New York's Great Lakes Fisheries:

The Real Fish Story

The good news, says New York Sea Grant Fisheries Specialist **Dave MacNeill,** is record-setting fish have been caught in New York's Great Lakes fisheries. "The bad news is that angling success has been down relative to previous years, perhaps related to unusual weather patterns this spring. But on the positive side, early signs suggest that fishing will start to pick up as trout and salmon move closer to shore." On the negative side, botulism now exists in both Lake Erie and Lake Ontario and monster size Asian carp are invading the Great Lakes. The good news is Sea Grant already has an information bank of research data on botulism in the Great Lakes and a research project on affected fish underway. NYSG staffers are also reading the literature on Asian carp.

Always good news: New York Sea Grant is constantly working to accentuate the positive and reduce, if not eliminate, the negatives affecting our coastline by employing science to educate public audiences concerned about the fisheries.

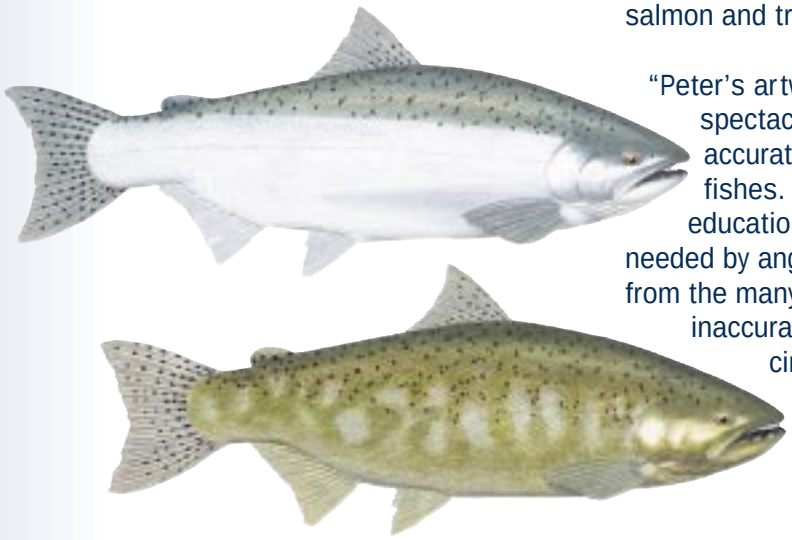
"Our goal is to share research-based, fact-based information with anglers, marina operators, and recreationists to maintain a healthy waterfront economy," New York Sea Grant Great Lakes Program Coordinator **Dave White** explains.

To educate recreational anglers about New York's freshwater sportfishing resources, MacNeill authored "Salmonids: Record-Breaking Salmon & Trout of the Seaway Trail." It appeared in the 2002 *Journey* magazine, published by the nonprofit Seaway Trail, Inc. of Sackets Harbor. Approximately 250,000 copies of the magazine are distributed to consumers and media across New York State and the U.S.

"A Sportfishing Mecca"

MacNeill's article calls the combined St. Lawrence River, Lake Ontario, Niagara River, and Lake Erie waters a "sportfishing mecca for anglers from all over the world." It describes record-breaking fish caught from Massena to Ripley. Sea Grant commissioned artist **Peter C. Thompson** to create illustrations to help anglers properly identify various species of salmon and trout.

"Peter's artwork gives us a spectacular collection of accurately-colored and marked fishes. The artwork serves an educational mission that was clearly needed by anglers trying to identify fish from the many black-and-white and inaccurate depictions that were in circulation," MacNeill says.



Chinook salmon in lake phase (top) and river phase (bottom). Artwork by Peter C. Thompson

Trophy-size Salmon

Chinook or king salmon are the largest species stocked into the Lake Ontario system and are highly prized by anglers. The Seaway Trail boasts the largest chinook salmon ever caught east of the Mississippi, weighing in at an incredible 47 pounds 13 ounces. They are voracious predators and eat three times their own body weight in small fish to reach these large sizes in the lake. They provide excellent lake fishing year round but are most often caught between the spring and fall. As adults, they return from the lake into their home stream in the fall where they provide trophy fishing opportunities for stream and bank anglers. Chinooks are a large silvery fish, with spotting on the upper half of the body and all of the tail.

— Dave MacNeill

Excerpts of Dave MacNeill's New York State's Seaway Trail Journey Magazine 2002 article are reprinted here on pages 8 and 9 with permission. To read more about fishing for salmonids go to 1-800-SEAWAY-T or www.seawaytrail.com to request a free copy.

