Those long, hot, hazy days we hope for as we pack our coolers and beach towels turn the Bight into a watery layer cake: the upper layer,

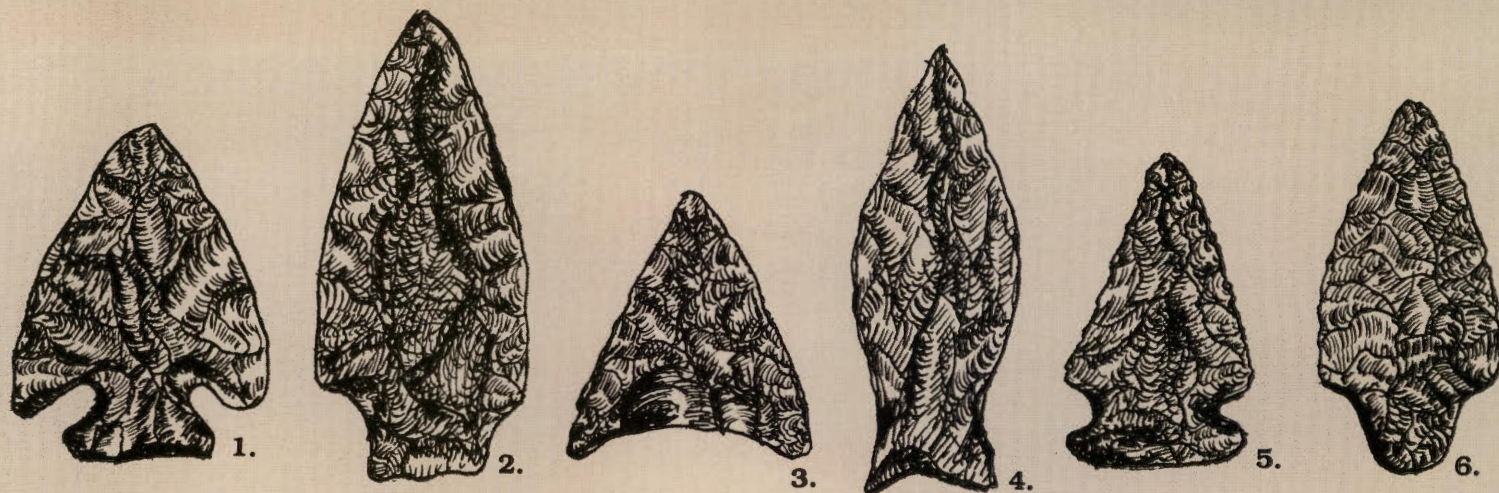
exposed to air and sunlight, is highly productive, supporting vast communities of phytoplankton which, in turn, produce oxygen through photosynthesis. The lower layer is successively darker and cooler, and receives the natural die-off of phytoplankton from the layers above, as well as sludge and other waste. Oxygen is consumed in the lower layer faster than it can be replaced. During the calm summer months, when the lower depths do not mix with the oxygenated upper layer, dissolved oxygen levels typically go down to a stressful 3-4 milligrams per liter (mg/l); EPA considers 5 mg/l a "healthy" level for aquatic life. In certain areas of the Bight, even lower levels are not uncommon during the summer in deep water. Generally before the situation gets worse, though, summer storm activity churns up the Bight, restoring oxygen to acceptable levels. It is possible, however, for oxygen to continue to be depleted until anoxia (zero oxygen) occurs.

#### **1976: WORST CASE**

In 1976, the year before the helicopter program began, this is precisely what happened. A major fish kill was reported July 4th weekend by bathers who found dead fish washing up on the beach at Seaside. The problem that year was attributed to an unusually warm winter which caused an earlier, more rapid growth of phytoplankton, or bloom, and an earlier than usual layering of Bight waters. Originating about twenty to thirty miles off the New Jersey coast, the anoxic condition spread throughout the Bight. "Environmental episodes move very quickly," says Dr. Hemmett, "a low DO [dissolved oxygen] in Long Branch one day could be in Manasquan two days

*continued on page 32*





## SURFACE COLLECTING INDIAN

BY JOANNE VAN ISTENDAL  
ILLUSTRATIONS AND  
PHOTO BY AUTHOR

Surface hunting for prehistoric Indian artifacts is a trip through time, and more. The adventure is educational, relaxing, and provides an exercise unsurpassed for the waist line: When you reach down and touch your first "arrowhead," you will undoubtedly be filled with a sense of curiosity.

Most historic towns and roads in New Jersey were originally Indian villages and paths. Many residents today find artifacts along those trails or in their own backyards. Farmers' ploughed fields also hold a treasury of history and prehistory, and permission to explore them will often be granted by the landowner. Respect for the owner, and an understanding of the crop schedule on his land, is an important ethic in surface hunting.

Since the Indians used waterways for their principal means of travel, stream banks often expose artifacts through erosion. A sandy knoll close to a stream is likely to be a productive location. Examining the soil, we look for stone tools, flakes, discoloration, ash, fire-cracked rock, and potsherds (pottery fragments). Some sites are rich in artifacts; with others, only a few are exposed. Any stone could have been used as a tool; examine the rock for wear patterns or flaking. Sometimes an eroded stone may be difficult to identify, but if the type of material is foreign to the area (for example, flint in an area of red shale), we can assume the artifact was imported through trade or carried from a distant quarry site by prehistoric people.

One knoll can yield artifacts spanning from 10,000 years BC to the disheartening plastic wastes of today.

Now for that waistline: Walk back and forth over the area and pick up all the stones you feel might have been used by the Indians. If it is a large site, you might want to map the different artifact locations to establish ancient settlement patterns. There are some collectors who have only the need to possess "arrowheads" points. They search the surface to fill a mental quota. If only that need would be for knowledge! The real history of the site is revealed in the less "showy" tools, which represent all that is left of those ancient people.

