

## **Addressing VHS Impacts on Great Lakes Fisheries**

**V**HS - viral hemorrhagic septicemia is a serious viral disease of freshwater, marine, and aquacultured fish. A new strain of VHS in the Great Lakes causes mortalities of ecologically and economically important species including muskellunge, walleye, and smallmouth bass. The unfamiliarity of Great Lakes fish propagation staff, managers, and businesses with VHS containment, prompted APHIS (the U.S. Department of Agriculture's Animal and Plant Health Inspection Service) to impose stringent regulations restricting live fish transport. These regulations created unintentional economic hardships for fisheries-dependent businesses.

Early in 2007, New York Sea Grant (NYSG) organized a meeting with regulatory agencies, fish disease experts, and legislators, including U.S. Senator Hillary Clinton, to strategize VHS-related fisheries protection with minimizing economic impact on small businesses.

Other meetings were held with individual State Assembly members and New York State (NYS) Governor Elliot Spitzer's office to provide representatives with VHS information and potential implications for NYS fisheries.

NYSG collected VHS research information from worldwide sources and disseminated CDs of 285 articles to the New York State Department of Environmental Conservation and the Great Lakes Fisheries Commission.

NYSG is currently collaborating with Cornell Unviersity researchers to develop extension outreach of new fish diagnostic tools and a statewide economic survey of the bait industry.



Juvenile Pacific herring with VHS. Photo: Paul Hershberger, Western Fisheries Research Center, Nordland, Washington

The NYSG-led meetings helped expedite development of:

- regulations addressing how to cope with VHS through legislators and APHIS
- an effective live fish euthanization procedure for live fish processors, and
- identified sources of low interest loans for a business worth \$170,000 to the upstate economy.

All of these actions resulted in significant reduction of economic losses to small businesses.

In 2007, VHS information provided by NYSG was used to:

- investigate possible control strategies from Europe to adapt to NYS hatcheries
- continue discussions in the NYS Assembly for developing more restrictive ballast water legislation, with VHS as a focal point
- focus increased attention on fish pathogens at a NYS Assembly public hearing at which NYSG testified, and
- stimulated discussions by Governor Spitzer's office for proposed expansion of fish diagnostic capabilities in NYS.

New York Sea Grant is a cooperative program of the State University of New York and Cornell University. 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, 315-342-3042, dbm4@cornell.edu, www.nyseagrant.org.