Facts, not Fear, Found on Sea Grant websites

In July 2002, botulism was first identified in Lake Ontario. But months before, New York Sea Grant Coastal Education Specialist **Helen Domske** and Assistant Communicator **Paul Focazio** had set up a web site www.seagrant.sunysb.edu/botulism with facts and updates about outbreaks of the bacteria in other Great Lakes. This information helped to dispel public fears about botulism.

Researchers looking at the role that invasive species might play in the transfer of botulism have found valuable information at New York Sea Grant's www.aquaticinvaders.org. This comprehensive web site offers facts on freshwater and marine nuisance invasive species. The site is maintained by New York Sea Grant Coastal Resources Specialist **Chuck O'Neill, Jr.** Chuck O'Neill was recently appointed to the select Invasive Species Advisory Committee that advises the National Invasive Species Council. (See page 18).

With Sea Grant funding, researchers **Paul Bowser** and **Rod Getchell** with Cornell University's College of Veterinary Medicine are measuring the prevalence of the botulism bacteria, *Clostridium botulinum*, in healthy, moribund, and dead fish in Lake Ontario and Lake Erie.

Carp: Fish or Foul?

St. Lawrence River sportfishing buffs are successfully promoting angling for common carp to international visitors. But on the upper Great Lakes, Asian carp, an invasive species that can reach weights of 50 to 100 pounds, are threatening to disturb the food chain of the Great Lakes' fisheries.

NYSG specialists have already studied hundreds of papers written by European fisheries researchers and managers on the impact of Asian carp on overseas waters. They are paying particular attention to the feeding patterns of these fish, which are notoriously inefficient food processors. They also want to know how the fish affect nutrient levels, namely nitrogen and phosphorus levels.

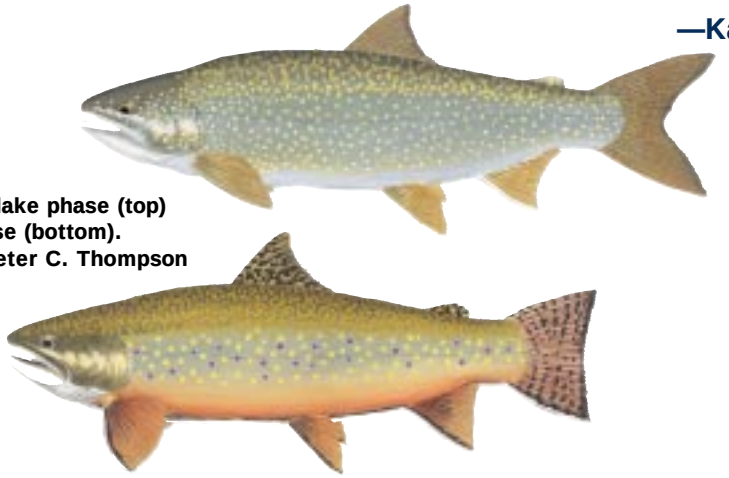
Dave White, who shares fisheries education and information materials with marina operators and marine trade groups, says "Sea Grant's research and fact sheets play a vital role in addressing water resource issues. They also keep our marine-based businesses healthy up and down the New York shoreline. We have a strong record of anticipating bad news and having research already underway to develop some answers for anglers, boaters, and waterfront business owners."

—Kara Lynn Dunn

State Record Lake Trout

Lake trout, were once native to the Great Lakes waters but became extinct during the 1950s from excessive commercial fishing and predation by the sea lamprey, a primitive blood-sucking fish that may have been introduced into Lake Ontario during the early 1800s through the inland rivers and canals. Lake trout have been stocked in Seaway Trail waters since the early 1970s in an attempt to create a self-supporting population and to provide deeper water fishing opportunities. There have been some encouraging signs of successful reproduction during the last decade. Lake trout are long lived species with specimens living beyond seven years. The Seaway Trail boasts the state record for lake trout at over 39 pounds. Lake trout are easily distinguished from other species by their pattern of light worm tracks along a green or gray background.

— Dave MacNeill



Lake trout in lake phase (top) and river phase (bottom). Artwork by Peter C. Thompson

Like the salmon and trout artwork you see?

Notecards and posters are available through Seaway Trail Inc. See contact info on p. 8.