

## U.S. FISH AND WILDLIFE SERVICE

### LA CROSSE FISH HEALTH CENTER July 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 July to the Lac Du Flambeau Tribal Fish Hatchery, Lower Keweenaw Bay (Keweenaw Bay Indian Community), Kincaid State Fish Hatchery (Ohio Division of Wildlife Resources (ODWR)), London State Fish Hatchery (ODWR), Castalia State Fish Hatchery (ODWR), Lake Erie (6 miles off of Lorain, OH) (ODWR), Lake Zurich (Illinois Department of Natural Resources), and Genoa National Fish Hatchery (United States Fish and Wildlife Service). (by Julie Teskie)



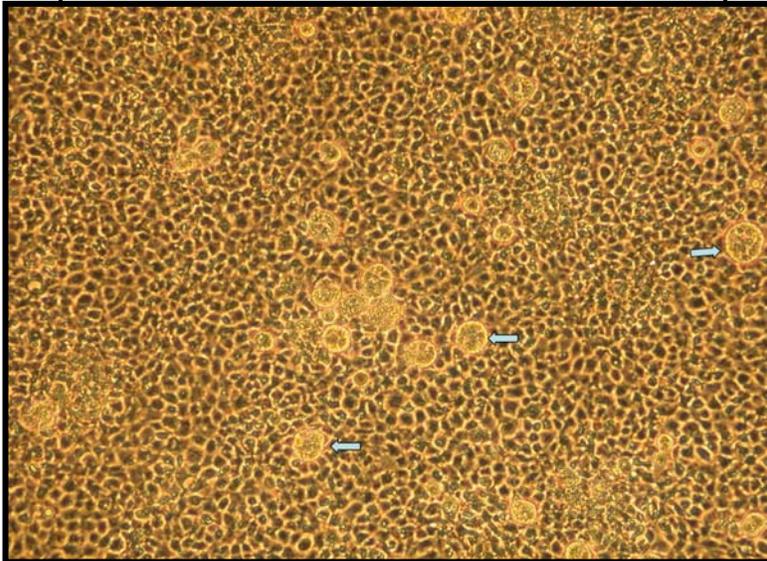
## AQUATIC SPECIES CONSERVATION AND MANAGEMENT

The Annual Goby Round-Up and Asian Carp Corral was held June 16-20, 2008. The event was organized by the La Crosse National Fish and Wildlife Conservation Office with the main objectives of monitoring relative abundance of round goby and determining distribution of the invasive silver and bighead carp. In addition, 155 fish health samples were collected by Eric Leis, La Crosse Fish Health Center and volunteers Jeff Johnson, Mike Leis and Jim Robinett. The samples were taken from round goby and bighead, silver, grass, and common carp from the Illinois River near Starved Rock as part of the Service's National Wild Fish Health Survey.

The fish health samples were screened for presence of serious bacterial



*Eric Leis (center, La Crosse Fish Health Center, U.S. Fish & Wildlife Service), Eric's father, Mike Leis (far left) and Jim Robinett (Shedd Aquarium) take time to pose for a picture during the annual goby round up and Asian carp corral. (USFWS Photo)*



*Aquareovirus: These EPC (Epithelioma papulosum cyprini) cells are infected with Aquareovirus. Notice the giant cells (arrows), characteristic of the cytopathic effect of Aquareoviruses. (Photo by Sarah Bauer)*

and viral pathogens like Spring Viremia of Carp Virus (SVCv) and Viral Hemorrhagic Septicemia Virus (VHSV). The only pathogen detected was an aquareovirus from silver carp. Aquareoviruses are a diverse group of aquatic viruses which infect many species of fish and shellfish. They are generally non-pathogenic; however, some strains have been associated with large mortalities. The bighead, grass, and common carp were negative for viruses.

