IN SEARCH OF

Blue PIKE

Is a tiny secluded lake in northern Minnesota the last refuge for the "ivory-billed woodpecker" of fish?

FISHERIES biologist Gerry Albert and I bumped down a balsam-canopied dirt road in a pickup truck. On this steamy, mosquito-filled June morning, we were looking for a trailhead to an isolated, nondescript northern Minnesota lake.

With a canoe and fishing rods, we were here to catch ghost fish: descendants of the Lake Erie blue pike. Not a true pike, Sander vitreus glaucus is a walleye subspecies. It was declared extinct by the U.S. Fish and Wildlife Service in 1983.

Now it looked like someone was beating us to the punch.

"Darn it," said Albert, who works as a large-lake specialist for the Department of Natural Resources in Grand Rapids. At the same moment, we both spotted another pickup parked in the only space at the leafy trailhead. We
had to park along the ditch instead.

"I never see anyone here," he groaned. "Maybe they're just bass fishermen."

This lake has a secret dating to the Nixon administration. In 1969 two biologists carefully tooted 525 fish fingerlings down the trail and slipped them into the lake. According to DNR records, the wriggling fish represented an effort—ultimately a failed one—to save the fabled Lake Erie blue pike from extinction.

The surreptitious stocking is one of the most intriguing footnotes in Minnesota angling history because no one knows for sure what swims in the lake today. Are the bluish fish indeed descendants of Lake Erie blue pike? Or are they just a blue-color variant of walleyes? So-called blue walleyes occasionally turn up in Canada and the upper Midwest.

**BLUE SPECIMENS.** As we carried our canoe and fishing gear about 200 yards to the lake (which won't be named here, because Albert wants to protect the rare fish from overharvest), the biologist described his past encounters with the mystery fish.

For nearly four decades, he and a handful of other people have kept track of the lake's blue-hued fish. The fish often elude survey nets, so what Albert knows about them comes from old files and his own
fishing prowess. One winter evening in the 1990s, Albert and a friend hoisted two blue specimens through the ice.

“I’ve seen at least seven caught over the years,” said Albert, a self-described fishaholic. “But we always throw them back. It’s possible this is the last place where these fish live.”

While Albert thought our odds of catching one weren’t great, we reasoned we had numbers on our side. Along on the trip were two other anglers with good fishing skills: freelance photographer Mike Dvorak and his father, Tom. They were in a separate canoe.

We planned to fish the whole day on the small lake. Maybe one of us would get lucky.

TASTY FISH. The blue pike was native only to Lake Erie. This member of the perch family looked like a walleye (*Sander vitreus*) except for its remarkable grayish-blue color and larger eyes. It has become the Great Lakes version of the ivory-billed woodpecker: a celebrated species that may or may not have been wiped off the face of the Earth. Some eminent scientists say the blue pike is gone, while some anglers and other scientists hope a remnant population will be found.

In the 1930s and 1940s, this deep-dwelling, tasty fish was so bountiful that it spurred a Lake Erie boom in commercial fishing. According to the U.S. Fish and Wildlife Service, blue pike catches exceeded 20 million pounds in 1915, 1936, 1944, and 1949. But the fishery collapsed in the 1950s. The last reported spawning occurred in 1954.

Scientists believe the fish succumbed to overfishing and pollution. But that doesn’t stop people from dreaming blue pike might still exist.

In 1999 an Ohio fisherman named Jim Anthony, whose father fished commercially for blue pike, revealed that he had been keeping a 15-inch specimen in his freezer since 1962. Because the genetic material in the frozen specimen would be less difficult to test than material in formaldehyde-preserved specimens, some people initially hoped Anthony’s fish would be a missing link to the long-gone species. Alas, testing showed that Anthony’s fish was not a true blue pike, though scientists concluded one of its parents could have been a blue pike. The findings dampened hopes a remnant bluepike population or a stitch of pure genetic material will be found.

Carol Stepien, fish geneticist and director of the Lake Erie Center, a research and education center at the University of Toledo in Ohio, tested the Anthony fish. She has also followed up on many other claims of bluepike “discoveries.” All have proved to be blue-hued walleyes and not true blue pike. The difference between the two, experts say, is that blue walleyes have a blue mucus that rubs off and blue pike have blue skin. Also, blue walleyes don’t have the tapered head and larger eyes of a blue pike.

“As far as I know today, the blue pike seems to be extinct,” Stepien told *The New York Times* in 1999 after genetic tests proved the Anthony fish was more likely a walleye. “I’m not saying there may not be some somewhere. I just haven’t seen them.”

That possibility made our pilgrimage to northern Minnesota all the more intriguing.

FABLED CATCH. As we launched our canoes, we spotted two other fishermen working the plant beds on the far shore with heavy-looking lures—no doubt they were casting for largemouth
bass. Albert breathed a sigh of relief.

We paddled to the same spot where Albert caught the blue fish years earlier, then Albert and I began casting jigs tipped with leeches and night crawlers. From their canoe in a nearby bay, the Dvoraks—camera at the ready—worked their lures.

The nonmotorized lake resembled many I've fished in the Boundary Waters Canoe Area Wilderness. The shoreline had no recent signs of logging and no development. A grove of ancient white pines rose majestically on the shore. I could see why worried scientists might choose such a quiet, land-locked lake as a refuge for a storied fish.

For hours we hauled in chunky largemouth bass but nothing resembling a blue-hued walleye. Then Tom Dvorak's rod doubled over, and in less than a minute his son netted a very large fish next to their canoe.