The knives, scrapers, drills, net sinkers, milling

stones, fire-cracked rocks and flakes all tell a story. Since those early people traveled throughout the year (making "seasonal rounds" of various food sources), we can sometimes infer why a site was occupied. If we find only a few knives and fire-cracked rock, we can imagine the site to have been used temporarily by a hunting party. When the site contains scrapers, drills, milling stones, knives, flakes, and fire-cracked rocks, we can assume it was a longer-term family settlement.

Milling stones and nutters were used to process foods from hickory nuts and butternuts. New Jersey's wild plants provided an abundance of vegetables and fruits: cranberries, huckleberries, blackberries, persimmons, wild rices, and many roots and herbs for food and medicine. Baskets woven by the women from reeds and grasses were used to carry and store the gathered fruits, vegetables, and grains. The scrapers and rills were often used in preparing skins for making clothing. Scrapers and knives were of all sizes and shapes, both right handed and left. They were utilized when butchering game like deer, elk, bear, fox, muskrat, and squirrel, as well as many species of birds and reptiles. Sinews cut from the legs of deer and elk were used like cord to bind the points to the spears. Fresh blood was probably used as a glueing agent. Fish and shellfish were a ready available source of food rich in protein. Fish such as sturgeon were smoked and dried for winter use. They were sometimes speared or caught in nets as the fish were driven into weirs by nets weighed by grooved stones (net sinkers).

If you decide to accept the responsibility of collecting Indian artifacts, they should be washed, dried, and marked with India ink identifying the state, county, and site (cover the ink with clear nail polish to preserve your code). Always label your finds, because many potentially important artifacts become meaningless with no identification. Removing a prehistoric artifact should indeed instill a sense of responsibility and respect, especially if it has been lying undisturbed in the earth for thousands of years. But even though the artifact may have been found on the surface, it still may be the missing piece of an archaeological puzzle. Some collectors





## ARTIFACTS



are hesitant to seek the aid of a professional for fear that they will have to surrender the artifacts. This is not true, but an archaeologist may want to photograph the "find" if it is an important piece. Many times we see "arrowheads" unlabeled in shoe boxes, sold at flea markets, and so forth. These points are worthless as far as providing any scientific knowledge, and can hardly be considered more than mere rocks by an archaeologist. Keep a log of your sites, write down the questions that occurred to you when exploring them. Someday you may be able to answer your own questions with the clues you hold in your hands.

Examine your stone treasures carefully and try to separate projectile points that are similar in shape. Points are classed in seven different studies; side notched, corner notched, straight stemmed, contracting stemmed, expanding stemmed, lanceolate, and triangular. Using standard terminology makes it easier to place the projectile points in their proper time-periods for identification. Just as certain architectural styles have become the distinguishing features of some cultures, so does the work of ancient knappers (those who fashion tools from stone) become the hallmark of their specific cultures. For example, there are three main types of expanding stemmed points found in New Jersey: the Orient Fishtail (ca. 1000 B.C.) the Susquehanna Broad (ca. 1200 B.C.) and the Perkiomen Broad (ca. 1750 B.C.). By comparing your styles with pictures of those excavated and dated scientifically, you have started on the road to knowledge. The Susquehanna and Perkiomen belong to the Transitional Period. During this time a dramatic change occurred when stone cooking pots were developed. Earlier, food had been cooked in skins. The liquid in these skins was boiled by dropping in heated stones (pot boilers). With the advent of these soapstone kettles, the meal could be cooked directly over the fire. The soapstone (steatite) fragments, which we find as far south as Southern New Jersey, probably came from quarry sites in Pennsylvania. Some pots that have been excavated were found to have been broken, then mended with threaded sinew thongs through drilled holes. They were treasured. In some cases, the soap-

stone kettles were broken (killed) and interred with deceased Native Americans for use in the afterlife.

Since water travel was so important, it is likely that during the Transitional Period the dugout canoe was made from cedar and shaped with wood-working tools such as adzes, celts, and gouges. Wooden artifacts have long decayed, however, leaving only stones as clues to the ancient woodworking industry.

The most important ethic in surface collecting is to be careful not to disturb the subsoil of the sites. To dig, or "pothole," a site is a very serious mistake. Trained archaeologists remove artifacts scientifically from the subsurface. Excavating slowly and meticulously, they record the artifacts in relationship to stratigraphy; pollen, bone, seed, and flake material; and so forth. The soils are analyzed for chemical content, and site location and topography are noted. Charcoal samples, in relationship to the arrowheads on the "living floors," are used to date the points which the surface hunter collects. The "living floors" are the actual ground level where the prehistoric cultures lived. An Archaic living floor (7000-1000 B.C.) might reveal hearths, chipped stone points, knives, and scrapers all where the Native Americans left them. Many people who "pothole" do not realize that they are depriving the people of New Jersey of important historical evidence by not recording or evaluating the entire contents of a site.

Surface collectors who act ethically are called lay archaeologists, and play an important role in assisting the professional. They work side by side on scientific excavations, salvage recovery, and surface survey consulting. The lay archaeologists serve as a watchdog network throughout the state to report threatened sites to the Department of Environmental Protection, the State Museum, and the Archaeological Society of New Jersey. The Archaeological Society is a public educational organization dedicated to promoting archaeological awareness in our state.

Surface collecting for prehistoric Indian artifacts offers mystery, excitement, insight, and appreciation for New Jersey's past Native American cultures.

*Alfee Van Istendal (son of author), first one to touch the  $\frac{3}{4}$  grooved axe left behind about four thousand years ago.*

1. Corner-notched
2. Straight stemmed
3. Triangular
4. Expanding stemmed
5. Side-notched
6. Contracting stemmed
7. Lanceolate





# Blueberries at Whitesbog

On the rising tide of public interest, many little-known treasures in New Jersey's Pine Barrens are being swept into public focus. Whitesbog, the birthplace of the cultivated blueberry and home of one of the state's oldest cranberry plantations, is clearly one of those treasures.

Straddling the Burlington/Ocean County border, Whitesbog is a convenient midway point for shore-bound vacationers. Rich in the history of berry agriculture, this village and its surrounding plantation have seen the evolution of farming techniques which dramatically increased production while nearly eliminating the need for labor. It is these high-tech farming techniques that promise even greater cranberry and blueberry harvests in the future, insuring New Jersey's nickname as the Garden State.

