

STATEMENT ON THE USE OF *Crassostrea ariakensis* IN CHESAPEAKE BAY

Virginia Institute of Marine Science

College of William and Mary

November 28, 2001

In 1995 the Virginia General Assembly, through House Joint Resolution 450, directed the Virginia Institute of Marine Science (VIMS) to begin research on non-native oyster species for possible use in Chesapeake Bay. VIMS proceeded in a responsible manner by using sterile triploid oysters to prevent an unintended introduction. One of the results of our research has been the identification of an oyster species, *Crassostrea ariakensis*, that grows well in the Chesapeake Bay, is tolerant of local diseases, and has been well received in marketing trials. Recognizing that there is widespread commercial interest in this species, we are providing this statement in the absence of a specific request from industry. Our purpose is to clarify VIMS position on the use of *C. ariakensis* for aquaculture, fisheries restoration, or both. The following statement is based on the science to date. It is subject to revision as warranted by results from further research.

It is the general position of VIMS at this time that the intentional introduction of reproductively capable (diploid) *C. ariakensis* into the waters of the Commonwealth would be imprudent. The ecological consequences of introducing this oyster to the Chesapeake Bay are too uncertain to support such an introduction. From discussions to date, it is clear that the broader marine science community shares this view. Further, we believe that the introduction of diploid *C. ariakensis* into the Atlantic coastal waters of the U.S. is a resource management decision of far reaching consequence. Such a decision should involve stakeholders beyond Virginia for the obvious reasons that colonization is enabled by larval transport and that the risks and merits of this species may vary spatially.

VIMS research has shown that aquaculture of sterile (triploid) *C. ariakensis* offers promise for economic development in Virginia and the region. However, the development of an aquaculture industry based on *C. ariakensis* will require adequate biosecurity in commercial-scale operations and implementation of adequate regulatory structure. We also recognize that with current technologies and production methods, large-scale use of triploid *C. ariakensis* would entail some possibility of introducing reproductively capable non-native oysters over the long term (decades) through reversion, production errors, or both. Therefore, scale-up to commercial production needs to be accompanied by implementation of and improvements in biosecurity.

Carefully designed and monitored commercial trials serve the dual purpose of providing data on the long-term aquaculture potential and the ecological impacts of this species. The paucity of such data underscores the need for parallel research on ecological, genetic and disease impacts and/or benefits of *C. ariakensis* because of the possibility of introducing reproductively capable populations over the long term, at least with current triploid technology and production methods. Acquiring such knowledge for use in policy decisions is a primary role of VIMS and is in accordance with the International Council for the Exploration of the Seas (ICES) Code of Practice on introductions.