Volume 4

Connecting People with Nature ~ Lets Go Outside! By Katie Goodwin, Visitor Services Manager

Think back to when you were a child. Think about what your top 10 favorite

things were to do. I bet a number of them had to do with the outdoors, I hope they still do. Now think of a child in your life—son, daughter, grandchild, or neighbor. What are their top 10 favorite things to do? Do any of them involve being outside? Recent studies have shown a direct connection with children spending less time outdoors and health problems. Obesity rates in children from 6-11 have increased fourfold since 1971. Type 2 diabetes and prescription medicines for Attention Deficit Hyperactivity Disorder (ADHD) have snowballed affecting more and more children each year.

Outdoor activity helps children develop cognitive and creative skills as well as get their bodies moving. That helps improve their motor skills, physical fitness and

ability to deal with stress. Outdoor play has helped alleviate symptoms of ADHD and the need for medications in children.

Last Child in the Woods—Saving Our Children from Nature-Deficit Disorder, written by Richard Louv, has sparked an international movement trying to reverse the trend of children always being inside. Natural resource agencies like the U.S. Fish & Wildlife Service, physicians, schools, and private organizations have all stepped forward to encourage people, especially children, to reconnect with nature

and spend time outdoors. Why children? They are our future. We care about their

> health and mental well-being, as well as the earth that they will be in charge of very soon. All we have to do is step out the door with them and watch their health and imaginations soar.

Organized sports are wonderful in northern Wisconsin. What a place to learn teamwork and be active! Beyond scheduled activities, children need down time, unstructured time to just be a kid. They are able to discover things and make connections to the places they live in and visit. Children use all of their senses to take in their environment around them and learn from it. What better place to take in smells, sights, sounds and textures than the outdoors?

Start simple. Step outside and ask the child with you to look up. Figure out what the clouds look like. Stay up a little late and watch for shooting stars. Leave a bug box or a small butterfly net out and see what they do with it. Pack a picnic lunch on your next trip. Children will natu-

rally ask questions, but you don't need to know all of the answers! If you can tell a youngster that it is a bird, beetle, fly, butterfly, etc. that is a great start. If their excitement grows and they want to find out more, help them seek out resources to help you both.

Your local library, nature center or wildlife refuge are there to help. Whittlesey Creek and the Northern Great Lakes Visitor Center also have activities to help get you started.

Children are our future and the possibilities are endless! Children look to adults for guidance. Why not take the time to share an interest of yours with someone you care about?



Watershed Happenings

A new culvert was installed under Wickstrom Road on Little Whittlesey Creek. The culvert replacement will allow fish to travel up Little Whittlesey Creek to spawn. The project was a joint effort of the U. S. Fish and Wildlife Service, the Town of Barksdale, and County Land & Water Conservation Department.

5,000 trees were planted this past summer on Refuge and private lands to help restore lowland, upland, and riparian forests.

Dates to Know:

Earth Day: March 22nd

Spring starts March 20th

Arbor Day: April 25th

Chequamegon Bay Birding & Nature Festival: May 16-18

Kids Fishing Day: June 7th

Superior Celebration: August 9th







keep alive his inborn sense of wonder, he needs the companionship of at least one adult who can share it. rediscovering with him the joy, excitement and mystery of the world we live in. ~ Rachel Carson



Refuge Sets Precedent With Invasive Free Zone

By Darienne McNamara, Biological Technician

Have you heard? Whittlesey Creek NWR is working with the Northern Great Lakes Visitor Center and private landowners to create an Invasive Free Zone (IFZ). To our knowledge, this IFZ is the first of its kind! It began in 2005 when we started mapping all of the invasive plants within the IFZ boundary. In 2006, we began the arduous task of treating invasive species using a variety of tools and methods. Once the invasive species have been controlled, we initiate the process of restoration by planting native trees and shrubs.

To date, we have nearly finished mapping invasive plants in the IFZ, and we expect to finish this phase in 2008. Treatment began in 2006 and will be ongoing for several years. Our most troublesome species include reed canarygrass, buckthorn, and honeysuckle. For information about these species and others, visit the Wisconsin DNR website at *dnr.wi.gov/invasives/plants.htm*.



