

U.S. FISH AND WILDLIFE SERVICE

LA CROSSE FISH HEALTH CENTER May Station Highlights



The La Crosse Fish Health Center (LFHC) is located in Onalaska, Wisconsin and is responsible for fish health management within the Big Rivers/Great Lakes region of the upper Midwest. Primary responsibilities include inspection, certification and diagnostic services for federal hatcheries, providing inspection and laboratory services for state, federal and tribal agencies, surveillance of target pathogens as part of the National Wild Fish Health Survey, providing training in fish health management, monitoring use of drugs and chemicals for national fish hatchery use, researching fish health management and assisting in design and implementation of surveillance, and control of invasive aquatic pathogens in cooperation with state, tribal, federal and non-governmental agencies.

LABORATORY TESTING SERVICES

The La Crosse Fish Health Center provided laboratory testing services in May to Lac Courte Oreilles Tribal Fish Indian Fish and Wildlife Com-Tribal Fish Hatchery (WI), Owen (WI), University of Wisconsin Lac Lake), the Ohio Department (Ohio River, Silver Creek Lake Erie), the Wisconsin Department (Fox River, Koshkonong Lake, Seven Mile Lake, Pick-Clear Lake, the Wisconsin



Hatchery (WI), the Great Lakes mission (Lac Du Flambeau Lake Metonga (WI), Wisconsin Stevens Point, and Millersport of Natural Resources Pond, and the central basin of Department of Natural Resources Madeline Lake, Little Trout Lake, Lac Vieux Desert, River at the Wisconsin Dells, and the Upper Mississippi River at Pool 7, Pool 10, and below Dresbach Dam), the Illinois Department of Natural Resources (Mississippi River at West Alton and Quincy), the Illinois Natural History Survey (Illinois River at Havana), the Columbia National Fish and Wildlife Conservation Office (Missouri River at Columbia and Desoto National Wildlife Refuge, and Weldon

Springs), Case Western Reserve University (OH), Hammond Bay Research Station (MI), Jake Wolf Memorial Fish Hatchery (IL), Jordan River National Fish Hatchery (MI), and Genoa National Fish Hatchery (WI) (by Julie Teskie)

AQUATIC SPECIES CONSERVATION AND MANAGEMENT

Fish Disease Found in Ohio Reservoir



FOR IMMEDIATE RELEASE

June 17, 2008

The Ohio Department of Natural Resources has confirmed that viral hemorrhagic septicaemia (VHSv), a virus that causes disease in fish but does not pose any threat to public health, was confirmed present in muskellunge sampled during routine egg collection in Clear Fork Reservoir in late April. The virus was found in ovarian fluid samples collected from the muskellunge as part of routine ODNR testing for VHSv, but has not resulted in a fish kill. The samples were sent to the U.S. Fish and Wildlife Service (USFWS) Fish Health Center in La Crosse, WI, where the VHSv virus was initially isolated and then to the National Veterinary Services Laboratory, USDA Animal Plant Health Inspection Service (APHIS), Ames, Iowa, where it was later confirmed.

These results mark the first isolation of VHSv outside the Great Lakes basin. Fisheries officials believe VHSv has been a factor in recent fish kills of several species of fish in the Great Lakes that correspond with the end of spring spawning.

VHSv was first isolated as a virus in 1963, and is presumed responsible for European fish kills as far back as 1938. In 1988, the virus was first detected in marine fishes in the Pacific Northwest. VHSv is a pathogen of international concern and is reportable to the World Organization for Animal Health (OIE)

In 2005, VHSv was first reported in the Great Lakes, but may have been responsible for fish kills since 2003. VHSv has been responsible for numerous fish kills in lakes Erie, Huron, Michigan, and Ontario. The virus has also been the cause of fish mortality in several inland lakes in the states of Michigan, New York, and Wisconsin, all within the Great Lakes Basin. As a result, APHIS issued an emergency order in 2006 restricting the interstate movement of live fish of susceptible species from the States and Provinces of the Great Lakes. Many States around the Great Lakes, including Ohio, developed their own emergency orders restricting intrastate movement to protect other watershed within their states. For a list of susceptible species, visit APHIS's website at <http://www.aphis.usda.gov/>.

