

## **New York and Rhode Island Sea Grant Programs Sponsoring an Information Workshop on VHS, Viral Hemorrhagic Septicemia, for Marine Extension and Fish Health Professionals.**

**VHS is a serious viral disease** that has resulted in significant mortalities of wild marine, aquacultured marine and freshwater fish since its first discovery in 1938. It has been a serious fisheries problem in Europe, the Pacific Northwest, Northeastern Atlantic and Baltic Sea. The pathogenic virus, VHSV, has been detected in the Northeastern Atlantic and Baltic Sea in Atlantic cod, haddock, halibut, turbot, Atlantic herring, sprat, plaice, flounder; whiting, blue whiting, and European eel elvers. In the Pacific, viral isolates have been found in such species Pacific herring, Pacific sardines (pilchard), Pacific smelt (euchalon and surf smelt), and anchovy. Large-scale, population level mortalities from VHS have been reported among Pacific Northwest stocks of Pacific herring, Pacific hake, walleye pollack and Pacific sardines. The vast majority of studies have, however have focused on fish using viral strains endemic to European waters.

To date there have been at least four distinct genetic variants or genotypes of the virus identified around the world: Type I, Type II, Type III, and Type IV. Genotype IV has been split into to major groups: Genotype IVa (marine isolates) of Genotype IV and Genotype IVb (freshwater Great Lakes Basin isolates).

What is not known in eastern North America is how Genotype IVa will affect stocks of haddock, cod, and Atlantic herring. It may only be a matter of time before losses of the magnitude of those observed in the marine environment of the Pacific Northwest are seen along the Atlantic coast of North America. An additional concern that has been given little attention is the potential that the freshwater Genotype IVb may move to the marine environment and cause devastating mortalities as are occurring in the Great Lakes Basin. If this were to happen, the commercial industry could face severe economic hardships

Because of the potential for VHSV to infect important commercial species in the Northwest Atlantic, as well as possibly affecting important forage species such as Atlantic herring it is imperative to proactively put this issue on the radar screens of fisheries professionals, enabling them to respond if or when the disease emerges.

Because VHS issue is of concern to both in Marine and Great Lakes extension and research, New York and Rhode Island Sea Grant have organized a one day information meeting on VHS to summarize current state of knowledge: distribution, viral dynamics, infection routes, population impacts, disease pathology, and diagnostic tools.

**When/Where: Friday, October 17<sup>th</sup>** The location of the VHS workshop on October 17 is the Hazard Rooms in the Coastal Institute on the URI Narragansett Bay Campus (the Graduate School of Oceanography Campus) in Narragansett, RI.

### **Workshop Agenda:**

- **9:00** Welcome, introductions, housekeeping, purpose/outcomes of workshop (VHS as a potentially emerging issue in the Great Lakes and possibly in the Northwest Atlantic) Dave Beutel, RI Sea Grant and Dave MacNeill, NY Sea Grant
- **9:15** Overview of Fish Diseases in Marine and Freshwater Fisheries. Dr. Paul Bowser, Cornell College of Veterinary Medicine and Dr. Mark Fast, SoMas (School of Marine and Atmospheric Science), SUNY Stony Brook.
- **9:55** Emergence of VHSV in the Great Lakes Basin. Dr. Paul Bowser
- **10:40** Break
- **11:00** Virology 101: The VHSV Rhabdovirus, Possible mechanics of spread, Genetics. Dr. Jim Casey
- **11:40** Q&A
- **12:00 – 1:00** Lunch
- **1:00** VHS Diagnostics: Dr. Jim Casey, Cornell College of Veterinary Medicine.
- **1:40** The role of USDA APHIS in Fish Health Management: Dr. Paul Egrie APHIS, Washington D.C.
- **2:10** The Fish Inspection Process- Dr. Andy Goodwin
- **2:50** Break
- **3:00** Discussion
- **3:30** Adjournment

**To Register**, please contact **Dave Beutel**, Rhode Island Sea Grant, University of Rhode Island, 401-874-7152 email: [dbeutel@uri.edu](mailto:dbeutel@uri.edu)

## **Directions to the URI Narragansett Bay Campus:**

**From the West:** Via Rt. 1. Interstate 95N to Exit 92 in Conn. Right turn after leaving expressway, then about 1.5 mi. on Conn. 2 to 78. Take Rt. 78E (a barrier divides the roadway) 4 mi. to Rt. 1N in Westerly, R.I. Go left on Rt. 1N for about 27 mi. to intersection of Rts. 1 and 138. Make a right onto Bridgetown Rd. Continue to next traffic signal (intersection of Bridgetown Road and Scenic 1A). Cross intersection onto South Ferry Rd. Continue past South Ferry Industrial Park on the right and South Ferry Church on the left. Entrance to campus is on the right.

Via Rt. 138. Interstate 95N to exit 3A in R.I. (Kingston exit). Turn right off exit ramp onto Rt. 138E (Kingstown Rd.). Continue on 138 (passing the University's Kingston Campus on the left) to Rt. 1 and cross the junction onto Bridgetown Rd. Continue on Bridgetown Rd. to South Ferry Rd. Continue past South Ferry Industrial Park on the right and South Ferry Church on the left. Entrance to campus is on the right.

**From the North:** Interstate 95S toward N.Y. and Narragansett. (From T.F. Green Airport, follow the Airport Connector signs to join 95S at exit 13.) Continue on 95S to Exit 9 and exit in left lane off highway onto Rt. 4S. Continue to Rt. 1 and the junction of Rt. 138W. Take a left at the tower onto Bridgetown Rd. Continue to South Ferry Rd. Continue past South Ferry Industrial Park on the right and South Ferry Church on the left. Entrance to campus is on the right.

**From the East:** Rt. 195 to 24S to 138W. Cross Newport (toll \$2) and Jamestown Bridges. Take the first exit after the bridge onto Rt. 1A toward Narragansett. Continue south to the first traffic signal and make a left onto South Ferry Rd. Continue past South Ferry Industrial Park on the right and South Ferry Church on the left. Entrance to campus is on the right.

## **Nearby lodging (nothing is really near) can be obtained at:**

**The Hamilton Village Inn.** 642 Boston Neck Rd., North Kingstown, RI 02852,  
[www.hamiltonvillageinn.com](http://www.hamiltonvillageinn.com) 401-295-0700

**Holiday Inn South County,** 3009 Tower Hill Rd. South Kingstown, RI 02880,  
401-789-1051

**The Village Inn and Resort,** One Beach Street, Narragansett, RI 02882,  
[www.v-inn.com](http://www.v-inn.com) 800-843-7437

**Hampton Inn-South Kingstown,** South County Commons, 20 Commerce Drive,  
South Kingstown, RI 02880, 401-788-3500