Del. Bay oyster beds face new woe

The high mortality among larvae could force them to close if the problem isn't fixed.

By John Curran
Associated Press

BIVALVE, N.J. - Decimated by disease in the 1990s and still recovering, Delaware Bay oyster beds are facing yet another scourge: mysteriously high mortality among larvae.

A new report by Rutgers University marine scientists says that for the fifth consecutive year, oyster spat - or larvae - aren't taking hold and growing on the bay bottom in numbers big enough to replace the number of oysters lost to harvest, predators and disease.

Scientists say the problem could force the closing of oyster beds if not corrected. Even some of those who stand to lose by a halt in commercial oystering think that may be necessary.

"Every year, everyone's just pounding and pounding on it, and it's taken a toll," said oysterman Todd Reeves, 41. "What they're doing now isn't working. The bay needs to be closed. It needs a break."

Others who make their living on the water are hoping nature's course - together with a little help from man - can save the fishery.

In the 19th century, the bay's bounty of eastern oysters sustained an industry that employed 5,000 people on hundreds of boats or onshore.

The annual harvest ran into the millions of bushels and railcars transported them to restaurants and wholesalers all over the East.

The outbreak of a parasitic disease known as MSX began killing oysters in 1957. Within three years, the annual harvest plunged from 711,000 bushels to 49,000 bushels. From there, the industry declined steadily, turning fishing villages into ghost towns.

In 1986, a second outbreak of MSX hit. Five years later, a more damaging parasite called Dermo - harmless to humans, but deadly to oysters - wiped out the entire harvest.

Since then, state regulators have put sharp limits on the amount of oysters that can be caught. Last year's harvest was 68,000 bushels; this year's will be less than half that, 26,000 bushels, an all-time low.

Rutgers scientists at the Haskin Shellfish Research Laboratory finished work last month on a study that confirmed a problem even more dire than disease: Too many oysters were dying young.

"The big problem is that oyster recruitment - the number of baby oysters being added to the population every year - has been at extremely low levels for five consecutive years," said fisheries biologist Eric Powell, director of the Rutgers laboratory.

"We have no idea what the problem is. It is not overfishing. It's not directly related to the diseases that are in the bay, as far as we can determine, although the diseases have reduced abundance," Powell said.

When oysters spawn, they drop eggs into the water that develop into swimming larvae that linger in the water for up to three weeks, consuming phytoplankton until they grow big enough to sink to the bottom.

There, the offspring - or spat, as they are called by fishermen - attach to rocks, pilings or shells, taking up to three years to grow to maturity.

But fewer and fewer spat have managed to take hold on the bay bottom since 2000. Researchers don't know whether the adults are producing fewer larvae or the larvae aren't getting enough to eat.

In hopes of reversing the trend, the state and federal governments have chipped in $300,000 apiece for an oyster bed revitalization project in which shells from processed surf clams and oyster quahogs will be trucked in, loaded onto boats and dumped into the bay in July.

The process, which was tried on a limited basis two years ago on the western edge of the Cape May peninsula, is to give the oyster larvae a hard, clear place to settle and grow.