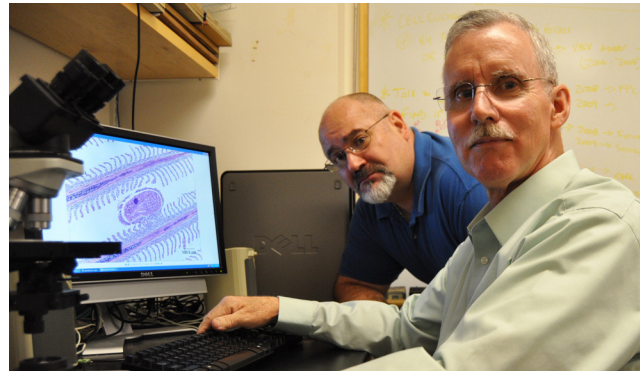


Preventing & Containing VHS in Aquaculture Operations

VH_S, viral hemorrhagic septicemia, threatens the sustainability of global fisheries and aquaculture. The viral pathogen (VHSV) is considered to be one of the more serious fish pathogens known and has the potential to devastate hatchery operations. Prior to 2007, little information concerning the containment of the virus and disease was available. Since then, New York Sea Grant (NYSG) has been taking steps to educate fish health and culture professionals about VHS in an effort to protect wild fish stocks and maintain the viability of aquaculture in the Northeast.

With NY Sea Grant funding, renowned fish disease experts Dr. Paul Bowser and Dr. James Casey of the Aquatic Animal Health Program at the Cornell University College of Veterinary Medicine developed and refined a molecular technique used to diagnose the disease. These researchers also generated valuable research essential to prevent and/or contain the disease and pathogen.

During 2008–2010, NYSG partnered with the Cornell researchers and Rhode Island, Pennsylvania and Lake Champlain Sea Grant programs to organize regional workshops to disseminate the results of this research to diverse stakeholder groups. Hatchery managers of the Vermont Fish and Wildlife Department



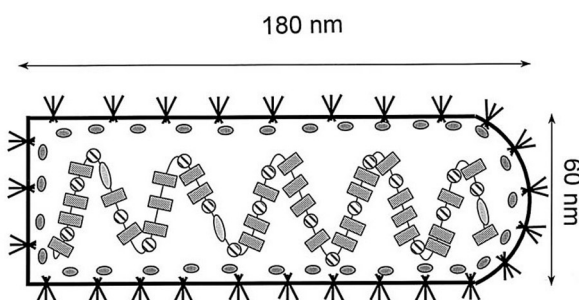
Above: The research-outreach project of NY Sea Grant Fisheries Specialist David MacNeill (left) and Dr. Paul Bowser of the Cornell University of College of Veterinary Medicine Aquatic Animal Health Program earned the National Sea Grant 2010 Research Application Award. Photo: Stephanie Specchio, Cornell University

were among the first to use the information to evaluate their current practices and maintain their walleye stocking program.

The National Sea Grant Office recognized the success of this research and outreach partnership and presented its first-ever “Research to Application Award” to Dr. Bowser and NYSG Fisheries Specialist David B. MacNeill in October, 2010.

As of January 2011, VHSV has not been found in any fish culture facility in the eastern U.S.

This project highlights New York Sea Grant’s ability to quickly identify and respond to a high priority by supporting cutting edge research and delivering newly generated information to diverse constituencies in partnership with researchers.



Left: Diagram of a single VHSV specimen. Science-based research on the virus now supports prevention and containment protocols. Photo: Lorenzen et al, 1999

This project meets the performance measures of Sea Grant’s Healthy New York Coastal Ecosystems and Safe and Sustainable Seafood Supply focus areas. Sea Grant Extension administration is located at 112 Rice Hall, Cornell University, Ithaca, NY 14853. This project summary was written by David B. MacNeill, Fisheries Specialist, 315-312-3042, dbm4@cornell.edu, www.nyseagrant.org.