New Jersey oyster yields today are less than half the level of twenty years ago, and less than one tenth of what they were fifty years ago. Parasitic infection by *Dermocystidium marinus* and other protozoa such as MSX (see separate report on page 149) are responsible for decimating the state’s oyster population. The parasites were introduced into Delaware Bay in the mid-1950s via seed oysters imported from the lower Chesapeake Bay. Massive losses in the late 1950s were followed by a gradual period of recovery, until the oyster population was devastated by another outbreak in 1990.

**What's at risk?**
Eastern (aka American) oyster populations over most of the New Jersey side of Delaware Bay experience high rates of mortality. Eastern oysters on the Atlantic coast are also affected. Younger oysters are less likely to become infected and have lower mortality rates than older oysters.

**What are the ecological impacts in New Jersey?**
The Dermo parasite causes a reduction in shell and soft tissue growth in infected oysters. Infection impairs the oysters’ ability to open and feed, resulting in severe emaciation and high mortality rates. In 1953, New Jersey harvested 8.5 million tons of Eastern oysters. Current yields of about 700,000 pounds have rebounded from a low of just 585 pounds in 1993. The distribution of the parasite is not linked to environmental contaminants; Dermo is prevalent in both clean and polluted water. Oyster population decline significantly reduces the filtration of suspended particles in estuary ecosystems, such as Delaware Bay.

**What are the socioeconomic costs to New Jersey?**
Returning the oyster industry to historic levels would restore hundreds of jobs and contribute an estimated $40 million to New Jersey’s economy. (MSX parasites are included in this analysis.)

**What’s being done?**
Management actions to reduce the impact of Dermo disease focus on maintaining low salinity levels that help protect young oysters from infection, and on the possible introduction of disease-resistant strains of oysters.