

JEFFERSON EDUCATIONAL SOCIETY

Quick, Timely Reads On the Waterfront

Where Did Lake Erie's Blue Pike Go?

By David Frew
August 2023

Editor's Note: While Dr. David Frew is away, here is one of his Classic "On the Waterfront" articles. It ran originally in May 2020.



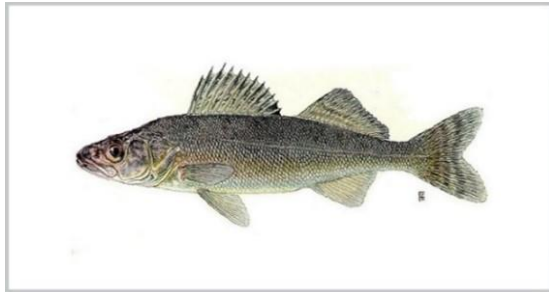
The Big Fish was an iconic image entering Presque Isle.

The blue pike (blue pickerel) was a sweet-tasting fish that was larger than a perch and smaller than its genetic cousin, the yellow pike (walleye). Blues were endemic to Lake Erie, in general, and to the deep basin north of Presque Isle, in particular.

Biologists have explained this subspecies and its unique characteristics by describing its habitat. Unlike the yellow pike, which hatched and grew in Lake Erie's western shallows, blue pike hatched and developed in the deep basin

between Erie and Long Point; thus, the color differences. From a bird's eye, which is an important perspective, yellow pike blended with the sandy colored bottom structure of western Lake Erie while the blue pike evolved to blend with the gray-blue color of the deeper waters north of Erie.

All fish tend to be white on the bottom and colored-patterned on top. White bottoms protect them from bottom predators (big fish) while the top colors (yellow or blue) protect them from diving birds. During the 1940s and 1950s, when Al Capp was one of America's leading cartoonists and social commentators, locals often compared blue pike with the shmoo, a fanciful creature that provided for every possible human need. As the story went, "God provided blue pike for the people of Erie and shmoo for the residents of Dogpatch (Appalachian)." Both "species" were plentiful and good to eat.



The Lake Erie blue pike and... Al Capp's shmoo

Blue pike were fun to catch, easy to clean, mild tasting, and could be prepared in dozens of ways. They could be fried, baked, cut into bite-sized pieces, made into soup, or grilled. When they were "running," people caught them in batches of 50 or more. They bit so vigorously that fishermen often reported catching them without bait. Erie's downtown docks were crammed with party boats that would take dozens of fishermen to the "pike grounds" northeast of town, where almost everyone would catch buckets full of "blues." On summer nights, lights from the party boats would create the illusion of a floating city just offshore. Party boats departed every day when the "blues" were biting and on weekends they often left the docks several times per day. Locals with boats, as well as people who rented from the boat liveries east of town, also traveled to the pike grounds in the summer, often filling boats with blue pike in just a few hours. Ice fishermen caught them in the winter.

My boyhood home had a concrete, double sink in the basement, and when we returned from fishing, we would pick out the liveliest blue pike and transfer them to the sink. A hose was inserted in the hole at the top of the sink so that running water, which spilled over the top, would keep fish fresh for days. It was not unusual in my neighborhood for someone to stop by and "borrow" a few blue pike

from our basement sink. The same people would generally return the favor after they went fishing.

We cleaned and ate blue pike several times per week. Then one day it all stopped. The party boats, the livery rentals, the ice fishermen. They went out to fish as always, but there were few, if any, blue pike. And then there were none. We settled for other fish, such as perch, yellow pike, and crappie and assumed that someday the blue pike would return. But they did not. We never forgot the wonderful times when blue pike, like Al Capp's shmoos, seemed to have been sent to Erie as a gift from God. And we should have listened to the cynical message that Capp was sending to Erieites as well as the residents of Dogpatch who similarly underappreciated their shmoos. Wasted the gift.

We now realize that it was a combination of things, mostly driven by the greed of fisherman that ruined the blue pike fishery. We should have paid attention. Lake Erie's 1956 total catch of 18 million pounds dropped to 10 million pounds in 1957. And to 1.4 million in 1958.

Why didn't we notice that?

