Genoa National Fish Hatchery News and Notes

Making Lasting Connections

Genoa National Fish Hatchery and Southern Bluffs Elementary School are well on their way to helping twenty-eight fifth graders enjoy the benefits of nature for a lifetime. These lucky students attended their first of three all-day sessions in the Outdoor Classroom, a place where nature is the teacher, wetlands are the guide, and plants, animals, and imagination become playmates.

Sampling for invertebrates.

Learning about ecosystems, the water cycle, and the ecology of aquatic organisms while touching, feeling, and experiencing them first-hand make the lessons stick. The School District's science curriculum for fifth graders includes these lessons, so making it stick with students is important. Exploring nature and discovering answers to questions on their own not only gives these kids a better understanding of science, it also benefits physical fitness, emotional health, development of social skills, problem solving strategies, spatial awareness, and increases the chances that they will acquire a love for nature that can increase overall health and well-being beyond adulthood.

Time for exploration.

Beginning in February 2007, the Service has made "Connecting People with Nature" one of its Six Top Priorities. This priority was established to help ensure the future of conservation and to help people enjoy the benefits of nature for themselves, both of which contribute to the Mission of the Service "To conserve, enhance, and protect fish, wildlife, plants, and their habitats for the benefit of the American People". The benefits are two-fold.

Microoganism study.

Teaching conservation ethics in nature ensures the health of America's natural resources as well as the health of American people. Also, healthy Americans that have grown up with a strong connection to nature are likely to make substantial, positive contributions to nature conservation in America. Susan Houlihan of Southern Bluffs Elementary and Darla Wenger and Jenny Walker Bailey of Genoa NFH have worked hard to incorporate nature experience into the curriculum for fifth graders so that these students may excel in their classes and enjoy the other benefits nature can provide. Introducing these children to nature over a series of visits will help them connect with nature on a personal level that will stay with them as they grow into adults. Helping to create these connections is not just important for creating future conservationists in natural resource fields. It is also important for the future of conservation in new areas such as architecture, engineering, social psychology, art, law, medicine, and science.

Getting down in the weeds.

As these children grow into young adult professionals, it is hoped that with nature close to their hearts, they will become healthy, successful individuals that contribute to nature in ways that are only imagined today.

- ***Jenny Walker Bailey&***
- ***Darla Wenger***

Let's Go Outside!

Children & Nature

Genoa National Fish Hatchery Talks Environmental Issues with Waukon Junior High

Genoa National Fish Hatchery gives dozen of hatchery tours and school presentations each year. The fact that many of these schools keep returning yearly and requesting speakers is a testimony to the value of the conservation message being provided and to the mission of the Fish and Wildlife Service. In October, Genoa NFH was asked for the third straight semester to be a part of Waukon Junior High School's environmental studies unit for 200+ 7th and 8th graders. This semester's presentation covered hazardous chemicals and pharmaceuticals in America's surface waters. The presentations began by Genoa's mussel biologist entering the room in a heavy duty SCUBA dry suit and full facemask.

This sign warns about fish consumption for the Tittabawassee River in Michigan.

The dry suit helped introduce hazardous chemical like dioxins that pollute many streams preventing recreational uses such as swimming and fish consumption. The second half of the presentation covered the increasing amounts of prescription and over the counter pharmaceuticals being found in our surface waters.

Mussel Biologist Tony Brady giving a presentation to the 7th and 8th graders at Waukon Middle School

Information provided by the La Crosse National Fish and Wildlife Conservation Office was presented showing how increasing levels of pharmaceuticals are affecting fish and mussel reproduction by increasing hormone levels that cause male fish to produce eggs, and causing the premature release of larval mussels called glochidia. Information about the pharmaceutical collection center in La Crosse was provided to spread the word in Iowa about the collection center which is located within a reasonable drive for the people in Waukon. The take home message for the students was that simple actions that we do everyday can impact our environment, both positively and negatively.