Thanks to the help of *many* volunteers, partners, students, and a local contractor, we made tremendous progress in 2007. We managed to treat over 100 acres of invasive plants – more than any other year at the Refuge! In addition, we planted roughly 5,000 trees and shrubs to restore wildlife habitat. Unfortunately, record drought took its toll on the small seedlings and many did not survive. However, Refuge staff will continue their treatment and restoration efforts through 2008 and beyond.

Our efforts, along with the help of our valuable volunteers and partners, have not gone unnoticed. This year, federal agencies and others are taking the Invasive Free Zone *Challenge* by creating new IFZ's modeled after the pilot project taking place at the Refuge. The Chequamegon –Nicolet National Forest has established the Moquah Barrens as an Invasive Free Zone, and several national forests across the nation have followed suit.

Do you have invasive species on your land that you plan to eradicate? Would you be willing to volunteer a few days this summer to help control invasive species at the Refuge? If you answered "yes" to either of these questions, you are eligible for the *Weed Warrior Award!* This award is for the person who spends the most time treating invasive plants on their property or on public lands. Prizes will be awarded at the Superior Celebration in August, 2008. For more information, contact Darienne McNamara at 685-2648 or visit us at the Northern Great Lakes Visitor Center.

Stream Monitoring Update

By Mike Mlynarek, Fish & Wildlife Biologist

During the past two summers, Youth Conservation Corps crews have spent many days collecting data throughout the Whittlesey Creek watershed. The information gathered is meant to provide a "fish eye" perspective of stream habitat. Stream characteristics that are important to fish are measured and documented. Observations include water temperature, stream width and depth, logs and wood in the channel, percent of sand, gravel and rock in the streambed, and undercut banks or overhanging vegetation. These features are important for spawning and nursery habitat, protection from floods and predators, food and shelter, etc.

Data collected from 18 stream segments allowed us to rate the habitat at those locations as *excellent*, *good*, *fair* or *poor*. From the "fish eye" perspective, only one site was classified as excellent habitat, with a nearly equal split of good and fair ratings for the remainder. We plan to reevaluate the same segments approximately every five years to track stream habitat changes. Annual fish population surveys will also help us monitor fish habitat changes over

time. As projects are initiated to reduce flooding and erosion, we will be able to document how and where stream habitat is changing and improving. Current and anticipated projects include culvert replacements, roadside ditch stabilization, reforestation and wetland restoration.

Thanks to the Youth Conservation Corps crews for their hard work and dedication. Special thanks to all the landowners in the Whittlesey Creek watershed who have graciously allowed us stream access by way of their property! Without landowner cooperation, what we do would not be possible.



Archery Deer Hunting Update

Due to pending litigation the U.S. Fish & Wildlife Service has still been unable to open an archery season on the refuge. Please contact refuge staff with questions.

The Next Generation

By Scott Stipetich, YCC Crew Leader 2007

The average summer job for many high school teens consists of a gas station clerk, department store employee, or a fast food server. However, this past summer five high school students from the local area signed up for a position as members of a Youth Conservation Corp. (YCC) crew working on the refuge and out of the Northern Great Lakes Visitor Center, a position much different than the average summer job.

The first day of work started out with five shy faces who communicated with a head nod here or there. Pulling teeth would be a good analogy for getting these teens to talk to one another. In contrast, at the end of the summer the table had turned and it was getting the students to stop talking to one another that was a bigger problem. The experiences and activities accomplished by this team brought them together, teaching them skills needed to succeed in life today.

The crew accomplished a vast amount of tasks during their 10 weeks of work. On extremely hot days you could find the YCC crew "playing" in Whittlesey Creek. What they were really doing was monitoring the creek by taking numerous measurements to determine what type of habitat there was for the coaster brook trout, which are slowly being reintroduced to their native creek.