From there, the blue pike harvest evaporated: 79,000 pounds in 1959, 4,000 pounds in 1960, 2,000 pounds in 1961, and 1,000 pounds in 1962. The grand total in 1963 was zero. But by then, it was far too late. In 1975, the Lake Erie blue pike was officially declared extinct.

Dozens of attempts have been made to identify the underlying reasons for the sudden demise of the blue pike, but most have been disproven. One of the most popular is that they disappeared because the Canadian sailor (a common bug) disappeared at about the same time. The academic literature has disproven that "popular" belief, concluding that both disappeared at the same time but that the relationship was spurious rather than causative, meaning that both events coincided but that one did not cause the other.

The most promising theory, suggested by the Ontario Ministry of Natural Resources, is that the introduction of an invasive species, the rainbow smelt, was the root cause. Ontario has always had a major interest in Lake Erie since that Canadian province controls the entire north side of the lake as opposed to four American states. In 1955, for example, Canadian fishermen reported harvesting 12 million pounds of blue pike in Lake Erie as opposed to 7.6 million pounds caught by American fishermen in New York, Pennsylvania, Ohio, and Michigan.

At a lecture that I attended years ago in London, Ontario, a fisheries biologist began by joking that if smelt grew to four feet in length it would not be safe to swim in Lake Erie. The seemingly small fish is unbelievably aggressive and bites with the voracity of fish many times its size. Smelt were introduced to Lake Michigan in the early 1900s by sports fisherman as a feeder fish for lake trout that

had been introduced there. They were native to the North Atlantic and to northern lakes in Ontario at the time.

Smelt apparently did not like Lake Michigan, however, and departed, swimming north to Lake Huron and then south through the St. Clair River, Lake St. Clair, and the Detroit River. In their relentless quest for better habitat, enormous schools of smelt continued until they reached Lake Erie, where they flourished. During the late 1950s, at the same time that blue pike were declining, Lake Erie's smelt population was growing to frightening proportions and threatening to destroy the balance of the lake.

One of the most powerful techniques employed by Ontario's fisheries scientists was (and continues to be) ongoing analysis of the stomach contents of commercially caught fish. During the 1950s it was noted that blue pike that had been randomly sampled from commercial fish catches contained increasing numbers of smelt as the years continued. At about the same time it was observed that the stomachs of smelt contained a huge proportion of blue pike fry. The sampling suggested that the two species were cannibalizing each other. As biologists were beginning to understand what was happening to Lake Erie and its valuable blue pike stock, the Ontario Ministry of Natural Resources knew that to save the "blues" they would have to do something about rainbow smelt.

To that end, they launched a multi-year program designed to initiate a controlled trawling program that would reduce the smelt population. Trawling was the only practical way to catch the small fish. But the new program was complicated and expensive and, before it could be effective, the blue pike were gone. Fisheries biologists were still not sure how smelt had managed to annihilate the blue pike. Had the ravenous smelt simply eaten all of the blue pike fry? Or were there other explanations?

Years later, a related hypothesis emerged. After the Lake Erie smelt trawling program had matured (too late to save blue pike), fish processing companies were approached by mink farmers seeking an inexpensive source of protein to feed their animals. Fish is a natural food for mink, and it seemed logical to transport trimmings from commercially prepared smelt (heads, tails, entrails, and leftovers) and feed it to farm mink. Within a few years, however, there was a major problem. While mink farmers reported that their animals continued to be sexually active, they slowly became impotent. Farm minks were not having babies. A breeding disaster! The logical conclusion was that the smelt trimmings had created the problem and, as soon as new feed was substituted, the previous rodent-like fertility returned.

That was when the Ontario Ministry of Natural Resources began to conclude that in addition to other problems in the lake, the blue pike diet of smelt might have rendered the blue pike sterile.

