



THE PLAIN DEALER

Electrofishing helps scientists catalog species in Cuyahoga River - Page 2

Electrofishing' comes up with shocking results

Cuyahoga Heights -- John Rhoades leans over the bow of his motorboat, sweeps his long-handled net through the water and pulls up a stunned-but-still-thrashing mass of fish.

His partner, Tom Zablonty, steadily steers the 17-foot vessel around eddies and into calm pools, looking for specific fish hideouts. He's also casually pumping up to 600 volts of electricity into the water -- temporarily shocking his prey so Rhoades can easily nab them.

Just another spring day electrofishing on the Cuyahoga River.

But these two guys aren't fishing buddies who are cheating by cleverly zapping and unfairly netting innocent fish. They're researchers who are examining and counting an ever-burgeoning freshwater fish population on "the river that burned."

Rhoades and Zablonty work for the Northeast Ohio Regional Sewer District, the agency that handles the waste of more than 330,000 customers in Cleveland and 60 suburbs, making it the largest remaining player in maintaining Cuyahoga water quality.

"Electrofishing is the most effective way to do an assessment of fish in a water body and it's what the Ohio EPA recommends," said Rhoades.

Rhoades oversees environmental water quality and industrial pollution monitoring for the regional agency.

"It actually provides the least amount of stress on the fish because they're only in the electrical field for a small amount of time and then put into the freshwater tank in our boat so we can examine and count them."

And in the Year of the River - June 22 will be the 40th anniversary of the infamous fire on the Cuyahoga - the stunned fish plopped into that tank are providing considerable evidence that the waters are getting cleaner yet.

Rhoades and Zablonty zapped, netted and examined more than 75 fish of some two dozen different species on a sunny morning in late May. Although that's an unofficial count (the sewer district won't start its annual summer count until later this month), it's also a good sign.

"Early in our history of shocking on the river, we'd collect maybe four or five Northern hogsuckers, for example," Rhoades said. "Now, we're seeing 30 to 40 in a single sampling run."

The sewer district caught more than 60 different fish species throughout the river last year, more than 40 of those just downstream from the Southerly Wastewater Treatment plant in Cuyahoga Falls - which each day treats an average of 125 million gallons of human and industrial waste.

Improvements over the last few decades at that massive plant, along with other upgrades in wastewater treatment, wet-weather sewer overflow control and industrial pretreatment programs by dozens of companies and players along the river have brought portions of the Cuyahoga to the brink of vitality.

"There are still problems on the Cuyahoga and there are other parameters that we look at such as the chemical composition and the bug and invertebrate populations, but the fish count is certainly a pretty good indicator of river water health," said the sewer district's Scott Broski.

Those high - and more importantly, varied - fish counts recorded by the sewer district last year caught the attention of the Ohio Environmental Protection Agency, which has since returned to the Cuyahoga ahead of schedule to confirm the growing population.

That confirmation means the middle portion of the Cuyahoga will probably meet U.S. EPA standards for aquatic life habitat - that's both fish and insects.

The announcement is likely to be made in time for the Sunday, June 21, commemoration of the June 22 fire by the sewer district, the EPA, the Cuyahoga River Community Planning Organization and other river watchers.

Steve Tuckerman, a biologist at the Ohio EPA's Northeast office in Twinsburg, who called the comeback "absolutely amazing" when he first saw the new numbers, recalled that he had routinely come back with only a few pollution-tolerant fish species when the state count first began in 1984.

And that's the key to the increased fish counts: more fish that generally can't live in polluted waters.

"We're netting not only steelhead [trout], but sucker and minnow species that you just can't have in polluted waters," Broski said. "So it's not just the number of fish - if we were pulling in nothing but a bunch of fish who can tolerate pollution, there'd be nothing to brag about."

And the fish coming out of the water look like, well, like fish.

Broski said the crew also looks at each netted fish for lesions, tumors and abnormalities, such as eroded fins. "It's good that they're there, but they need to be healthy as well and most of them are."

The sewer district team didn't find any deformed or abnormal fish last month, another departure from the 1980s - a time period already a decade removed from the 1969 fire and beginnings of the cleanup.

But the Cuyahoga - apart from the more pristine waters near the headwaters in Geauga County - is still far from attaining the "fishable and swimmable" goal of the 1972 federal Clean Water Act and subsequent revisions.

But Broski and Rhoades say their portion of the river - from upstream of the sewer plant north to the bulkhead-lined shipping channel at the last six miles before reaching Lake Erie - will continue to get cleaner.

"Even just since 2006, we're starting to see species in the lower end of the river that we haven't seen before," Rhoades said. "They're telling us that the water's getting better."

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