The crew also found time to complete many odds and ends that included pulling old fence wire; treating invasive plants like tansy, purple loosestrife, and spotted knapweed; planting, watering, and installing shelters for tree seedlings; trail construction; and other tasks that the refuge and visitor center staff needed assistance with.

Besides all the hard work the YCC crew accomplished, they found time to engage in many educational trips to local areas. Such trips included a tour of the Aquaculture Center in Red Cliff, kayaking on Lake Superior, fish-



shocking on Whittlesey Creek, a visit to an archeological dig near Drummond, a cruise tour of the Apostle Islands, and visiting Crex Meadows Wildlife Area in Grantsburg, WI. These trips helped educate the crew about the magnificent area that they live in and provided them an opportunity to see job occupations that may interest them for the future.

As the leader for the crew, I was able to watch individual crew members interact with one another. It was interesting to see members with different backgrounds intermingling with each other trying to accomplish a task as effective and efficient as possible. Each member brought different skills to the group which helped them work well. They were a great group of students to work with and made my summer enjoyable.

Working for a YCC is a summer job that leaves a lasting impression on a member. The friendships and skills learned from working with the YCC are lifelong. It is a summer that they will not forget, plus they got paid too!

New Faces at Whittlesey Creek NWR



Staff from left to right: Scott Stipetich, STEP student; Darienne McNamara, Biological Technician; Katie Goodwin, Visitor Services Manager; Tom Kerr, Refuge Manager; Mike Mlynarek, Fish & Wildlife Biologist

In the beginning of January we wished Pam Dryer good luck as she took a new position as Habitat Branch Chief for Lake Superior with the U.S. Fish & Wildlife Service. Tom Kerr is now the Refuge Manager. He works at the St. Croix Wetland Man-

agement District Office in New Richmond, WI. Even though he is primarily stationed at St. Croix, don't be surprised when you see him at the Visitor Center or the Refuge. Katie Goodwin and Mike Mlynarek are still here with offices at the Northern Great Lakes Visitor Center. Darienne McNamara has been at the Refuge for two years working on the Invasive Free Zone and numerous other tasks. Scott Stipetich was a great YCC crew leader in 2007, and the Refuge was able to extend his employment to a STEP (Student Temporary Employment Program) appointment for 2008. Scott will be with us again next summer helping with refuge projects.

A Culvert Dilemma

By Mike Mlynarek, Fish & Wildlife Biologist

Many people have never considered the culverts they drive over everyday. Culverts allow water to continue flowing towards rivers and lakes and they allow us to

continue down the road. However, old and failing or improperly installed culverts can be a safety hazard and can also cause major problems for streams and fish.

Culverts that are too short require steep road banks that easily erode in the stream. When they are misaligned with the stream channel, water coming out of the culvert hits the outside bend of the stream with tremendous force, increasing erosion. Stream banks at inlet and outlet ends should be protected with rock or with "wing dams" so that water is funneled into the culvert. If this isn't done, water can erode fill soil along side the culvert, resulting in what is known as piping. Eroded material often smothers fish eggs and covers up gravel spawning areas. Beside causing erosion, piping can produce safety hazards as the road subsides due to loss of fill soil. Additionally, culverts need to be big enough to handle all of the water during heavy runoff so that water doesn't become backed up. Backed up water can lead to complete roadway and culvert washouts, resulting in road closures.

Water coming out of perched culverts drops, rather than flows, into the stream and migrating fish may not be able to leap into the culvert. Culverts that are installed at too steep of an angle result in fast flowing water that prevents migrating fish from swimming upstream. Both of these problems are known as fish passage barriers. Fish on either side of the culvert

are isolated and can't cross breed. Migrating fish can't make it to upstream spawning and nursery sites. Also, culverts should be imbedded, meaning that the bottom of the culvert is slightly lower than the bottom of the streambed. Doing so allows the culvert to accumulate a thin layer of sand and gravel, material that's the same as the streambed.