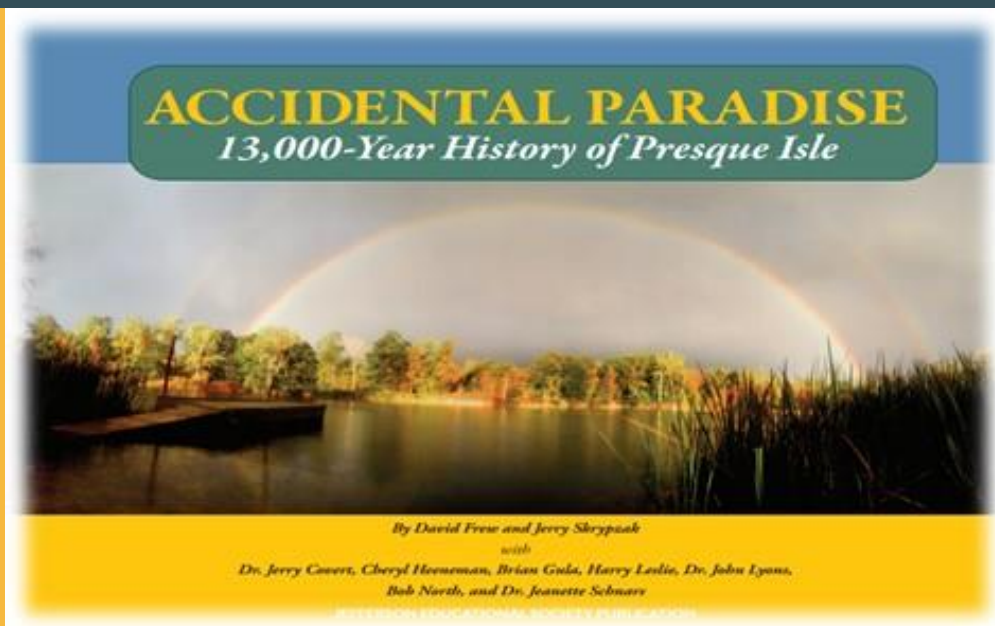
We will never know for sure. In retrospect, it is hard not to conclude that the influx of rainbow smelt destroyed the blue pike. Just one more example of a horribly destructive, invasive species.

[Subscribe to JES Publications Mailing List!](#)

[Support JES | Donate](#)

Accidental Paradise Available at TREC!

Accidental Paradise
by Dr. David Frew and Jerry Skrypzak



The beautiful book on Presque Isle published by authors David Frew and Jerry Skrypzak – “**Accidental Paradise: 13,000-Year History of Presque Isle**” – is on sale at the Tom Ridge Environmental Center’s gift shop and through a special website, AccidentalParadise.com.

The book, priced at **\$35 plus tax and shipping**, can be ordered now through the website sponsored by the TREC Foundation, AccidentalParadise.com.

Presque Isle Gallery and Gifts on the main floor of TREC, located at **301 Peninsula Drive, Suite #2, Erie, PA 16505** will also handle sales *daily from 10 a.m. to 4 p.m.*

For more information, send an email to aperino@TREC.org.

To watch "Accidental Paradise: Stories Behind The Stories" click [here](#).

ABOUT THE AUTHOR

Historian and author David Frew, Ph.D., is a Scholar-in-Residence at the JES. An emeritus professor at Gannon University, he held a variety of administrative positions during a 33-year career. He is also emeritus director of the Erie County Historical Society/Hagen History Center and is president of his own management consulting business. Frew has written or co-written 35 books and more than 100 articles, cases, and papers.



In Case You Missed It

[Jefferson Report | Transatlantic Idea-Sharing Can Lead to Just Economic Future](#) written by JES Vice President **Ben Speggen**

[The Wider World | Niger Revisited after Military Coup](#) written by President of DC Analytics **Diane Chido**

[Truth in Love | The Content of Our Character](#) written by Jefferson Scholar-in-Residence **Dr. Parris J. Baker**

[University of Vienna \(Part Two\)](#) written by Director of the Brock Institute for Mega Issues Education **Rev. Charles Brock**

[Be Well | Sporting the Perfect Shades](#) written by health and wellness expert **Debbie DeAngelo**

[Book Notes #150 | 'Chatting' with ChatGPT4](#) written by Jefferson Scholar-in-Residence **Dr. Andrew Roth**

[Cigarettes, Coupons, and Canasta: The Card Table that Killed Grandma](#) written by Jefferson Scholar-in-Residence **Dr. David Frew**

Jefferson Educational Society | jeserie.org