"One likely possibility is that VHS will act like many other viruses in the environment. Typically, viruses or bacteria infect fish, which may lead to disease in the fish if they are susceptible. Once the disease is expressed in these fish, some percentage of the population will die," said Ray Petering, chief of the DNR Fisheries Division. "Those remaining will survive and will develop immunity to the viruses or bacteria that cause a disease. Since there are no large-scale treatments for VHS that can be applied to fish in the wild, the presence of this new virus may result in spring fish mortalities that are abnormally high for a few years as more fish encounter the virus. These mortalities may abate as fish begin to build immunity to the virus."

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Citizens are encouraged to report sick fish or fish kills by calling 1-800-WILDLIFE or use the ODNR Web site at: <http://www.dnr.state.oh.us/contactform/tabid/10750/Default.aspx> then from the Topic list select: Wildlife - Fishing & Hunting

Anglers should contact the ODNR if they observe large numbers of fish exhibiting any of the following: hemorrhaging in the skin, including large red patches particularly on the sides and on the head; multiple hemorrhages on the liver, spleen, or intestines; or hemorrhages on the swim bladder that give the otherwise transparent organ a mottled appearance.

This information will help ODNR track VHS and take appropriate actions to slow spread of this virus. Anglers and boaters can help prevent spread of VHS and other viruses or bacteria that cause disease in fish by not transferring fish between water bodies, and thoroughly cleaning boats, trailers, nets, and other equipment when traveling between different lakes and streams.

The use of a contact disinfectant such as a solution of 200 ppm chlorine bleach (5.1 ounces per 10 gallons of water) to clean vessels and live wells is very effective against VHS and other viruses and bacteria that cause disease in fish. Soaking exposed items such as live wells, nets, anchors, and bait buckets in a light disinfectant

of 20 ppm chlorine solution (5.1 ounces of liquid household bleach per 100 gallons of water) for 30 minutes is also an effective method to prevent the spread of a wide range of aquatic nuisance species. Routine surveillance, disinfection of eggs used in fish production, public education, and additional VHS research will continue by the ODNR, Ohio Department of Agriculture, and the U.S. Fish & Wildlife Service in an effort to minimize the spread of VHS and protect fish hatcheries.



Ken Phillips of the La Crosse Fish Health Center samples Lake Erie walleye with Ohio Division of Wildlife staff. (USFWS)



Contact Information:

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Spring Viremia of Carp Surveillance



The La Crosse Fish Health Center (LFHC) has begun its surveillance program for Spring Viremia of Carp virus (SVCv). SVCv is an exotic viral disease commonly found in Europe, Asia, and the Middle East. In 2002, SVCv was discovered in the United States when it was isolated from a Koi farm in North Carolina, and found in a wild carp population in Cedar Lake, Wisconsin. Since 2002, the LFHC has also isolated the virus from the Calumet Sag Channel (2003), and Pool 8 on the Mississippi River (2007). SVCv is caused by the virus *Rhabdovirus carpio*, which is a bullet shaped RNA virus.

Signs of SVCv are darkening of the skin, pop-eye, excess fluid in the body cavity and/or organs (called ascites fluid), hemorrhages in the gills, skin, and eyes, tiny hemorrhages in the swim bladder, swollen spleen, and protruding vent.

The virus enters fish through the gills and is spread through the feces and mucus of infected fish. The virus is active when water temperatures range between 12 to 22 degrees C. SVCv affects fish in both the spring and fall



Members of the La Crosse Fish Health Center train staff from Columbia National Fish and Wildlife Conservation Office on fish health sampling techniques. (Columbia NFWCO).