- Tony Brady

Delegates from Local Wisconsin Fisheries Offices Travel to China as Part of Conservation Exchange

Pam Thiel of the LaCrosse (WI) National Fish and Wildlife Conservation Office and Doug Aloisi of the Genoa (WI) National Fish Hatchery traveled to China in October as part of a Conservation Exchange forum between the U.S. Fish and Wildlife Service (FWS) and the People's Republic of China. The recent visit was to exchange methods and strategies for aquatic resource conservation in the face of continuing stresses currently on both China and the United States aquatic resources. Nine FWS fisheries program delegates from across the U.S. attended the meetings and site visits, which were planned and scheduled by the Chinese Ministry of Agriculture and the USFWS division of International Affairs.

Chinese and American delegates exchange information in wrap up meeting in Beijing China

Included in the trip were presentations to the Chinese Academy of Fisheries Science, and site visits followed the Yangtze River visiting the Chinese Sturgeon Institute and the Laboratory of Freshwater Biodiversity Conservation, as well as visiting established nature reserves along the Yangtze River. Included was a presentation on the

conservation status of rare and Endangered fishes such as Chinese Sturgeon, Chinese sucker, Chinese paddlefish, and Dabry's sturgeon. The Chinese Academy of Fisheries Science also presented the history and development of Conservation Law in China.

Three Gorges Lock and Dam located on the Yangtze River, China.

A reciprocal visit is being planned with Chinese scientists visiting key fisheries stations and recovery locations in the United States in April of 2009. This visit will further conservation strategies in aquatic systems impacted by dams and other effects of development. The LaCrosse area fisheries offices were able to share their thoughts and experiences involving sturgeon restoration and big river systems. Through these visits it is hoped to be able to share experiences and challenges that are faced daily in the fields of aquatic resource conservation. Learning from each others experiences, it is hoped that we can save some of the world's most unique and Endangered aquatic species such as the Yangtze River Dolphin, Chinese Sturgeon and Yangtze finless porpoise.

- Doug Aloisi

Thirty Families Relocated from Isle Royale National Park

Much like Christopher Columbus sailing across the Atlantic to discover the new world, Glen Miller (Ashland FRO), Anna Varian (Northern Michigan University), and Nick Starzl (Genoa NFH) ventured out on that special Columbus day across Lake Superior to bring hope for a population of genetically distinct brook trout called "Coasters" which inhabit the Tobin Harbor region of Isle Royale. The U.S. Fish & Wildlife Service's Iron River NFH, Genoa NFH, La Crosse Fish Health Lab, and the Ashland National Fish and Wildlife Conservation Office actively work with the staff of the Isle Royale National Park Service in order to conserve this rare strain of fish.

Service staff spawning the Tobin Harbor coasters during their spawning run to collect new gametes from the wild population.

The once common coaster brook trout is now scarce throughout most of its historical range because of over-fishing and loss of habitat. In order to restore the coaster to the north shore of Lake Superior, the service maintains a broodstock at the Iron River NFH which is derived from Isle Royale coaster offspring. This broodstock supplies both Iron River NFH and the Genoa NFH with all of its brook trout eggs for their annual production goals. Stocking "wild" fish, or fish that represent the founding population, is key to a successful program. To achieve this, service staff periodically captures the Tobin Harbor coasters during their spawning run to collect new gametes from the wild population. During this years trip to the island, 17 females and 28 males were selected from the over 100 captured brook trout to create 30 individual families. The small 150 egg pairings were then disinfected and transferred to the Genoa NFH for incubation. If all goes well, the families will develop and hatch over the next month, and biannually undergo disease testing throughout the production cycle. If cleared, the lot of fish will be folded into the existing Tobin Harbor broodstock at Iron River NFH, and eventually produce families of their own.

- Nick Starzl

For additional information about any accomplishment report please contact Genoa National Fish Hatchery at 608-689-2605

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