Originally Whitesbog was a plantation and company town. Today, no more than 25 buildings remain in the village which served as the hub and headquarters for a thriving 3,000-acre berry plantation. In the early part of this century, as many as 450 migrant farm workers came together for annual harvests of cranberries and blueberries which thrive in the sandy, acid soils of the New Jersey Pine Barrens. It was there that Joseph J. White and his family began a series of experiments which revolutionized the production of cranberries and spawned the cultivation of the American blueberry industry.

Whitesbog is located at the northwestern edge of the Pine Barrens, along the emerging retirement village centers along Route 70. Roughly 35 miles from Philadelphia, this scenic and expansive agricultural complex is now part of Lebanon State Forest. It offers a tranquil respite from the day's labor

where water and sky and the unusual vegetation of the Pine Barrens mingle in ways that no photographer can resist.

Joseph Josiah White (known as J.J.), for whom Whitesbog is named, was an enterprising and inventive man. In 1870 he and his wife Mary authored the definitive text *Cranberry Culture*, which served as the authoritative guide to the cultivation of cranberries. He also developed new methods of harvesting, sorting, packing and storing these berries, greatly improving the standards of and market for his produce.

Watching her father's experiments was his daughter Elizabeth C. White. She and her father discussed the idea of adding blueberries to their operation, although other farmers in the area maintained they could not be cultivated.

In 1911 Miss White invited Frederick V. Coville, botanist with the U.S. Department of Agriculture to use Whitesbog and her assistance for the domestication of the wild blueberry. This collaboration led to the eventual cultivation and marketing of the blueberry and is responsible for the multimillion-dollar industry it is today. (See "The Blueberry Invention" in the *NJO* July/August 1982 issue.)

Miss White gave a great deal of credit for the cultivated blueberry to the native population. In Miss White's words, "It takes a good woodsman to find a good bush." She found that the old pickers know which swamps to head for to find the best berries.

Armed with bottles, gauges with holes up to 5/8 of an inch in diameter and a unique understanding of the local terrain, Pineys brought back samples of the bushes that were to father a new generation of agriculture. Among the rewards for finding exceptional bushes were liberal wages and the promise of a sort of immortality, for Miss White considered it good psychology to name the blueberry varieties after their finders. Varieties still in existence bear the names of their discoverers, names like the Rubel, named after Rube Leek of Chatsworth; the Harding, named after Ralph Harding; the Dunphee, named after Theodore Dunphee and, simply, the Sam, named after Sam Lemmon.

Whitesbog village proper contained a schoolhouse with upstairs living quarters for teachers, a post office, a general store with a built-in ice house, housing for 41 permanent workers, a building used to make cranberry barrels, two large packing and storing sheds, a water and power supply for the community, and spacious housing for the foremen and supervisors.

Eventually Elizabeth White built a house for herself in Whitesbog village and named it "Sunglve." From her upstairs living quarters she viewed the original Whitesbog cranberry bog, called "Old Bog," to the southeast and looked out over her newly framed rows of blueberries to the northwest.

Mechanization of harvest practices in the 1950's spelled the end of the labor-intensive farming practices of the past. As the need for a large seasonal labor force decreased, so did the usefulness of the workers' housing. People left, and machines took over the harvest chores in a thoroughly efficient manner.

Tom Darlington, grandson of J.J. White and current owner of the berry company and inventor-in-residence, is credited with many of the latest advances in cranberry and blueberry harvesting. His

BY FRANCIS J. BANISCH  
& MICHELE BYERS

COLOR PHOTOS BY DAVID ENNIS



blueberry-picking machine, looking like a long-legged mechanical monster, is actually a tender and gentle sort. Designed to straddle rows of blueberry bushes, the harvester shakes the ripe blueberries from the bushes and catches them on a conveyor belt down below.

Whitesbog village and the 3,000 acres of bogs, swamps and pine woods comprising the plantation were bought by the State of New Jersey in the late 1960's as additions to Lebanon State Forest. Many of the old cranberry bogs and blueberry fields, now under lease with J.J. White, Inc., are still in production. The company continues its tradition of innovation and technological advances in the berry industry both at Whitesbog and at its new state-of-the-art bogs at nearby Buffins Meadow.

Although the needs of Whitesbog's agricultural lands are cared for under J.J. White's long-term lease with the state, Whitesbog village is a company town in need of a helping hand. Since the village was merged into Lebanon State Forest, Whitesbog has lacked any cohesive management strategy. Limited state resources have been directed to other state parks and forests in response to the demands of an expanding population. Yet, in the meantime, deferred maintenance has led to deterioration of many village structures, and prompt attention is required to insure that these structures are not lost to the elements.

In addition to the J.J. White company, several other leaseholders contribute to the current way of life in the village. The two principals among these are the Conservation and Environmental Studies Center (CESC) and the New Jersey Conservation Foundation (NJCF).

CESC leases the majority of buildings in Whitesbog. A private nonprofit organization, CESC provides environmental education programs for schools and groups throughout South Jersey. Pine Barrens ecology, recycling and general environmental education are a few programs CESC has become noted for.

The New Jersey Conservation Foundation (NJCF) leases one building in Whitesbog for a South Jersey office. Operating out of "Suningive" NJCF work on Pine Barrens conservation and education, farmland preservation, the restoration of Whitesbog village and open space preservation in South Jersey.

As part of Lebanon State Forest, Whitesbog is also a recreational resource for residents of the surrounding community and for many New Jersey residents who have, often by chance, stumbled onto the village.

Numerous small streams, abandoned cranberry bogs and old fields provide habitat for a variety of plants and animals.

Among botanists, Whitesbog is known for its unusually high number of rare Pine Barrens plants as well as for the diversity of its vegetation.

A stopover for migrating waterfowl, Whitesbog is also a popular hunting ground and fishing area.

Canoeists, joggers, hikers, horsebackriders, birders all enjoy Whitesbog's scenic qualities.

