

Alewife Herring



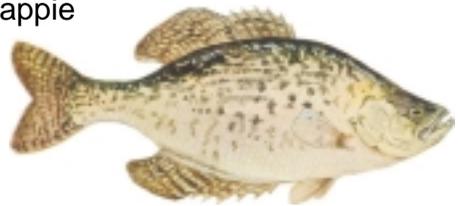
Pumpkinseed Sunfish



Brown Bullhead



Black Crappie



Channel Catfish



Largemouth Bass



Brook Trout



Smallmouth Bass



Brown Trout



Northern Pike



Lake Trout



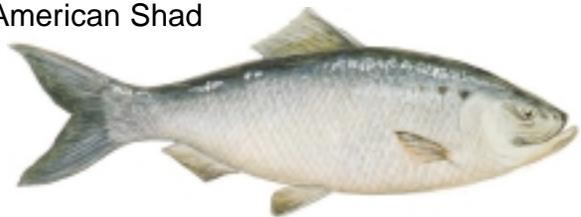
Chain Pickerel



Bluegill

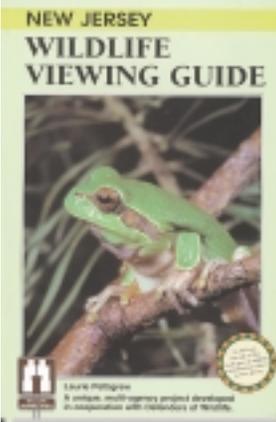


American Shad



## NEW JERSEY WILDLIFE VIEWING GUIDE

The NJ Division of Fish and Wildlife is proud to announce the publication of the New Jersey Wildlife Viewing Guide. The publication of the Guide is the culmination of a two year project coordinated by the Division's Endangered and Nongame Species Program to establish a network of viewing sites throughout the state.



The Guide beautifully illustrates the rich natural treasures that few people realize exist in the state. Experience the amazing diversity of New Jersey's wildlife and habitats at 87 of the state's best Wildlife Viewing Areas. The 165 page Guide is full of color photos and illustrations and provides directions to each site and information on site facilities, best viewing seasons and which animals and habitats can be seen.

Unique to the New Jersey Guide is the addition of Wildlife Diversity Tours. In four regions, expanded information is provided on five sites in each region that when experienced through a 2-3 day trip provide a deeper understanding and appreciation of the ecosystems and wildlife found in the region.

Order yours today by using the order form below. Credit card orders can be placed by calling 609/292-9450.

*The creation of the Wildlife Viewing Guide and the development of a*

*Watchable Wildlife Program for New Jersey was made possible through funding from the sale of 'Conserve Wildlife' license plates.*

### Wildlife Viewing Guide Order Form

Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Payable by Credit Card, Check or Money Order for \$10.95

Plus \$3.95 S/H to:

**NJ Division of Fish and Wildlife  
Endangered and Nongame Species Program  
PO Box 400 – Trenton, NJ 08625-0400**

\_\_\_ Visa \_\_\_ MC \_\_\_ Discover \_\_\_ American Express

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Expires: □□ / □□

Signature: \_\_\_\_\_

## Conserve Wildlife License Plates Support Nongame and Endangered Species

Since 1972, the Endangered and Nongame Species Program (ENSP) has worked to protect and restore New Jersey's endangered and threatened wildlife. You can help the program through the Income Tax Check-off and/or through the Conserve Wildlife license plate.



These attractive \$50 license plates let everyone know you believe in conservation, and 80% of your tax-deductible payment goes directly to the ENSP.

Personalized Wildlife Plates are also available for \$100.

Previously available by mail only, motorists may now purchase the plates in person at DMV offices regardless of their current expiration dates. Plates can also be purchased from car dealers when buying or leasing a new car.

## Wild Places & Open Spaces



The NJ Division of Fish and Wildlife is proud to announce the publication of *Wild Places & Open Spaces-A Wildlife Enthusiasts Guide to Finding and Using Public Open Space in the Garden State*. The publication, designed similar to a road map, offers the outdoors-person a wealth of information on locating and exploring New Jersey's open spaces in a compact and easy-to-read format.