From left to right: Biological Science Technician Andrew Flaten from the La Crosse District Refuge, Fisheries Biologist Heidi Keuler from the La Crosse NFWCO, and volunteer Bob Huff drop off carp for disease testing at the La Crosse Fish Health Center. (Columbia NFWCO)

when waters are at the optimal temperature range. All of the exotic carp species located in U.S. waters are susceptible to the virus. It is unknown how native species are affected by this

exotic virus.

This year the La Crosse National Fish and Wildlife Conservation Office (NFWCO) and the Columbia National Fish and Wildlife Conservation Office played an important role in the surveillance program. La Crosse NFWCO captured fish from locations along the Mississippi River, Illinois River, and Wisconsin River. The fish were then transported back to La Crosse to be processed by LFHC staff. Dave Wedan from La Crosse NFWCO assisted in coordinating the sampling plan.

Columbia NFWCO also captured fish and took health samples for the program. LFHC staff traveled to Columbia, Missouri and trained Columbia NFWCO staff members on proper fish health sampling techniques, aseptic sampling protocols, and sample preparation for transport. Columbia NFWCO sampled grass carp, bighead carp, silver carp, and common carp from three sites each on both the Missouri River, and the Mississippi River. Wyatt Doyle from Columbia NFWCO assisted in coordinating the sampling plan. (by Corey Puzach)

PUBLIC USE



La Crosse Fish Health Center Welcomes New Student Trainee Experience Program (STEP) Employee

Lucas Purnell recently joined the La Crosse Fish Health Center as a biological aid. A graduate of Holmen High School (Holmen, WI), Lucas has worked for the health center in the past and contributed significantly in the accomplishment of routine activities.

Lucas has assisted biologists with the National Wild Fish Health Survey; he has been busy making media, performing parasite necropsies, and sterilizing glassware. He is training in virology as well.

Lucas has already proven to be a wonderful addition to the health center staff and he will remain working for us as he attends the University of Wisconsin-La Crosse. He will be working towards a degree in Biology. (by Sarah Bauer)

WET and WILD Education a Success



Education training took place on May 20th for the programs Project WET, and Project WILD. The training was held at the US Fish and Wildlife Service offices in Onalaska, WI. In conjunction with these trainings Angler Education was offered at Pettibone Park, on the following day in La Crosse, WI. Jeff and Elizabeth Janvrin from the Wisconsin DNR conducted the trainings.

Attending the training were representatives from the United States Geological Services, the United States Fish and Wildlife Service, the City of La Crosse Park Department, the City of Sparta Parks and Recreation, and members of the Friends of the Upper Mississippi Fisheries Services.

Project WET, Project WILD, and Angler Education are programs designed to assist students in developing awareness and knowledge of wildlife and aquatic resources. To this goal service members, volunteers and educators are trained in the skills needed to provide educational outreach materials, resource materials, and ac-

LFHC Staff Participate in Genoa National Fish Hatchery's Annual Fishing Clinic

On May 17th Genoa National Fish Hatchery held their annual Fishing Clinic. Approximately one hundred and thirty children attended the event with their parents. The Genoa National Fish Hatchery was assisted in conducting this event by members from the La Crosse National Fish and Wildlife Conservation Office (USFWS), the La Crosse Fish Health Center (USFWS), the Wisconsin Department of Natural Resources, and members of the Friends of the Upper Mississippi River Fishery Services.

The Fishing Clinic had four stations where participants learned about animal fur identification, fish identification and habitats, fish anatomy, and jig making. They also had an opportunity to fish in the one of the hatchery's rainbow trout-stocked ponds. Proper casting techniques were demonstrated in order to show how to catch a fish with a minimal amount of tangled lines. Each participant was allowed to take up to five trout home after the fish were cleaned for them by hatchery staff.

The event concluded with prizes awarded for the heaviest, longest, lightest, and shortest fish caught. Door prizes were given and each child received a gift bag. Overall the event was a success with great weather, great fishing, and many smiling faces. (by Sarah Bauer)