In an attempt to secure an historic register nomination for the settlement at Whitesbog, the New Jersey Conservation Foundation has led the way to a clearer understanding of the cultural significance of the site. Through a grant funded by the National Trust for Historic Preservation, the National Park Service, The New Jersey Department of En-

vironmental Protection and the Victoria Foundation, NJCF's consultants have detailed the significance of the inventions, experiments and discoveries at Whitesbog.

Under the leadership of NJCF, a group of concerned citizens has initiated the development of a plan for the stabilization, repair and reuse of the village. Soon to be incorporated as the "Whitesbog Trust," this nonprofit corporation hopes to rejuvenate the village and provide people with an opportunity to view the origin and evolution of New Jersey's berry industry.

Pemberton Township, the Whitesbog Trust, the State of New Jersey and many local groups and businesses have planned a series of festivals at Whitesbog. The first will be a blueberry festival to celebrate the glories of Miss White's discovery.

Billed as one of the "Parks '84" events to be held this year throughout New Jersey, the Whitesbog Blueberry Festival, scheduled for Saturday, July 28th, will be an all-out celebration of Pine Barrens arts, crafts, music and culture and will include the joys of cooking and eating blueberries in every imaginable form. Also planned is a 10-kilometer cross-country race through the bogs and some of the most relaxing scenery in New Jersey.



*Elizabeth C. White  
examining blueberries in  
June 1928.*



*Blueberry harvester at  
work*

For details on the Whitesbog Blueberry Festival, the 10K race, and a guide to local "pick-your-own" blueberry farms, please send a self-addressed stamped envelope to:

Whitesbog Blueberry Festival  
c/o Whitesbog Trust, Inc.  
120-34A Whitesbog Road  
Browns Mills, New Jersey 08015  
Phone: 609-893-4646





## Guarding N.J.'s Coast

continued from page 27

later. If we had had the helicopter then, we would have discovered the area of low dissolved oxygen and been able to track it through increased sampling." Though the EPA's remedies in this type of situation are limited—the EPA Regional Administrator can temporarily suspend ocean disposal at the 12-mile site immediately in an emergency—"at the very least," explains Dr. Hemmett, "we would have been able to alert the environmental and health officials of the state and affected counties." (The impact on marine fisheries is discussed in "Ocean Fishkill 1976", July/August 1978 issue of *New Jersey Outdoors*.)

After that summer, which also, according to the EPA *New York Bight Water Quality* report, saw an "unusually heavy washup of debris" along the Long Island coast, EPA decided that it needed to respond more quickly with its sampling and to sample the entire Bight. Enter a UH-1H or "Huey" helicopter, donated by the Army, and large enough to fit EPA's sampling crew, equipment, and the racks of bottles brought back daily filled with water from the Bight for analysis at the Region II laboratory in Edison.

### CURRENT MONITORING PROGRAM

EPA Region II's ocean sampling program is now quite extensive and covers most of the New York Bight. There are 66 stations along the New Jersey and Long Island coasts (the 40 New Jersey stations run from Sandy Hook down to Cape May). Samples at these stations are collected just beyond the surf area at public and private bathing beaches, and are analyzed for bacteria. There are rows of stations which are perpendicular to each coastline, and stretch from 1 mile to fifteen miles off the coast. Both surface and bottom water is sampled at these stations and tested for dissolved oxygen content. Finally, a group of stations in the apex of the Bight are sampled and tested for both oxygen and bacteria. These stations cover the area from the mouth of Raritan Bay out to the sewage sludge dumpsite, 12 miles off the coast of Sandy Hook.

### COOPERATIVE EFFORT

The ocean monitoring program starts up in early spring, and is in full swing by Memorial Day. At the start of the sampling season, members of the New York Bight Advisory Committee meet at the Edison offices of EPA to review the previous year's program and to discuss the monitoring strategy for the coming season. The Advisory Committee is made up of representatives of EPA; the National Oceanic and Atmospheric Administration (NOAA), based in Sandy Hook; the U.S. Coast Guard; the New Jersey Department of Environmental Protection (NJDEP); the New York Department of Environmental Conservation (NYDEC); the New York City Department of Environmental Protection; the Interstate Sanitation Commission (ISC) which has representatives of NY, NJ, and Conn.; and health and environmental officials from counties along both coasts. Cooperative monitoring efforts between groups are set up; for example, the EPA collects weekly samples throughout the season which the NJDEP analyzes for phytoplankton. When there is a bloom, each group responds immediately in turn in order to identify the species as soon as possible.


Then the group discusses the "contingency plan" for the summer. Says Dr. Hemmett: "If we start seeing severe DO depression, a decision would have to

be made. The Bight Advisory Committee would meet, further and more intensive sampling would be done immediately, and the Regional Administrator [of EPA, who is currently Jacqueline E. Schaefer] would be notified that the situation had gotten severe." The contingency plan calls for the Regional Administrator to take immediate action to ameliorate the situation, if possible, which could include moving the sewage sludge dumpsite out to a designated area 106 miles off the New Jersey coast. At the time of this writing, EPA is in the process of deciding whether to order all remaining municipalities who are ocean dumping to move out to the 106 mile site, and to end sludge disposal in the New York Bight permanently.

### BIRD'S EYE VIEW

While the ability to make frequent water measurements is the most significant aspect of using the helicopter for monitoring the Bight, another feature unique to this program is the capacity to observe phenomena out in the Bight that could eventually impact bathers. For example, a "red tide," in most cases a bloom of algae called *Olisthodiscus luteus* that is harmless to bathers, can be spotted right away from 800 feet, EPA's cruising altitude, but it is difficult to see from a boat unless it is very thick and close to the surface. Travelling from station to station, EPA technicians are constantly on the lookout for anything that might cause a problem on the beaches or in the Bight: sewer line fractures, which can be spotted when a waste stream is coming up short of the end of the pipe; "short-dumping," that is, a sludge barge releasing its load before it reaches the dumpsite; oil slicks; or large amounts of garbage floating on the surface of the water. Incidentally, the garbage, sandwich bags, and orange skins you've seen floating in the water do not come from the dumpsite, but rather from landfills along the coastline or careless people on boats. Sewage sludge, according to Dr. Hemmett, "is strictly organic material. The treatment plants go through primary treatment and take out all the floatables."