Originally developed as an updated version of the familiar Guide to Wildlife Management Areas, the publication not only contains valuable information on Division wildlife management areas and the variety of wildlife present, but includes state parks, forests and much more! Showcasing a full-color map of New Jersey, more than 700,000 acres of public open space are highlighted with an accompanying wildlife activity grid.

Order yours today by using the form below.

Send check or money order made payable to:  
NJ Division of Fish and Wildlife  
Wild Places Map  
P.O. Box 400  
Trenton, NJ 08625-0400  
Attn: Carol Nash

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_ Zip Code \_\_\_\_\_

Quantity Ordered \_\_\_\_\_  
(price per map: \$4 includes shipping)

Total Enclosed \$ \_\_\_\_\_

## The Partnership for Wildlife Volunteerism Platinum Visa® Card



When you carry the Partnership for Wildlife Volunteerism Platinum Visa card, you'll carry more than just another credit card. This is the only Visa card program that helps support important volunteer activities conducted by the New Jersey Division of Fish and Wildlife—at no additional cost to you. It's an easy way to show your support, because each time you use your card to make a purchase — a contribution will automatically be made to supporting Division programs such as “Becoming an Outdoors-Woman” and “Take a Kid Hunting”.

TO APPLY CALL  
**1-800-FIRST-USA**

## New Jersey Seventeenth Waterfowl Stamp and Print Kicking off the New Jersey Landmark Series with the Hautman Brothers

New Jersey Division of Fish and Wildlife's Waterfowl Stamp Advisory Committee is proud to announce the HABITAT 2000 LAND-MARK SERIES to be painted by the three Hautman brothers, the only brothers ever to win the prestigious Federal Duck Stamp Competition. Since 1990, they have won the competition 5 times! The series begins with the 2000/01 design, featuring canvasbacks flying past America's most recognizable New Jersey landmark, the Statue of Liberty, and will be painted by Joe Hautman.

Brother Bob Hautman will paint the second year scene of tundra swans at Sedge Island on Barnegat Bay. The third year will feature Jim Hautman creating a fall scene of wood ducks at the Delaware Water Gap. These three land areas are preserved open space for all to enjoy and cherish!

The Hautman Brothers are fast emerging as America's foremost wildlife artists. All three brothers have received numerous honors and awards, including dominating many states and national duck stamp competitions. At last count, the three brothers have seen their art featured on over 34 state and federal stamps. The talents of the Hautman Brothers as well as their unique family gift were mentioned in the major motion picture “FARGO”. They have received national accolades from newspapers such as *USA Today*, *The Washington Post*, *Minneapolis Star Tribune* and *The St. Paul Pioneer Press*, as well as the following magazines: *TIME*, *US News & World Report*, *Sports Illustrated*, *U.S. Art*, *Fur-Fish-Game* and *the North American Hunter*.

This year's artist, Joe Hautman, brought home the Federal Duck Stamp honors in 1992. The eldest Hautman brother, Joe won the South Carolina Duck Stamp award in 1994. He also designed the New Jersey Duck Stamp in 1995, the 1998 Connecticut Duck Stamp and most recently won the contest for the 2000 Minnesota Turkey Stamp.

The seventeenth waterfowl stamp and print will feature New Jersey's, (and maybe America's) most recognized landmark, the Statue of Liberty.



This area is the wintering ground host to vast numbers of migrating waterfowl including canvasbacks and it plays a vital role in their survival during migration.

The Statue of Liberty was a gift from the people of France on the 100th birthday of America's freedom. Designed by Auguste Bartholdi, it was built with the assistance of Gustave Eiffel and is the cornerstone of Liberty State Park. It was officially unveiled on October 28, 1886 by President Grover Cleveland. The Statue of Liberty is open daily (except December 25). To find out more about the environmental and historical education programs offered for all age groups, teacher workshops and other public programs, call (201) 915-3409.

