U.S. Fish & Wildlife Service

La Crosse Fish Health Center

February & March 2013 Monthly 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.

Aquatic Species Conservation and Management

Annual Inspections

by Sarah Leis

Every spring, La Crosse Fish Health Center (LFHC) staff conduct fish health inspections at the six national fish hatcheries (NFH) in Region 3. In February and March, LFHC staff traveled to Genoa NFH, Pendill's Creek NFH, Sullivan's Creek NFH, Iron River NFH, and Jordan River NFH. During the inspections, the fish are screened for target bacterial, viral and parasitic pathogens to ensure the fish are free of certifiable pathogens prior to their release into the wild. Neosho NFH annual spring inspection is scheduled for May 2013.

James Anderson of Sullivans's Creek National Fish Hatchery assisted Terrence Ott of the La Crosse Fish Health Center during their annual spring inspection USFWS B. McCann

Whitney Genetic Laboratory Collaborating with Local U. S. Geological Survey Scientists on Asian Carp Work

By Emy Monroe

The Whitney Genetics Laboratory (WGL) assisted Dr. Jon Amberg of the U.S. Geological Survey's (USGS) Upper Midwest Environmental Sciences Center (UMESC) with two projects during February and March of this year. Our eight thermocyclers were used by Amberg's team to amplify hundreds of samples to generate data summarized in the recently released report, "Detection of Environmental DNA of Bigheaded Carps in Samples Collected from Selected Locations in the St. Croix River and in the Mississippi River", which can be found online at: http://www.maisrc.umn.edu/files/2013/04/OFR2013-1080-web-final.pdf

WGL staff filtering samples for ECALS extraction kit test
USFWS B. Lasee

WGL staff also spent sereral days assisting Amberg's team with a portion of the environmental DNA calibration study (ECALS), "Asian Carp eDNA increased efficiency and calibration" (see pg 66 of the Environmental DNA Calibration Study, Interim Technical Review Report, online at: http://www.asiancarp.us/documents/ECALS_INTERIM.pdf). WGL staff filtered 300 samples in our lab to be used in a test comparing the current MoBio PowerWater extraction kit to Qiagen's DNeasy Blood and Tissue kit. The WGL will also serve as one of the labs that will analyze the samples in the round-robin test, and will begin processing the samples in April. We are happy to start off a positive relationship with our colleagues at the USGS, but are also hopeful that the results of this ECALS project will save money and increase efficiency of the lab this summer when we are processing thousands of samples as part of the Chicago Area Waterways and Great Lakes monitoring programs.

Baitfish Pathogen Study Presentation Given at Law Enforcement Meeting

by Corey Puzach

In March, U.S. Fish and Wildlife Service Law Enforcement Special Agent Gary Jagodzinski and La Crosse Fish Health Center (LFHC) Fish Biologist Corey Puzach attended the law enforcement section of the Great Lakes Fishery Commission in Pulaski, New York. This section of the commission discusses enforcement issues on the Great Lakes and representatives from Wisconsin, Michigan, Ohio, New York, the Great Lakes Indian Fish and Wildlife Commission, and Ontario, Canada were present. Gary and Corey attended the meeting to present the findings of a two year baitfish pathogen study conducted at the La Crosse Fish Health Center.

The baitfish pathogen study was the outcome of an investigation by law enforcement agents from the U.S. Fish and Wildlife Service and Wisconsin Department of Natural Resource. Four baitfish companies were charged, convicted and sentenced to violating the Lacey Act by importing bait fish from outside the state without valid import permits and health certificates. As part of their convictions and sentencing the companies were required to submit select monthly imports for disease sampling and comply with on site facility testing by LFHC staff and law enforcement agent Gary Jagodzinski.

Golden shiner infected with Asian Tapeworm
USFWS B. Lasee

Upon completion of the sentencing the LFHC had tested over 4,300 baitfish for bacterial, viral and parasitic pathogens. The majority of the samples were from fathead minnows, white suckers, and golden shiners. In the end, LFHC isolated several pathogens of concern, which included: Golden Shiner Virus (GSV), Fathead Minnow Nidovirus (FHMNV), five uncharacterized viruses, the bacterial pathogens *Aeromonas salmonicida* and *Renibacterium salmoninarum,* and Asian Tapeworm (*Bothriocephalus acheilognathi*). This study is an excellent example of how law enforcement and biologists can work together to protect and conserve our natural resources.

Meetings & Training

La Crosse Fish Health Center Attends Environmental Compliance Training

by Nick Grueneis

At the end of March Assistant Project Leader Terrence Ott and Fish Biologist Nikolas Grueneis attended the Fish and Wildlife Service's Environmental Compliance Training Course held at the Upper Mississippi River La Crosse District National Wildlife Refuge. The primary focus of the training is in the handling of hazardous material and hazardous waste, and is intended for employees responsible for handling and/or documenting use or disposal of hazardous materials. The course was full of relevant and useful information that will assist us in updating and fulfilling the stations safety requirements. This course also satisfies the stations HAZCOM Plan requiring that designated individuals be trained for their responsibilities with either hazardous materials or waste.

Whitney Genetics Lab Staff Attend the Asian Carp Summit

by Nick Berndt

The River Alliance of Wisconsin hosted the first Wisconsin Asian Carp Summit on March 15, 2013 at the U. S. Geological Survey Upper Mississippi Environmental Science Center on French Island, WI. This meeting more specifically addressed the often less publicized, but equally important implications of Asian carp becoming established in Wisconsin's inland lakes, large rivers and smaller tributaries, as opposed to the Great Lakes.

The meeting was well represented by citizen conservation groups, the aquaculture industry, and state and federal government agencies. Representing U.S. Fish and Wildlife Service were staff from the La Crosse Fish and Wildlife Conservation Office, the Whitney Genetics Lab, and law enforcement agent Gary Jagodzinski.

Topics presented ranged from current Asian carp surveillance and control techniques, law enforcement and policy, illegal movement of fish in the aquaculture and bait industry, and the live food market. These studies outlined the current status of Asian carp movement within our inland waterways, and showcased the current and future cutting edge techniques used to monitor and control the advance of Asian carp. These topics opened up many avenues of discussion, and increased networking amongst the various conservation groups present.

Public Outreach

La Crosse Fish Health Center Assists with Laboratory Exercise at Western Technical College

by Eric Leis

In March, the La Crosse Fish Health Center (LFHC) assisted with a laboratory exercise at Western Technical College in La Crosse, WI. Students were taught to identify Largemouth Bass Virus using the Polymerase Chain Reaction (PCR) assay. PCR is routinely used by the LFHC to identify bacteria, viruses, and parasites. In order to successfully complete the exercise, students were required to carefully pipette small amounts of reagents without contaminating the samples. The exercise was successful as all the groups were able to correctly identify Largemouth Bass Virus.