

**U.S. FISH AND WILDLIFE SERVICE**

**LA CROSSE FISH HEALTH CENTER**

## **September 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 September to: Iron River National Fish Hatchery (NFH) (USFWS), Sullivan Creek NFH (USFWS), Genoa NFH (USFWS) and the Upper Mississippi Environmental Sciences Center. (by Julie Teskie)



# AQUATIC SPECIES CONSERVATION AND MANAGEMENT



## FISH HEALTH INSPECTION ON THE SHORE OF LAKE GICHIGAMI!

It was a cold, clear morning on September 10, 2008. I was on my way to do a fish health inspection at the Keweenaw Bay Tribal Fish Hatchery near L'Anse, Michigan. For those of you who don't know where L'Anse is located it is found in the western half of the Upper Peninsula, about an hour south of Copper Harbor.

I found myself driving north along beautiful Pequaming Bay on the shores of Lake Superior. In Ojibwe language the lake is called Gichigami, which means "Big Water". It is also written "Gitche Gumee" as recorded by Henry Wadsworth Longfellow in his poem *The Song of Hiawatha*. During the seventeenth century the French called the lake "Le Lac Supérieur" or "Upper Lake," because it was located above Lake Huron. By the time the English arrived and began colonizing the region the lake was already well-known as Lake Superior, so called on account of its magnitude to any of the other lakes on the vast continent.



Indian communities have traditionally depended on a healthy and abundant fishery in the Great Lakes for their subsistence. Lake Superior fisheries have always been critical to the survival of the Ojibewa people. Fish (giigoonh) are still an important part of the Native American diet and they are also used in ceremonies, cultural stories, and tribal feasts.

Today the importance of Great Lakes and inland fisheries to tribes is reflected in the growth of tribal hatcheries throughout the Great Lakes region. The Keweenaw Bay Tribal Hatchery was established in 1989 and is located on ten acres of tribal land on Pequaming Bay. It is funded through the Keweenaw Bay Indian Community.

The main objective of the Keweenaw Bay hatchery is to rear native stocks of fish for stocking into the bays of Lake Superior and adjacent streams. The hatchery uses approximately 900 gallons of artesian water from two deep wells to raise over 95,000 fish annually. Eighty vertical incubation trays with the potential of 10,000 eggs per tray are used for incubating lake and brook trout eggs received from Iron River National Fish Hatchery in Iron River, Wisconsin. The lake trout eggs are from a captive lot of brood fish collected as eggs years ago from the Traverse Island area. The brook trout are a Lake Superior strain collected as eggs from adult fish over Klondike Reef.

The hatchery also has its own captive brood stock of native brook trout collected from the Jumbo River in Baraga County. The goal is to increase brook trout production and extend stocking efforts in the western Upper Peninsula. This will be done by producing over 40,000 brook trout fingerlings each year to stock back into the Jumbo River and other streams in Baraga County which flow into Lake Superior.

The hatchery has maintained a “Class A” classification since April 2005. This classification represents a disease-free hatchery where all lots of fish have been inspected annually and have received negative inspections for at least a 2 year period. The classification system is an important communications tool used to summarize the results of regular monitoring of hatcheries by fish health biologists. The federal fish health inspection report contains a list of nine certifiable fish pathogens that are screened for during an inspection. If these pathogens are not detected for a period of two years, the hatchery will attain a “Class A” designation.



The Keweenaw Bay investigation for the nine fish hours to collect tissue samples to complete all laboratory tests. hatchery need to be processed

tribal fish hatchery is still under in-health pathogens. It takes several from a lot of fish, but up to 35 days All the tissue samples collected at the by laboratory staff at the La Crosse Fish Health Center through the various lab disciplines of virology, bacteriology, and parasitology. Hopefully, the screening process will not turn up any suspicious samples and the hatchery once again can receive and maintain the class “A” rating. (by Terry Ott)

### **The La Crosse Fish Health Center's Surveillance Program for Viral Hemorrhagic Septicemia**

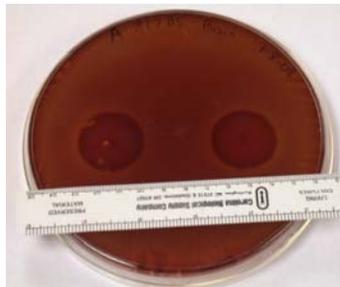


*Corey Puzach taking samples from wild fish as part of the surveillance program for VHS. (USFWS)*  
The U.S. Fish & Wildlife Service's La Crosse Fish Health Center has completed their annual testing of wild fish for Viral Hemorrhagic Septicemia (VHS) in the Great Lakes/Big River's region.

Genotype IVb of VHS is a strain specific to freshwater fish and was first detected in the Great Lakes in 2005. To date, over 28 different fish species in the Great Lakes have been affected, with large kills reported in populations of yellow perch, freshwater drum, muskies and round gobies. VHS IVb is an extremely virulent and highly infectious disease that requires constant monitoring in order to slow its spread. The Fish Health Center has relied on assistance from numerous federal (La Crosse and Columbia National Wildlife and Fish Conservation Offices) and state agencies (Wisconsin DNR, Ohio Division of Wildlife and Illinois DNR) for fish collections. Because of these partnerships, over 17,209 fish have been tested since 2005. In 2008, over 8,000 fish were tested, with most sampling done in Ohio (2,571), Wisconsin (3,560) and Illinois (1,006). Significant findings by the La Crosse Fish Health Center in 2008 include: detection of the virus in ovarian fluids of spawning muskie from Clear Fork Reservoir in Ohio (the first isolation outside the Great Lakes' basin and the first report in ovarian fluids (a non-lethal sample)) and the first detection of the virus in sea lamprey, a new host record for the virus. (by Becky Lasee)

## **LEADERSHIP IN SCIENCE AND TECHNOLOGY**

### **La Crosse Fish Health Center staff complete cooperative field effectiveness study on use of Aquaflor medicated feed to control streptococcal disease in tilapia**



*A blood agar plate showing areas of bacterial drug sensitivity (arrows). (USFWS)*

Eric Leis and Becky Lasee of the La Crosse Fish Health Center (U.S. Fish and Wildlife Service) and Mark Gaikowski and Sue Schleis (Upper Midwest Environmental Sciences Center, U.S. Geological Survey) submitted the following completion report to Schering-Plough Animal Health Corporation: “Gaikowski, M.P., Schleis, S.M., Lasee, B.A. and E. Leis. Field effectiveness of Aquaflor™ (50% Type Medicated Article), Florfenicol - SCH25298 administration in feed to control mortality associated with

*Streptococcus iniae* in tilapia (*Oreochromis spp.*)”, 355 pages. The Fish Health Center was responsible for isolation and confirmation of the *Streptococcus* bacterium in tilapia reared at the Minaqua Fisheries facility in Renville, MN. Drug sensitivities of isolated colonies to the florfenicol drug were also performed at the Center. Field studies, like this one, support the Federal Drug Administration (FDA) approval of new drugs for treating serious diseases of propagated fish. (by Becky Lasee)