If any of these situations is spotted, the crew chief can decide to go down for a closer look in order to take pictures and to grab a sample, if appropriate. After the crew returns to Edison, they notify the proper agency about the problem, i.e., if floatables were sighted off the New Jersey coast, the NJDEP would be called. Also, if the problem seemed serious enough, EPA's regional office in New York City would be contacted so that they could answer the questions of concerned citizens who might call.

EPA's data over the past seven years have shown that water quality is, for the most part, favorable for recreation along the New Jersey coast. There have been no repeat performances of the 1976 anoxic condition, and bacteria counts along the Jersey beaches are usually well below the limits set by EPA. The situation in the heavily used Bight is still tenuous, however, due to its limited capacity to absorb the pollution associated with the metropolitan area. Should sludge disposal in the New York Bight be discontinued, and if New York City eventually responds to the ever-increasing pressure to treat its sewage, the future of the New Jersey/New York coastal waters could look brighter. Regular monitoring will probably always be a fact of life for the Bight, though, to prevent its recreational uses from being usurped by its more utilitarian ones. So expect to continue seeing EPA's 'helicopter' hopping from beach to beach in the years to come. 



## Dear Editor

*New Jersey Outdoors* welcomes letters from readers. Letters for publication should include the writer's name and address and should be mailed to: Editor, *New Jersey Outdoors*, CN 402, Trenton, N.J. 08625. Letters may be edited for reasons of length or clarity. Please keep the letters coming. We'd like to hear what you think about the magazine. We'll also try to answer questions and if we cannot, we'll ask our readers for help.

I greatly appreciated "Our Friends in the Parks" (January/February). Where should I write for the 1984 calendar of events for state parks. Have you ever considered a column of the many wonderful events scheduled at New Jersey's parks? I for one would love it and would appreciate the opportunity to take advantage of all the wonderful activities New Jersey has to offer.

Judy Dolgos  
Piscataway

To obtain a copy of the current calendar of events, send a stamped, self-addressed #10 envelope to State Park Service, Department of Environmental Protection, CN 404, Trenton, N.J. 08625 and ask for a copy of "What's Happening?" and "Parks '84 Happenings" These brochures list dates, times, locations and contacts for regular and special events at state, county and local parks.

"Parks '84 . . . from the Mountains to the Shore" is a special program that celebrates New Jersey's fine system of parks, forests, wildlife management and natural areas.

You may have noticed that we have started publishing a regular listing of park events in the May/June issue. Your idea is right in line with our thinking and also complements the Parks '84 campaign. Many thanks.

The March/April Letters to the Editor column included a request for environmental education information. You suggested the N.J. School of Conservation in Branchville, and Len Soucy. May we point out the Bergen County Wildlife Center is also a nature education facility which serves over 25,000 children and adults each year. We have weekly programs year-round and special programs during the summer.

David B. Rimmer, Manager  
Kim Contini, Naturalist  
Supervisor  
Bergen County Park  
Commission Wildlife Center  
Wycoff

Thanks for the information. There are a number of environmental education centers at county and local parks through-

out New Jersey. You can check with your park commission to see what they offer. And we often cover environmental education activities in *New Jersey Outdoors*. In the May/June issue there was an article about the environmental education program at Poricy Park in Monmouth County.

In addition thirteen state parks and forests also offer a variety of interpretive and education programs in their nature centers. Most activities take advantage of local trees, plants, animals and birds to demonstrate environmental principles. North of Trenton, you'll find nature walks, lectures and exhibits at Stokes State Forest, High Point, Swartswood and Washington Crossing State Parks. Along the coast, programs focus on the ocean resources at Allaire, Cheesequake, Island Beach and Cape May Point State Parks. And you can learn more about the Pinelands at Bass River, Belleplain, Lebanon, and Wharton State Forests, and Parvin State Park.

The Liberty Park Interpretive Center in Jersey City and the Natural Resource Education Center at Pequest near Hackensack (see March/April) will offer comprehensive interpretive and educational programs when they open later this year. Watch for the opening dates in NJO!

For some time my wife and I had been planning to visit Fort Mott State Park. After reading Paul E. Taylor's article (March/April), we decided to take it in. Glad we did. The weather was beautiful, there were just a few folks around so we had time to really enjoy it. We also visited the National Cemetery at Finns' Point and came across several German POW graves from World War II. Is there any information available regarding these soldiers and how they came to be buried there?

Mr. and Mrs. James A. Cope  
Hamilton Square

Thirteen German prisoners of war who died at a Fort Dix detention camp during World War II are buried at Finn's Point National Cemetery. Three of those POW's were Russians who had joined the German army; they committed suicide rather than be repatriated to the USSR.

Finn's Point also holds the remains of some 2500 Confederate POW's who died from malnutrition, disease and neglect at the overcrowded Union prison at Fort Delaware on Pea Patch Island.

The March/April issue is THE BEST YET of an ever-improving magazine. Congratulations on providing a forum for reader dis-

cussion in the new department Letters to the Editor. I'm sure we'll have a healthy exchange of ideas.

Robert D. Elder  
Medford

Thanks for the compliments. We like to hear comments pro and con. Please keep the letters coming.

"Happy Accidents in Sussex" (March/April) is very interesting but contained one factual error. The anagama kiln at Peter's Valley is not the only working one outside Japan. Juniata College in Huntingdon, Pennsylvania has been operating an anagama kiln since 1978 for pottery classes and professional potters. Our kiln was one of the first built of the 10 or so that exist in the U.S. today.

Robert C. Howden  
Juniata College  
Huntingdon, Pennsylvania

Our apologies. We thought the kiln at Peter's Valley was the only one in the U.S.