New Jersey, through an act of the State Legislature, began annually requiring waterfowl stamps in 1984. The New Jersey Department of Environmental Protection's Division of Fish and Wildlife administers the program for the purpose of purchasing wetlands for waterfowl habitat. To date, proceeds from the sale of New Jersey's duck stamps and prints have raised over \$3,600,000, all to acquire wetlands for waterfowl habitat and public use. Over 11,400 acres of waterfowl habitat have been purchased or donated.

New this year, the New Jersey Waterfowl Stamp Advisory Committee has added two additional products: a limited edition (500) collectors knife for each year of the series plus a limited edition (500) Habitat 2000 Souvenir stamp card that will feature three (3) artist signed stamps (one for each year of the series).

For more information on how to purchase a print, collector duck stamps or one of the new products, send a legal size SASE to: The Waterfowl Stamp Advisory Committee, NJ Div. of Fish and Wildlife, P.O. Box 400, Trenton, NJ 08625-0400 Or come visit us on the web at [www.state.nj.us/dep/fgw](http://www.state.nj.us/dep/fgw) and click on the products section. Remember, the profits from the sale of these items goes towards the preservation of waterfowl habitat in New Jersey!

## New Jersey's Wild Brookies - Are they the Genuine Article? By Patricia L. Hamilton, *Principal Fisheries Biologist*

Before I worked for New Jersey Division of Fish and Wildlife, I had no idea there were wild trout in New Jersey. As a trout angler, I gravitated to the streams and rivers stocked with hatchery-reared trout. It wasn't until I had a few years under my belt as a biologist sampling fish populations in brooks and streams, that I began to understand and appreciate our state's wild trout resources. Did you know wild trout inhabit many of the small streams cradled in the forested hills and mountains of north Jersey? The division has identified nearly 130 streams, brooks, and their tributaries that sustain wild trout.

Wild trout populations are able to maintain themselves naturally, through their own reproductive efforts. Their survival does not depend upon the stocking of hatchery-reared trout. Three trout species successfully reproduce in our streams.

Brown trout, imported from Europe before the turn of the century, have become widely established. Rainbows, native to the West Coast, were later introduced and also managed to gain a foothold here.

However, New Jersey's only true native trout, present since the glaciers receded, is the brook trout.

Wild "brookies" are a sight to behold. Their sides are speckled with yellow and magenta spots and the translucent orange fins on their undersides are trimmed with a leading white, then black, edge. During the fall spawning period their colors intensify, particularly on males, which may have a pronounced orange belly stripe. Subtle differences in coloration and body shape of brook trout throughout their native range (northeastern North America) were observed by biologists. These observations prompted researchers to investigate the genetic origins of brook trout. It has been determined that distinct genetic differences exist among brook trout from different geographic regions.

Yet no one knows where New Jersey's brook trout populations fit into this genetic puzzle. Do we have rare populations that are remnants of the original fish that colonized our area after deglaciation? Or, as a result of widespread stocking, have genetically pure populations interbred with

domesticated hatchery trout, thereby damaging or destroying the genetic integrity of the original populations?

The division, in collaboration with East Stroudsburg University, has embarked upon a study designed to answer this important question. Blood samples collected from a portion of our wild brook trout populations are being tested using sophisticated DNA analyses similar to those used to solve crimes. Division biologists are examining populations suspected to be genetically "pure", as well as those having a long history of stocking. The data resulting from this investigation will help determine if New Jersey has genetically unique populations of brook trout.

To all but the most ardent of trout anglers this study may seem to be a trivial scientific exercise. Yet solving this mystery will allow us to take an important step forward in managing our trout resources. Should New Jersey be fortunate and have vestiges of ancestral brook trout, efforts to preserve, conserve, and restore these "heritage" populations could begin. Perhaps it may lead to the adoption of regulations that would protect them from over-fishing.

But more importantly, the key to their survival lies in protecting their habitat.

Development of the forested lands surrounding the sensitive headwater streams where wild brook trout dwell may be the greatest threat to their continued existence. Diminishing or fluctuating water flows, along with increased water temperatures and sedimentation, create hardships for wild trout which can eventually cause their demise. Looking at the larger picture, maintaining both plant and animal biodiversity in the face of a changing landscape is a concept that is being embraced both state and worldwide.

