



La Crosse Fish Health Center April 2010 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

Spring is Fish Health Inspection and Tornado Season in Neosho, Missouri

by Terry Ott

Located in southwestern Missouri on the southern edge of the Midwest, Neosho National Fish Hatchery (Neosho NFH) lies at the western edge of the Missouri Ozarks. The federal hatchery is named after the city of Neosho which completely surrounds the hatchery. The name “Neosho” which means “clear, cold water” is derived from the Osage, a Native American tribe of that region. Much of Neosho’s history revolves around the many springs which bubble out of the limestone rock, including the operation of one of the oldest federal fish hatcheries (built in 1888) in the country.



Aerial view of Neosho National Fish Hatchery USFWS

Traveling from the La Crosse Fish Health Center (LFHC) in Onalaska, Wisconsin to Neosho NFH involves a painstaking ten hour road trip through the heart of corn country Iowa, around the big city of Kansas City, Missouri and through the hilly country of the Missouri Ozarks or as I like to call it in the spring “Tornado Alley”. Neosho is situated in a broad region where cold air from the Rocky Mountains and Canada collide with warm air from the Gulf of Mexico, creating some of the most powerful thunderstorms in the Midwest. Neosho has had many severe outbreaks of thunderstorms and tornados, including an EF4 tornado in the spring of 2008.

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Neosho (cont.)

The hatchery crew at Neosho can attest to some of these violent storms by telling you some pretty scary stories of severe weather they've had to endure, while taking care of their rainbow trout and threatened and endangered pallid sturgeon. That is why I was in Neosho, to collect fish tissue samples from these fish for their semi-annual fish health inspection.



Neosho National Fish Hatchery Staff USFWS

The fish health inspection is a tool we use to assure fishery management biologists, hatchery managers, and the general public that we are stocking “disease free” fish into lakes, reservoirs and streams. The inspection process looks for a specific group of viruses, bacteria, and a parasite which fish health biologists know could have devastating effects on populations of wild fish if one of these pathogens was introduced into their environment.

On April 13th, eleven lots of rainbow trout and pallid sturgeon, totaling 225 and 30 fish, respectively, were anesthetized with MS-222, cut open and sampled. Tissue samples were carefully placed into test tubes, on agar slants, placed into 96 well micro-titer plates, on DFAT slides and into whirl-pak bags for the return trip to Onalaska, Wisconsin.

Once back at the lab, these specimens will be sent off to their appropriate laboratories where they will be processed by fish health biologists according to the U.S. Fish & Wildlife Service, Fish Health Policy, Guidelines and Standards. The whole process can take up to a month, before the final test results are known. A fish health inspection certificate with a “Class A” designation is most welcomed



Brood stock pallid sturgeon at Neosho National Fish Hatchery USFWS

by hatchery managers, because it means their fish are free of “certifiable” pathogens which could cause harm to other species of fish when stocked. For the past four inspections, Neosho NFH has maintained a “Class A” status and we are hoping this classification will continue well into the future.

Annual Inspection Completed at Red Cliff Tribal Fish Hatchery

by Eric Leis

On Monday April 5th, Eric Leis and Sarah Bauer of the La Crosse Fish Health Center traveled to Red Cliff Tribal Fish Hatchery located near Bayfield, WI, to conduct their annual hatchery inspection. Five age classes (or lots) of brook trout were tested for a variety of bacterial and viral pathogens as well as the parasite that causes whirling disease. The results of the inspection are pending.

Sarah Bauer sampling brood stock fish at Red Cliff Tribal Fish Hatchery
USFWS E. Leis



Annual Wild Fish Health Survey

by Sarah Bauer

For over 10 years, staff at the La Crosse Fish Health Center has conducted an annual wild fish health survey of Pool 9 of the Mississippi River. Staff at Genoa National Fish Hatchery assist with the wild fish health survey by collecting fish from the river for La Crosse Fish Health Center. This year several members of the La Crosse Fish Health Center sampled 275 fish from 9 species of fish for target viral and bacterial pathogens. This year bluegill virus (BGV) was isolated from 2 species of fish,



Rebekah McCann taking virology samples from walleye USFWS E. Leis



Rebekah McCann supervising the Chinese delegates with virology sampling USFWS E. Leis

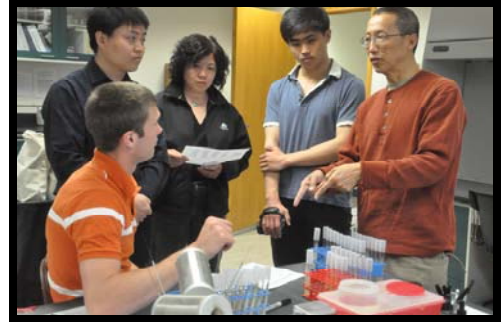
bluegill and black crappie. Bluegill virus is a picornovirus that has been associated with kills of bluegill in 2001 and 2003 at various locations in Wisconsin. Wild fish health surveys are an important component of fisheries management because they prevent inadvertent pathogen transfers by monitoring the distribution and spread of diseases. Also, if wild populations are free of serious diseases they may be safely used as hatchery broodstock.