You write about all kinds of recreation in New Jersey but one thing. That is golf, and I as well as all the other avid golfers in N.J. would like to know where all the public golf courses are. I subscribed to *New Jersey Outdoors* with the thought that I would find that kind of information in your magazine. I love camping, hiking and I also love to swim but then again I love to golf too.

Anonymous

Thanks for the idea. We're working on a golf story—watch for it in a spring issue.

The new format of the magazine is an improvement. The content is always well written and is directed toward a diversified interest in the outdoor activities offered in our great state.

I am an avid bow hunter and I believe the vocal and anti-hunting factions active in this state utilize the media in a one-sided effort and portray the hunting members of the outdoor public in an obviously distorted view. Publications such as NJO can and must give a factual and realistic account of the roll hunting plays in a state such as New Jersey.

This magazine should help fight against the true enemy of the state's natural beauty and wildlife, which is the loss of habitat.

Please do write and publish more articles about hunting to better illustrate this heritage that I hope we all can enjoy for years to come.

Richard J. Wieggers

New Jersey State Library





George Strasser with 40 pounds of peaches.

## Picking in your "backyard garden"

BY GEORGE STRASSER

If the Garden State is your "Backyard Garden," there are many opportunities for you to join in the harvest. The first step is to call your County Extension Service and ask for a free copy of "Where to Find Pick-Your-Own Fruits and Vegetables in New Jersey." This publication lists crop harvest dates, farms in each county (with addresses and telephone numbers) and other useful information.

You can begin as early as April with asparagus and finish in December with cauliflower. My family and I enjoy fresh fruit most; so we pick strawberries in June, blueberries in July, peaches in August, and apples in October.

"Pick-your-own" has many consumer advantages. As the consumer, you are assured the freshest produce, at its peak of flavor. Consider produce that is picked green so it does not rot in transit. Compare this to tree, vine, or plant-ripened produce. The shelved produce can not compare with the firm, juicy fresh fruit.

Price, also, is a prime consideration. Compare the \$1.50/pint for store-bought blueberries to the 50¢/pound pick-your-own blueberries.

Another advantage when you do the picking is that you know the produce quality is consistent. There are no small or deteriorating berries under the top layer.

But to me, the best advantage is a day in the fresh country air—a perfect excuse for a picnic.

"Pick-your-own" also has advantages for the farmer:

1. Elimination of harvesting costs (except for some field supervision and manning of checkout points.)
2. Perishable crops are sold quickly (raspberries have a shelf life of only 3 days, even under refrigeration.)
3. Immediate payment.

It is important to telephone the farm before you go. While some farms have toll-free numbers with recorded messages, most do not. When you call, some of the questions you may want to ask are:

1. Directions to the farm?

2. What days can you pick?
3. Is there a good supply?
4. Are containers provided?
5. What is the price?
6. Are children permitted to pick?
7. Variety for canning, freezing, etc.?

On one occasion I learned the value of calling ahead. I assumed we needed digging equipment to harvest potatoes. Upon calling, I learned we only needed bags. We simply had to follow the tractor machinery and pick up the unearthed potatoes.

Surprisingly, these potatoes seemed to last longer than store-bought even though they had no chemicals to prevent "eye" formation.

Since this is not a Garden of Eden, it should be mentioned that you have responsibilities when you pick. You should obey all owner's rules. After all, you are on his land. I have seen peach trees split from climbing, strawberries crushed from unsupervised children, and trash thrown from cars.

Farmers also have responsibilities—pickers should not have long waits in the sun to be assigned to a row, or have to park great distances from the picking area. These incidences are rare but they do exist.

How do you handle your harvest for the trip back home? Usually it is best to "pack shallow" because berries, peaches, and other commodities will crush under their own weight. We use half-boxes from canned soda cases. A cloth cover over the boxes should keep fruit from rolling around in transport.

Now that you are prepared to reap the harvest of the Garden State, I have one more suggestion. The "Pick-your-own" concept has gained popularity in the past few years which has resulted in crowded conditions in some areas. To avoid overcrowded areas, pick early in the day or try areas where there are many farms growing the same crop (Pemberton for blueberries, for example). Usually, farms further south tend to be less crowded.

Remember, New Jersey is the Garden State and it is in your backyard, so with a garden this fruitful, why not harvest it?

**WIN  
\$1,000.00!**

### SEVENTH ANNUAL New Jersey CHAMPIONSHIP TOMATO WEIGH-IN

TO COMPETE... Bring your heaviest tomato to a Weigh-in Station on Saturday, August 25, between 9:00 and 11:00 A.M. Winner is eligible to compete in the State Finals same day at the Monmouth Mall, Eatontown, at 5:00 P.M.

### PRIZES AT STATE FINALS

#### 1984 OFFICIAL WEIGH-IN STATIONS

##### Atlantic County

Emma's Farm & Garden Center, Hammonton  
Ronnie's Garden Center, Northfield  
Tom's Garden World, McKee City

##### Bergen County

J. Bunny, Florist, Little Ferry  
D'angelo Floral Acres, Dumont  
Goodman's Hardware, Teaneck  
Metropolitan Plant Exchange, Fort Lee  
Packard's Garden Center, Hackensack  
Tice's Farms, Woodcliff Lake

##### Burlington County

The G Boys, Marlton  
C. S. Heaf, Burlington

##### Camden County

Frieda & Fred's, Berlin  
Robbins Farm Market, Voorhees

##### Cape May County

Clinton Conover Farms, Cape May  
Courthouse  
Howey's Garden Center, Villas  
Robinson & Sons, Villas

##### Cumberland County

Bridgeton Agway  
Champion's Hardware, Millville  
City of Vineland (for Vineland residents)

##### Essex County

Fairfield Garden Center, Fairfield  
Fischer's Feed Store, Bloomfield  
Metropolitan Plant Exchange, W. Orange

##### Gloucester County

Orol Ledden & Sons, Sewell  
Turnersville Garden Center

##### Hudson County

Resnick's TruValue Hardware, Bayonne

##### Hunterdon County

Plantation, Flemington  
Sherred's Greenhouses, Clinton



## Summer Concerts

The money seems well spent.

