Area researcher fears zebra mussel impact on Otsego Lake

By Tom Grace Cooperstown News Bureau

COOPERSTOWN _ Otsego Lake appears unclouded, but that may not be a good sign, a local expert said.

The slate-blue water in this 9-mile-long lake is clear, deep down, this summer.

It looks almost like it's been vacuumed, because in a sense it is being vacuumed by countless zebra mussels, according to Matt Albright, assistant to the director of SUNY Oneonta's Biological Field Station.

"People have been impressed by the water clarity. They love it, but this is a stage many lakes go through when they have zebra mussels," he said Thursday.

The zebras, named for their distinctive striped shells, are invasive mollusks that found their way into the lake a few years ago. They filter lake water, devouring phytoplankton, bacteria and other fish food, as they colonize.

In a few years, as the watery ecosystem evolves, the lake's stark clarity may give way to a surface clogged with "blue-green algal blooms," he said.

"That's what's happened in other lakes," he said. "Zebra mussels were found in Canadarago Lake a few years before Otsego, and now Canadarago has had blooms."

Albright said fish still abound in Otsego Lake, although young fish may be in decline.

As for the zebras, they are everywhere.

"If we pulled up the anchor of the dock, it would be covered," he said.

Native to the Black, Caspian and Azov seas, zebra mussels have colonized all the Great Lakes and many smaller ones, moving in ships' ballasts and in boats' bait wells. They can cling to hulls, motors, water pipes and each other, finding a place to inhabit and filter, or hitching a ride to a new body of water.

"Zebra mussels are notorious for their biofouling capabilities by colonizing water-supply pipes of hydroelectric and nuclear power plants, public water supply plants, and industrial facilities," the U.S. Geological Survey notes on its website. "They colonize pipes, constricting flow, therefore reducing the intake in heat exchangers, condensers, fire-fighting equipment, and air conditioning and cooling systems."

But help may be on the way, Albright said.

"There is research that shows the toxin of a bacteria kills them, without harming other species," he said. "We're still hoping that science will come to the rescue."

That research was noted in the Tahoe Daily Tribune, which reports on its website: "New York State Museum researchers Daniel Molloy and Denise Mayer discovered a bacteria strain -- Pseudomonas fluorescens -- that can kill zebra and quagga mussels without killing other native species in the ecosystem.

"`The eureka moment did not come, interestingly enough, when we discovered the bacteria could kill zebra and quagga mussels, but came when we discovered the lack of sensitivity among non-target species," Mayer stated to the Tahoe Daily Tribune.

Albright said the discovery is giving others hope. And this summer, Otsego Lake, source of the Susquehanna River, is crystal clear, and people are enjoying it, he noted. To celebrate the lake, groups including the Otsego County Conservation Association and Friends of Glimmerglass State Park are preparing to host Lake Appreciation Day from 11 a.m. to 4 p.m. Saturday, Aug. 13, at Glimmerglass State Park.

Among activities scheduled are hiking, a picnic lunch and swimming.

Those planning to attend or exhibit are asked to call OCCA at 547-4488 by Tuesday to register.