Leadership in Science and Technology

La Crosse Fish Health Center Staff Exchange Fish Health Management Practices with Chinese Fishery Biologists

by Becky Lasee

Fishery Biologists Ms. Wei Liu, Mr. Ying Wang and Mr. Minquing Zong from Harbin and Beijing, China visited the La Crosse Fish Health Center on April 15-16, 2010. On Thursday morning, the Chinese delegates assisted Eric Leis, Sarah Bauer and Rebekah McCann with inspections of wild fish from Pool 9 of the Upper Mississippi River. On Friday, biologists visited



Chris Olds discussing bacterial testing procedures with the Chinese delegates USFWS
B. Lasee



Sarah Bauer demonstrating histology procedures for the Chinese delegates USFWS
B. Lasee

the Center and discussed sampling, lab reports, bacteriology protocols, histopathology of sturgeon iridoviruses and viral tissue cell culture techniques. The biologists from China and LFHC quickly realized that both countries use very similar techniques for identification of fish pathogens.

Public Outreach

Wisconsin Science Teachers Visit the Lacrosse Fish Health Center

by John Whitney

Recently, Wisconsin Science Teachers Association's annual meeting was held in La Crosse, WI. On April 15, teachers visited the La Crosse Fish Health Center for a tour of the bacteriology, virology, and histology labs. Topics of discussion included laboratory protocols, fish diseases, hatchery inspections and the wild fish health survey. Examples of VHS virus and various fish parasites were provided to the tour. They were quite excited about the demonstrations. At the end of the tour there was a question and answer session which the group participated in and they asked numerous questions.

Outreaching in Madison

by Jan Beitlich



A 4th grade student at Marquette elementary school showing off the coyote fur USFWS Jan Beitlich

Jan Beitlich, Administrative Technician with the La Crosse Fish Health Center gave a presentation to approximately 35 students and teachers at Marquette Elementary School in Madison, Wisconsin. A lamprey, otter, deer skull and various fur pelts accompanied her on the trip. The presentation included discussion on the mission of the U.S. Fish and Wildlife Service and a display of animal furs and other items that the students could look at and touch. The fourth graders had many stories to share regarding their encounters with these animals. Fish cookie treats, coloring books and frisbees concluded the presentation and left a smile on all their faces!

Children Learn Fish Identification and Anatomy

by Eric Leis

On Friday April 23rd, Sarah Bauer and Eric Leis of the La Crosse Fish Health Center, gave presentations to 3rd, 5th, and 6th graders from Saint Patrick's School in Onalaska, WI. Eric and Sarah borrowed Genoa National Fish Hatcheries' "fish on a stick" to teach the children fish identification. Afterwards, the youngsters were able to test their identification skills by comparing plastic replicates to live fish. The children were also shown external and internal anatomy of fish. They especially enjoyed fish dissection where they were able to see and feel the internal organs of a brook trout. The children had many questions and were very enthusiastic about telling their own fish stories.



Sarah Bauer holding a fish so the children could feel teeth inside the mouth USFWS E. Leis

Workforce Management

Fish Health Staff Attend Federal Retirement Planning Seminar

by Becky Lasee

Fish Biologist John Whitney and Project Leader Becky Lasee of the La Crosse Fish Health Center attended the Federal Retirement Planning Seminar that was held in Fort Snelling, MN, April 20-22, 2010. The seminar was presented by Personal Benefit Services of CO and covered both CSRS and FERS retirement systems. Topics included creditable service, MRA's, annuities, deferred annuities, survivor benefits, thrift savings and much more. We learned that retirement takes extensive planning and therefore, we would highly recommend this training to employees at any stage in their career.

Acting Fish Hatchery Program Supervisor Trevor Needham Visits La Crosse Fish Health Center

by Becky Lasee

On April 15th, Trevor Needham, Acting Fish Hatchery Program Supervisor toured the La Crosse Fish Health Center (FHC). Trevor was completing his Advanced Leadership Development assignment in the regional office but he also visited the La Crosse Fish Health Center and regional fish hatcheries. Trevor was given a tour of the three laboratories in the morning and in the afternoon, he assisted with a wild fish health survey. FHC staff were impressed with the interest Trevor had in their work.



Trevor assisting Becky (right) with working up fish during the wild fish health survey USFWS E. Leis