"People really like the concerts," Lanza relates. "We get notes and letters and phone calls. On a nice day we can get 900 people here at the arboretum; at Schooley's we can get 1,200.

"At most of the parks you can set up a picnic and make a full day of it."

Listeners can bring lawn chairs. Lanza recommends that senior citizens and the handicapped plan to arrive early to get better parking.

In the event of rain, cancellation announcements will be made over local radio stations, and signs will be posted at park entrances.

A few years ago it almost rained on Middlesex County's summer entertainment parade, so to speak. A fire destroyed the Roosevelt Park facility where Broadway musicals were staged during the warmer months. The Green Acres Fund came to the rescue with half the total needed to build a new amphitheater; other funding came from Bell Telephone and some of the area's pharmaceutical companies.

Now the Edison Township stage is in full swing on summer evenings, and shows draw crowds of 5,000 people a night. This season three Broadway smashes will each play for 10-night runs accompanied by full orchestras and featuring professional casts.

Guys and Dolls will run from June 26 to 30 and July 2 through 7. South Pacific will be presented July 18 to 28, and Annie will take the stage from Aug. 10 to 18. The shows are free, and begin at 8:40 p.m. There are no performances Sundays or holidays.

The shows are partially funded by the recording industry's Music Performance Trust Fund, explains Bill Seeman, secretary of parks and himself a former professional musician. Very often, he says, daytime drama stars or theater people on hiatus come down from New York to take part in the performances.

"Right here in our area we can draw from so much talent," observes Seeman. "I've been very fortunate in that I've been able to hire extremely talented people."

And of course pros know that the show must go on. Six years ago, when the original stage burned, South Pacific was playing. Not even a fire could cancel the performances.

"We have a showmobile—a portable stage—and we used that," Seeman recalls. This summer South Pacific should have smoother sailing.

There is music in the air at other Middlesex County spots, too. "We have band concerts every Sunday at 3 p.m. in July and August at Johnson Park in Piscataway," he reminds. There are also concerts at 6 p.m. on Sundays at Warren Park in Woodbridge during those months.

"We have every type of music," says Seeman. "Polka, big band, concert bands." Each summer one symphony is presented at one of the parks.

The less classically inclined might want to venture to Princeton, where Summer Sounds have a new ring to them—a new wave ring, that is.

"We try to have a variety," says township recreation supervisor Kathy Clarkson. "Last year we had some new wave, bluegrass and country rock."

The township's eight free concerts are held at Community Park North, off Route 206 on Mountain Avenue beginning in July. The Thursday night shows, held from 7:30 to 10 p.m., usually attract young people from the ages of 14 to 22, Clark observes. Sometimes *lots* of them.

"We've had as many as 1,800 people there," for some of the more popular acts, although Clarkson admits that at those times "there are just too many people."

Acoustics are very good at the outdoor amphitheater, completed in 1977 with the help of Green Acres.

"It's really a lovely site," Clarkson says. Although no alcoholic beverages are allowed in the park, concert goers may bring blankets and picnic baskets. There are seats built into the berm, but "a lot of kids like to sit on the hill. No matter where you sit you're going to be able to see the band."

Camden County has young people in mind, too. Their Children's Summer Series at Haddon Heights Dell features magicians, plays, clowns, folksingers and more for the little ones. The 45-minute programs begin at 10:30 a.m.

Adults more interested in big bands than Bozo will enjoy Camden's Evening Concert Series. The shows, held at Cooper River Park in Pennsauken as well as at other parks in Camden and Berlin, provide a panoply of musical styles to meet all tastes.

Recreation leader John McNally Jr. says, "We try to diversify. We go from big bands, string bands, some country to Latin and jazz." Past performers have included the Haggeman and Garden State string bands, Al Raymond's Big Band and the Walter Jay Orchestra.

The free concerts are held every Thursday night at 7:30 at Cooper River Park. Shows at other Camden County parks are held on different nights of the week.

No matter which part of the state you call home, or happen to be visiting this summer, the sound of music is sure to be heard nearby. It's easy listening.

For more information on summer concerts in Morris County, send a self-addressed envelope to Morris County Park Commission, P.O. Box 1295R, Morristown, 17960.

For a listing of concerts in Princeton, send a self-addressed, stamped envelope to Princeton Twp. Recreation Dept., Township Hall Annex, Princeton, 08540.

For information on shows or concerts in Middlesex County call (201) 745-3900; in Camden County call (609) 428-9338.

### Mercer County

Makrancy's Garden Mart, Trenton  
Tony's Garden Market, Windsor

### Middlesex County

Amato's Nursery, S. Brunswick  
John & Joan's Road Stand, Piscataway  
Maple Tree Farms, No. Brunswick  
Rupp's Hardware, Sayreville

### Monmouth County

Barlow Flower Farm, Sea Girt  
Belford Farm Market  
Brookside Garden Center, Middletown  
Builder's General Supply, Little Silver  
Cerrlone's Greenhouses, Holmdel  
Cliffwood Farm Mkt.  
Coast Hardware, Long Branch  
Flower Time, Manalapan  
Flower Time, W. Long Branch  
Harth Nursery, Wall  
Hillpot's Servistar Hardware, Freehold  
Joe's Farm Market, Neptune City  
Middletown Garden Mart  
Siegfried Hardware, Atlantic Highlands  
Sigmund's Greenhouses, Aberdeen  
Village Hardware, Holmdel  
Williams Garden Center, Howell

### Morris County

Butler TruValue Hardware  
Tony's Garden Center, Parsippany

### Ocean County

Agway, Inc., Lakewood  
Collina's, Bricktown  
Colony Market, Bricktown  
DeWolf Farm, New Egypt  
Fine Fare Super Market, Jackson  
Foster's Farm Market, Beach Haven  
Island Heights Farmers Market  
Moore Farm Market, Bayville  
The Red Barn Nursery, Toms River  
Trish TruValue Hardware, Tuckerton

### Passaic County

Rockledge Garden Center, Wayne  
Arbor Greens, Clifton

### Salem County

Elmer Agway  
Smick Building Material Center, Quinten

### Somerset County

Servistar Warrenville Hardware, Warren  
Venis Bros. Horticulture Center, Somerville

### Sussex County

Mohawk Gardens, Sparta  
Atlas Garden Center, Stanhope

### Union County

Green Grove Fruit & Garden Center, Union  
Wayside Gardens, Springfield  
Wayside Gardens, Summit

### Warren County

Best's Fruit Farm, Hackettstown



# The Black Skimmer

BY LARRY NILES AND MIMI DUNNE

People visiting New Jersey beaches see them often—streaks of black and white skimming inches above the water like squadrons of airships attempting to slip under enemy radar. They glide effortlessly over the ocean and bays leaving only a slight wake from their beak dipping into the calm water.

