

# Rainbow smelt see resurgence in Otsego Lake



Contributed A rainbow smelt is shown in this photo provided by Dr. John Foster, chairman of the SUNY Cobleskill's Department of Fisher Wildlife and Environmental Science.

[http://www.thedailystar.com/news/local\\_news/rainbow-smelt-see-resurgence-in-otsego-lake/article\\_57854871-8f86-5be1-bdac-6e25f99012c3.html](http://www.thedailystar.com/news/local_news/rainbow-smelt-see-resurgence-in-otsego-lake/article_57854871-8f86-5be1-bdac-6e25f99012c3.html)

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By Joe Mahoney Staff Writer

COBLESKILL — Rainbow smelt, a slender, cylindrical fish that grow to be a bit longer than a typical finger, could be found in abundance in Otsego Lake after they were introduced in 1979.

As a source of forage for bigger fish, the smelt were helping to support a thriving fishery in Otsego County's biggest lake. But when the alewife — an invasive species with a voracious appetite — were introduced in 1986, the rainbow smelt population in Otsego Lake began to plummet.

The smelt and the alewife both had an appetite for zooplankton. It was a competition won by the alewives, with the smelt becoming increasingly scarce.

But this year, the smelt — without any stocking of the waters — have rebounded with such strength that the resurgence came as a surprise to Dr. John Foster, a professor and chairman of the Department of Fisheries, Wildlife and Environmental Science at the State University College of Agriculture and Technology at Cobleskill.

For the past several years, Foster, other faculty at Cobleskill and their students have been working closely with the Biological Field Station, an arm of the State University College at Oneonta, in monitoring the cold-water fishery at Otsego Lake.

The leader of a Cobleskill student research team, Mary Mulvihill, said the best time to study the smelt is April, when the cold-water fish travel to tributary streams to reproduce.

Said Mulvihill: "We got better results than we were hoping for, and that's always a plus."

What Foster called the "spectacular recovery" of the rainbow smelt is another major dividend to flow from the Field Station's strategy of going after the alewife by stocking Otsego Lake with walleye beginning in 2000, an initiative teed up by Willard Harman, the Field Station director.

"Smelts are tasty," said Foster, noting he's enjoyed pan-frying them. "And the thing they are replacing, alewives, you really can't eat."

Precisely how the alewives got into Otsego Lake in the first place has not been documented, although Foster said it is speculated that "it was a bait-bucket introduction. Somebody decided they were going to put them in there."

Last month, Foster, Mulvihill, a Cobleskill student, and others using electrofishing gear pulled out some 1,400 spawning smelts from Mohican Canyon Creek, along the west shore of the lake, just north of Cooperstown.

That site was chosen because it had been studied since the 1980s, and the research crew had the permission of nearby landowners, Tom and Leslie Brighton, Foster noted.

Holly Waterfield, an aquatic biologist on the Field Station staff, said the reduction of the alewife population has taken place faster than expected.

"Surveys like Mary's are crucial to understanding the ongoing changes in Otsego Lake's complex food web," Waterfield said. "Whole-lake studies of this kind would be impossible without collaboration between the Biological Field Station, SUNY Cobleskill students and faculty, and the New York State Department of Environmental Conservation fisheries staff."

Foster said the number of smelt counted this year exceeded last year's haul by 20 fold.

Meanwhile, the invasive alewife has been missing in action in Otsego Lake.

"It's been a few years since we've seen any," Foster said.

The recent trends in the fish population have been positive, he said.

"I think we would like to have a nice balanced cold water fishery in Otsego Lake — and when I say balanced I'm thinking more of edible fish," Foster said. "Having smelt and Atlantic salmon and lake trout and cisco and white fish, that would make Otsego Lake kind of a gem of the region."