

National Academy of Sciences Conducts Study of *C. ariakensis*

Recent large-scale efforts by the Virginia Seafood Council to assess the potential of the non-native oyster *Crassostrea ariakensis* for use in commercial aquaculture (see article on facing page) have led a variety of organizations, including the US Environmental Protection Agency, National Oceanic and Atmospheric Administration, US Fish and Wildlife Service,

Maryland Department of Natural Resources, Virginia Sea Grant, Maryland Sea Grant, and Connecticut Sea Grant to contribute the \$350,000 needed for a National Academy study on the issue.

The National Academy of Sciences (NAS) is a private, non-profit society of distinguished scholars charged by Congress to provide independent and objective evaluations concerning issues of national importance. NAS considers the potential introduction of *C. ariakensis* into Chesapeake Bay a nationally important issue because it touches on several other nationwide concerns, including invasive species in ballast water, biodiversity, and ecosystem restoration.

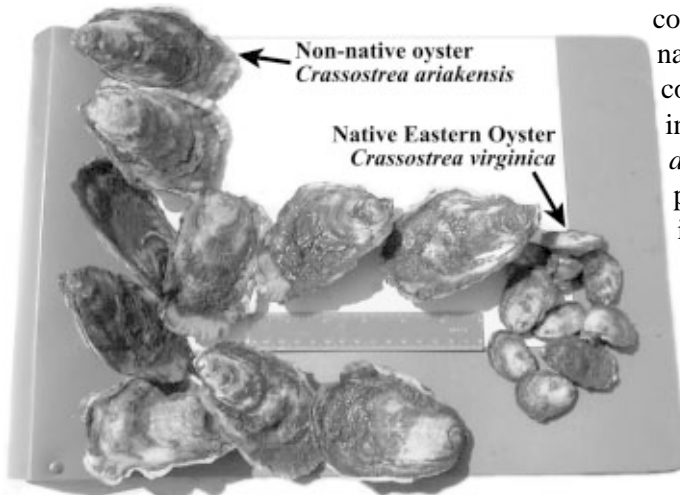
The potential use of *C. ariakensis* of course also raises a

number of critical issues for the Chesapeake Bay itself, such as the effects of re-establishing oysters as a keystone species, providing an alternative resource to reduce pressure on the blue crab fishery, and helping to save the oyster fishery, which is all but over using native species. Furthermore, the use of sterile non-natives in aquaculture provides an intriguing alternative to direct release of a new oyster. At the very least, triploid aquaculture provides an interim solution during which time researchers at VIMS and other institutions can further investigate the biology and ecology of *C. ariakensis*.

Begun in summer 2002, the NAS study “will examine the ecological and socio-economic risks and benefits of open water aquaculture or direct introduction of the non-native oyster, *C. ariakensis*, in the Chesapeake Bay.” A committee of oyster experts will address how *C. ariakensis* might affect Bay ecology, including effects on native species, water quality, habitat, and the spread of human and oyster

diseases. It will also consider possible effects on recovery of the native oyster, *C. virginica*. The study will explore the potential range and effects of the introduced oyster both within the Bay and in neighboring coastal areas, and investigate the adequacy of existing regulatory and institutional frameworks to monitor and oversee use of non-natives. The committee will also “assess whether existing research on oysters and other introduced species is sufficient to support risk assessments of three management options: 1) no use of non-native oysters, 2) open-water aquaculture of triploid oysters, and 3) introduction of reproductive diploid oysters. Where current knowledge is inadequate, the committee will recommend additional research priorities.”

NAS will issue a preliminary report to sponsoring organizations in late June 2003, with a full, published version scheduled for September 2003. For more information on the NAS review visit www.nas.edu/ and search for the keyword “oyster.”



C. ariakensis typically grows faster than the native oyster *C. virginica*.