The black skimmer is one of the most unusual and beautiful of New Jersey birds. Because of its beauty it was used as the emblem for the 1984 state income tax check-off for the wildlife promotional campaign. Unfortunately, the skimmer is not only one of the most-studied of our coastal species, it is also one of the most endangered.

The black skimmer breeds and feeds along most of New Jersey's coastline. In 1983 it was found nesting as far north as Tom's River and as far south as Cape May. Normally it nests on sandy beaches with little or no vegetation. Nests are located above the high tide line and below the primary dune. Usually, three to five eggs, 1½ inches in diameter rest in an oval, unlined depression. The tan eggs mottled with dark blotches blend well with the sand and broken shells of barrier beaches. Recently, skimmers have been found nesting on wrack—that debris accumulated on bay islands after an unusually high tide. Nesting on this debris protects the eggs and young from normal high tides in the marsh.

The skimmer nests colonially, or in groups, with members of its own species or birds of other species. It may be found in the same area as almost any of New Jersey's gulls or terns, but it is most often associated with the least tern. The least tern and black skimmer have nearly identical nesting habitat requirements. Colonies in New Jersey are some of the largest on the east coast. Last year at Holgate (part of Brigantine National Wildlife Refuge) over 750 pairs were counted by refuge personnel. Other large colonies can be found near Strathmere, Corson's Inlet State Park and Stone Harbor Point. But most colonies are small, with the number of adults ranging from about 4 to 44 and these are scattered all along the coast of New Jersey.

For thousands of years, the natural world has extracted a toll on beach-nesting species, keeping their populations in check. It takes 20-25 days for the eggs to hatch and another month for the young to fledge from the colony area. From the very beginning, the skimmer must battle climate, weather and other animals. First they must survive the major storms that frequent the coast during the nesting season. The storms that coincide with high tides are even more dangerous, and worse than that are the storms that coincide with flood tides (those tides that occur when the moon exerts its greatest force, usually a few days after a full moon). Even if the skimmer nests can withstand the elements, they may not survive depredations of the occasional red fox or raccoon. In some instances there animals can cause an entire colony of birds to abandon their nests. Add to that the occasional loss to flying predators.

Problems that skimmer populations encounter in nature have been compounded by the presence of people, their pets, and exotic introductions. People, dogs, cats and rats are undoubtedly the greatest threat to black skimmer colonies in New Jersey. Very

rarely does anyone directly enter a colony to destroy nests. But each time a person enters a colony to look at the eggs, the young birds, or the great wave of black and white as the colony rises in flight, that person unknowingly hurts the colony. Eventually, if there is enough interference, there will be a reduction in productivity. Interference can cause increased levels of egg failure, nest predation, or abandonment.

Free roaming dogs and cats find good hunting in a colony of beach nesters. Unleashed pets plus the exotic Norway rat have an unknown, but likely enormous, impact upon beach nesters.

Without a doubt, the most damaging impact of people is the alteration of habitat. The coast grows faster than any other section in the state. The casinos and retirement villages are just new attractions in an area always attractive to vacationers from all over the eastern United States. New developments sprout faster than alfalfa under a warm May sun. People bring bulldozers, bulkheads, rats, cats, and a host of other problems, all impacting upon the black skimmer.

The black skimmer population in New Jersey is in trouble. Between 1976 and 1983, the number of colonies declined from 14 to 10 and the number of adults per colony declined by 22 percent. Each colony, therefore, grows in importance, and a single catastrophe at one colony can have serious effects on the entire State's population. For these reasons, this bird is taken very seriously by endangered species biologists.

In 1976 biologists with the Division of Fish, Game and Wildlife's Endangered and Nongame Species Project began a project which continues today. Each year biologists count the number of adults and young in all colonies. Each year staff biologists, state park personnel, U.S. Fish and Wildlife Service biologists and local experts monitor each colony and protect them with signs and/or fencing.

The Endangered Species Program is initiating a project headed by Dr. Joanna Burger of Rutgers University to create new skimmer nesting habitat. Large and permanent wrack piles are to be created on islands with dwindling skimmer colonies. In addition, a management plan will be created in the spring of 1984 to improve the research and management techniques used for the skimmer, least tern and piping plover.

What does the future hold for this unusual bird? The Division is committed to working with landowners and educating the public to the importance of the beautiful skimmer. But, people in New Jersey must abandon the idea that it is solely the state's responsibility to protect this bird. The presence of the black skimmer on our coast will undoubtedly depend on the willingness of people in this state to make the necessary concessions. Some are as minor as keeping dogs leashed while on beaches. But others deal with the public's willingness to support the efforts of planners to avoid impacts of new developments on coastal wildlife. If taxpayers of New Jersey decide the skimmer shall remain, the job can be done.

*Author's note: Dr. Joanna Burger provided the data on black skimmer populations in New Jersey.*



## FRONT COVER

The Globe Star passes under the twin spans of the Delaware Memorial Bridge as it enters Delaware Bay, with Captain Marvin Creamer at the helm. Photograph by Paul K. Trace.

## INSIDE BACK COVER

Black Skimmer. Illustration by Carol Decker.

## BACK COVER

Kids love to fish. Photograph by Cornelius Hogenbirk.





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