The crew was interviewed by reporters from the Milwaukee Journal Sentinel and the LaSalle/

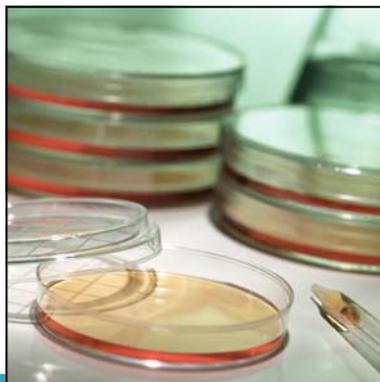
Peru News Tribune. (by Eric Leis)

## La Crosse Fish Health Center Staff Conduct Fish Health Inspections



*Terry Ott (left) taking samples to determine the presence of *Renibacterium salmoninarum* in brook trout at Jordan River National Fish Hatchery. Ryan Katona (right) taking bacterial samples from channel catfish at the Genoa National Fish Hatchery. (Photos by Sarah Bauer)*

In July, the La Crosse Fish Health Center conducted the annual fish health inspection of fish at the Lac Du Flambeau Tribal Fish Hatchery. Eric Leis and Sarah Bauer traveled to Lac Du Flambeau, WI to sample the rainbow trout raised at the hatchery. Viral, bacterial and parasite samples were taken from the fish for detection of certifiable fish pathogens according to the AFS Blue Book/Inspection Manual procedures. These rainbow trout are to be stocked in a pond on the hatchery grounds to provide angling opportunities for visitors.



In August, warm, cool and coldwater fish at the Genoa National Fish Hatchery were sampled by Ryan Katona, Eric Leis, Lucas Purnell, and Sarah Bauer. Eleven different species of fish were sampled for certifiable fish pathogens.

Jordan River National Fish Hatchery was also inspected in August. Terry Ott and Sarah Bauer traveled to Elmira, MI to inspect the hatchery's lake trout and the wild trout from the water supply. The results of these inspections are still pending. (by Sarah Bauer)

## LEADERSHIP IN SCIENCE AND TECHNOLOGY

### **Corey Puzach Gives Presentation at the Lake Superior Technical Committee Meeting**



Corey Puzach of the La Crosse Fish Health Center presented data on pathogens of cisco from lakes Superior, Huron and Michigan at the Lake Superior Technical Committee meeting in Houghton, MI on July 30, 2008. To date, Corey has sampled over 400 ciscoes and is completing parasite identifications and data analyses. This work will fulfill Corey's research requirement for a master's degree in Aquatic Sciences at the University of Wisconsin-La Crosse. There is very little known about the viral, bacterial, and parasitic pathogens of this important Great Lakes forage fish. Meeting attendees were from federal, state, tribal, and providential resource agencies. (by Corey Puzach)

### **Terry Ott attends the 14<sup>th</sup> Annual Drug Approval Coordination Workshop**

Terry Ott attended the 14<sup>th</sup> Annual Drug Approval Coordination Workshop on July 29-31, 2008 in Bozeman, Montana. The workshop was attended by over 80 participants representing FDA/CVM, USGS, USFWS, state resource agencies, university researchers, pharmaceutical company representative, and private aquaculture groups.

The meeting attendees were provided updates on recent drug approvals, technical presentations on fish health management, status of "project drugs" and much more. Most significant topics included: The approval by FDA for use of Terramycin 200 and Aquaflor by hatchery staff. Terramycin is prescribed to control ulcer disease, furunculosis, hemorrhagic septicemia and pseudomonas disease in freshwater salmonids. It is also used to mark skeletal tissues in pacific salmon and to control pseudomonas disease and hemorrhagic septicemia in channel catfish. Aquaflor has been approved to control coldwater disease and furun



culosis in freshwater salmonids and columnaris and enteric septicemia in channel catfish.

Other drugs and chemicals discussed during the workshop included 35% Perox-Aide, Halamid, Cairox, Triangle Brand Copper Sulfate, AQUI-S, Aquamycin 100, Minn-Fin, Slice, Reward, Paracide-F and Parasite-S. AQUI-S has been discontinued by the AADAP office from the drug approval process due to a chemical component found in AQUI-S called isoeugenol. This chemical has been found to be a suspect carcinogen. This will significantly delay the approval of a safe and effective sedative with zero withdrawal time.

The AADAP would also like to expand the labels on the following drugs: (1) Terramycin 200 to control columnaris in all freshwater salmonids and motile aeromonad disease in cool and warmwater fin fish, and to mark skeletal tissue in all salmonids and (2) Aquaflor to control *Streptococcus iniae* on hybrid striped bass and tilapia, and to control columnaris and motile aeromonad disease on all cool and warmwater fishes.

The 15<sup>th</sup> Annual Drug Approval Coordination Workshop will be held in Little Rock, Arkansas during June 2009. I would highly recommend for any one interested in aquaculture drugs to attend one of these annual workshops. (by Terry Ott)