The 3-pound walleye looked ordinary except for bluish hues around its mouth and fins. At certain angles in the water, it seemed to glow blue. We slid our canoes together and admired its iridescence. DNR records show the only walleyelike fish ever stocked in the lake were the purported blue-pike fingerlings in 1969. We marveled at the possibility that this fish's ancestors, now museum specimens, were sold by the boatload around Lake Erie. A half-century ago, a blue-pike sandwich was on the menu in Ohio taverns.

“Eating one now would be like frying up an ivory-billed woodpecker,” Albert said.

The walleye would be the only blue-hued fish we caught all day.

**TRUE BLUE?** Months after Tom Dvorak landed the fish with blue coloring, I contacted Stepien, one of the world's experts on blue pike, and asked if she knew anything about the blue-pike/Minnesota connection. She said she knew nothing of the 1969 stocking. She was also skeptical the fish was a true blue pike.

“By the time that stocking occurred, the blue pike were already gone,” she said.

DNR records support Stepien's skepticism, but they raise more questions.

In the late 1980s, Minnesota DNR officials began investigating the blue-pike/Minnesota connection when Dave Holmbeck, then area fisheries manager in Grand Rapids, began hearing rumors about "blue-colored walleyes" being caught in the lake. Anglers brought him specimens.

Holmbeck, in a 1988 report, wrote that some of the fish were caught by “Mr. Dan Volkmann … a retired conservation officer from Hinckley. He said that he stumbled onto the blue pike while fishing for largemouth bass in 1983 and 1984. He said that a plain yellow Mr. Twister (lure) worked best and that the fish accepted it readily.”

DNR records indicate there was a real effort to establish a blue-pike population in northern Minnesota with progeny from Pennsylvania. A 100-page file in Albert's office shows that purported blue-pike stock were taken from Lake Erie and stripped of eggs and milt in the state fish hatchery at Linesville, Pa. The fry or eggs were shipped to Gavins Point National Fish Hatchery in Yankton, S.D., to be raised as fingerlings. From there, they were brought to Grand Rapids, Minn., where federal and state fish technicians stocked 7 pounds of fingerlings...
DNR records show the only walleyelike fish stocked in the lake were the purported blue-pike fingerlings in 1969. On this recent trip, Tom Dvorak landed this walleye with bluish hues around its mouth and fins.
on Oct. 30, 1969, in the remote lake.

Former DNR fisheries research director Jack Wingate was teaching at Mount Marty College in Yankton in 1969. He recalls visiting Gavins Point hatchery and seeing the blue pike. "They were some of the most emaciated critters I had ever seen," Wingate told me before he retired in 2007. "They said they were going to be stocked in Minnesota."

NOT TRUE BLUE. By the late 1980s, Wingate had left his teaching job and joined the DNR as a fisheries researcher. He and other experts decided to get to the bottom of the Minnesota blue-pike story. They sent specimens from the northern Minnesota lake to James Underhill, a University of Minnesota professor of ichthyology.

Underhill compared the body structure of the specimens to historical descriptions of blue pike and conducted genetic tests. He concluded they were not true blue pike, but likely a blue-hued walleye that became that way by mixing with blue pike. This conclusion can't be substantiated today because there appears to be no genetic connection between blue pike and blue walleye; yet Underhill concluded the mixing likely would have occurred in Lake Erie long before they were captured and spawned in Pennsylvania.

Wingate also concludes the Minnesota fish aren't true blue pike because the blue mucus

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The author (left) holds up a stringer of chunky largemouth bass and one large perch, which provided decent fare for a shore lunch (right).
excreted from their skin can be rubbed off. "Which means it's not pigment in the fish, but growing on the fish," Wingate said.

Wayne Schaefer, a biology professor at University of Wisconsin-Washington County, was with Albert that winter evening when they caught two blue-hued fish.

Schaefer has studied blue walleye for eight years, confirming their existence throughout the upper Midwest and Canada. He said blue walleye are not genetically related to blue pike, but are a distinct color variation of the walleye (Sander vitreus). He has also published a peer-reviewed paper concluding the blue mucus has a protein never described before in scientific literature. He calls it sandercyanin, which is a combination of the walleyes genus name and the Greek word for blue. He said the protein occurs in the mucus of walleye in many water systems in Canada.

He confirmed that the blue pigment in the Minnesota mystery fish comes off easily. But Schaefer has also reviewed the stocking records in Albert's office.

"We know, however, that these fish came from Lake Erie," he said. "It's very likely these fish are similar or related in some way to the true blue pike."


UNIQUE NON-EHELESS. Stepens is skeptical the Minnesota fish have blue-pike connections at all. If they don't exhibit the classic grayish-blue color and larger eyes of the blue pike and their blue pigment rubs off, they are likely blue variants of walleye and not genetic remnants of blue pike, she says. Moreover, she says all of the fish Schaefer has shown her lack the blue-pike characteristics.

Yet why did Pennsylvania and Minnesota fisheries biologists, in concert with the U.S. Fish and Wildlife Service, go to such time and effort to move these blue fish from Lake Erie to South Dakota to Minnesota? Were the biologists motivated by blind hope to create a refuge for extinct fish? Or was it simply a case of mistaken fish identification?

There are no answers to these questions. The Minnesota DNR has no management plans for the fish, and no further genetic testing is proposed. The lake, however, remains off limits to further walleye stocking.

Albert said he finds the blue fish fascinating, even if its connection to an extinct fish is distant and disputed.

"There's no doubt it's a unique animal," he said. "It is genetic diversity that is here to remind us to have a lighter footprint on the Earth."