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# Innovative pens hatch thousands of trout

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For a fellow who doesn't fish, Pittsburgh District's Mike Fowles has sure helped to put a lot of trout into the creels of Pennsylvania anglers.

A fish and wildlife specialist for the U.S. Army Corps of Engineers for the last 26 years, Fowles has worked out a landmark agreement with a local chapter of Trout Unlimited to establish a cooperative fish hatchery in the tailrace of the district's Youghiogeny Lake. The effort has put an estimated 20,000 trout ranging from 12 to 16 inches into various area waters, and earned Pittsburgh District recognition across the state as a friend of fish.



The Chestnut Ridge Chapter of Trout Unlimited (TU) this spring signed a five-year extension to its memorandum of understanding (MOU) to run the hatchery. Other signers along with the Corps were the Pennsylvania Fish and Boat Commission and D/R Hydro, operators of an electric power generating plant at the dam. The initial three-year MOU was due to expire in June, and has been hailed as a success beyond anyone's expectations.

The key to this success, according to Fowles, is the use of "cage culture" nursery pens actually submerged in the flowing water of the Youghiogeny River, rather than the more common hatchery practice of long concrete tanks with artificial flows and aeration.

The fish arrive in early summer as three-inch fingerlings, and are fed a high-quality protein meal by TU members, who are also responsible for trash pick-up and maintenance of the submerged pens. Corps and D/R Hydro monitor water quality in the tailrace to insure that the young trout have the best possible living conditions. The result a year later is that thousands of the former fingerlings are more than a foot long, and ready to be stocked.

"This is a really good growth rate," said Fowles.

Some of the fish go right into the Youghiogeny River (one of Western Pennsylvania's premiere trout streams) while others are trucked to other nearby waters. The in-river hatchery offers much better growth and survival rates for the trout, which include rainbows, brown trout, brook trout, and an exotic strain of rainbows known as "palomino" trout.

Sections of the river downstream from the hatchery are designated "trophy trout" sections by the State Fish and Boat Commission, and draw anglers from throughout the eastern U.S.



**Thousands of brook, rainbow and brown trout are raised each year in these submerged pens in the tailwaters of the Youghiogeny River. (Photo courtesy of Pittsburgh District)**

The state provides the trout fingerlings each spring. For its part, the hydroelectric company provides free power from its nearby generators to support the hatchery.

"This is truly a win-win situation for all the partners," said Fowles on the day of that the partners extended the MOU. "This is an outstanding example of how Pittsburgh District is developing new partnerships to accomplish our natural resource management and environmental stewardship objectives."

Tom Shetterly, president of the Chestnut Ridge Chapter of TU, said about a half dozen of his group's members rotate the daily feeding duty for the young trout through the year. "When it's time to stock, we get 12 to 15 guys there," he said. The annual feeding bill runs about \$2,000.

He said that the Corps of Engineers "is just a great partner with us; you guys have just bent over backwards to make this program better than anybody could have ever expected." He also praised the efforts of other Pittsburgh District personnel, including Mike Koryak, district limnologist (one who studies fresh waters), and Pat Docherty, area operations manager.

Working with the Corps and the state, TU has also received permission to place gravel for enhanced natural spawning beds in the river and the stilling basin below the Yough Dam.

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"We're seeing some of the first fish we stocked come back to the same area to spawn," Shetterly said. Raising the fish in submerged cages apparently has imprinted them with the characteristics of their immediate surroundings, something that Shetterly says has never been accomplished elsewhere. "This thing is huge," he marveled. "It's going to be world-famous."

Another bonus of the in-river cage culture is the way the trout benefit from natural food, adding up to 12 ounces in weight gain for each pound of artificial fish food added to the cages. Waste from the trout and any food that goes through the bottom of the cages also combine to increase the alkalinity of the water, thus improving the environment, according to Shetterly.

The trout hatchery is one of many programs supporting fishing in Pittsburgh District. For example, working with the Yough Walleye Association, the district is supporting efforts to put crushed limestone into Tub Run, a tributary of Youghiogheny Lake, to neutralize the highly-acidic waters, a legacy of abandoned coal mining.

Youghiogheny Lake is one of 16 multi-purpose flood control reservoirs built and operated by Pittsburgh District in Western Pennsylvania, New York, Ohio, West Virginia, and northern Maryland. Pittsburgh District also works with various state fish and wildlife agencies to conduct annual fish census sampling at its navigation locks on the Ohio River.

All in all, Fowles has worked hard to help improve fish habitat and fishing as a sport, but don't ask him to tell you his own fishing stories. "I don't fish," he said simply. "And I don't hunt either, though of course I recognize both as legitimate outdoor activities."

He is passionate about bird watching, a hobby he and his wife picked up in 1973 while an undergraduate at Ohio University. His logbook shows he has sighted thousands of bird species all over the world.

"My list is rapidly approaching the 5,000 mark, a goal I set for myself when I first started birding." Comparing the two sports, he says of birders, "Oh, we get our prey. We just don't kill 'em."

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