The colorful brook trout has been designated our state fish, which may turn out to be even more appropriate than we thought. So the next time you pass by a small stream that comes tumbling down a mountain, or flowing quietly near the base of a hillside, pause to ponder: are there brook trout lurking out of sight?



# 2001 Hackettstown Fish Hatchery Report

## Robert Olsen, Superintendent

The new intensive fish culture building at Hackettstown was officially completed and turned over to the division in March 2000. This new facility provides a tremendous improvement in our indoor fish rearing capabilities by increasing rearing volume, water flow and improving water quality. Those species which are raised in this new system, are lake trout, northern pike, tiger muskie, muskellunge, hybrid striped bass, channel catfish and sunfish. Production of all these species improved this past year under this new intensive system.

The major emphasis with this new system is not to raise more fish but to raise fish to a larger size before being released. This will increase their survival in the wild and ultimately improve the cool and warmwater fisheries throughout New Jersey.

In addition to those species raised indoors, the following fish are raised outdoors under extensive conditions. They consist of walleye, black crappie, largemouth and smallmouth bass, brown bullhead, golden shiners, fathead minnows and mosquitofish. These species are raised outdoors because they do not do well under intensive culture methodologies.

Some species such as hybrid striped bass actually thrive well under both culture methods. They are placed into outside ponds as five-day-old fry and allowed to grow until they reach around 1 1/2 inches in length. They are then brought inside and grown to four inches before being released. This past year was our most productive year to date with over 70,000 hybrid striped bass fingerlings being stocked into the following waters: Manasquan Reservoir (12,210), Lake Hopatcong (39,600) and Spruce Run Reservoir (18,990).

This past year a total of 2,956,352 fish were released from the Hackettstown Hatchery. The different species and numbers of fish stocked are summarized in the adjacent table.

For a complete list of stocked waters indicating where these various fish have been released, send a self-addressed stamped envelope to:

**Warmwater/Coolwater Stocking List  
Pequest Trout Hatchery and  
Natural Resource Education Center  
605 Pequest Road  
Oxford, NJ 07863**

**This information can also be obtained by visiting  
our website at:  
[www.state.nj.us/dep/fgw](http://www.state.nj.us/dep/fgw)**

**Summary of All Species Distributed from the  
Hackettstown State Fish Hatchery in 2000**

<u>SPECIES</u>	<u>NUMBER</u>	<u>AVERAGE LENGTH (inches)</u>	<u>RANGE (inches)</u>
Bluegill Sunfish			
Fingerlings	66,000	1.0	.7 - 1.6
Adults	12,000	5.0	3.3 - 7.1
Channel Catfish			
Fry	243,540	--	--
Fingerlings	14,820	3.2	2.4 - 3.9
Adv. Fingerlings	55,060	6.8	4.0 - 9.4
Fathead Minnows	6,200	1.0	.5 - 2.0
Black Crappie	15,200	2.3	1.6 - 5.1
Lake Trout			
Largemouth Bass	16,500	2.7	1.8 - 4.6
Mosquitofish	288,430	—	—
Muskellunge			
Adv. Fingerlings	5,521	9.8	6.8 - 13.4
Smallmouth Bass			
Fingerlings	5,400	2.5	2.1 - 2.9
Adults	175	14.0	12.0 - 18.0
Tiger Muskies			
Fry	82,410	--	--
Fingerlings	16,587	5.5	2.4 - 9.2
Adv. Fingerlings	8,670	11.1	8.8 - 15.2
Walleye			
Fry	1,534,000	--	--
Fingerlings	170,430	1.8	1.0 - 2.3
Adv. Fingerlings	47,7048	3.7	2.7 - 6.5
Northern Pike			
Fry	210,420	--	--
Fingerlings	31,700	4.3	2.0 - 5.8
Adv. Fingerlings	26,077	7.0	5.1 - 8.6
Golden Shiners	1,600	2.0	1.5 - 2.5
Brown Bullhead	7,000	4.0	3.0 - 6.0
Hybrid Striped Bass	79,800	4.3	3.0 - 5.0
<b>TOTAL</b>	<b>2,956,352</b>		