US Fish & Wildlife Service and partners including private landowners, the Town of Barksdale, Trout Unlimited, County Land and Water Conservation Departments, USDA-Natural Resources Conservation Service and Wisconsin DNR have been working together to replace numerous problem culverts in the Whittlesey Creek watershed. Two have been replaced so far, and four are scheduled for replacement in 2008. Three are on high-quality feeder creeks at the upper end of the watershed. The fourth is the large culvert at the bend on Cozy Corner Rd. These four are the last fish passage barrier culverts in the Whittlesey Creek watershed!

These cooperative projects are funded through various grants, with additional funding from the Fish America Foundation to replace the Cozy Corner culvert in 2008.

Landowners and the Town typically contribute labor, materials and equipment, and incur minimal out-ofpocket expenses. Thanks to all who willingly assisted!



Perched North Fork culvert at the bend on Cozy Corner Road. Piping has occurred long the bottom and sides.



Newly installed culvert on Little Whittlesey Creek.

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Our headquarters are located in the Northern Great Lakes Visitor Center



What About Those Coaster Brook Trout?

By Henry Quinlan, Fishery Biologist, Ashland National Fish and Wildlife Conservation Office

In 2001, WIDNR and USFWS began studying the fish community of Whittlesey Creek with an eye toward experimental re-introduction of migratory or lake dwelling (coaster) brook trout. Since that time, we have had fantastic support from volunteer contributors such as the Wild Rivers Chapter of Trout Unlimited, the Forest Service, and Northland College.

After a few years of fish survey data collection, the agencies began stocking Isle Royale coaster strains of brook trout reared at the Iron River and Genoa National Fish Hatcheries. Thus far, we have stocked 100,000 eyed-eggs, 40,000 spring fingerlings, 4,000 yearlings and 175 adults. This winter we are stocking the third cycle of 50,000 eyed-eggs.

We alternate life stages stocked for several reasons. First, we don't know which life stage may be most successful at surviving life in the stream, leaving the river, growing in Lake Superior, returning to Whittlesey Creek to spawn, and producing young. This is our ultimate goal – naturally reproducing migratory fish.

Second, we want to compare the survival of different life stages to determine if one is more successful (greater numbers over time) than others. By alternating the life stage stocked on a two-year cycle, we anticipate being able to track particular year classes (ages) over time. This information will be useful to fishery biologists and managers for development of stocking plans for other streams around Lake Superior.

Our annual fish surveys have shown a significant in-

crease in the abundance of brook trout in Whittle-sey Creek since stocking began. Over the 3-year pre-stocking period from 2001-2003, the average number of brook trout captured was 50. While during 2004-2006, the average number captured is 570. The number captured during our surveys in a given year is influenced by the life stage stocked, the number stocked, and the environmental conditions that fish encounter throughout the spring and summer (ex. high water from rapid snow melt or heavy rain).

Thus far, we do not have evidence of stocked or wild brook trout leaving Whittlesey Creek for the open waters of Chequamegon Bay and Lake Superior. This is critical to the development of a migratory run.

In 2007, partly as a result of stocking adult fish, we did handle six brook trout greater than 10 inches in length! Now, that may not seem real big to some folks, but in a small stream like the North Fork Whittlesey Creek which is only about 6 feet wide, this was exciting to see. These larger fish should be better able to compete with other species for limited spawning substrate and produce more eggs than smaller brook trout. Both may help increase natural production of brook trout.

Thank you to....

All of the partners that make this project happen!

- Watershed Landowners
- Volunteers
- Trout Unlimited
- Wisconsin DNR
- Iron River National Fish Hatchery
- Ashland National Fish & Wildlife Conservation Office
- Whittlesey Creek National Wildlife Refuge





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Our Headquarters are located in the Northern Great Lakes Visitor Center (715) 685-9983 or nglvc.org

Celebrate 75 years of Duck Stamps & 50 years of the Small Wetlands Program!

Waterfowl hunters have bought Federal Duck Stamps for years in order to hunt. Did you know that 98 cents out of every dollar generated by sales of Federal Duck Stamps goes directly to protecting wetland habitat? Thank you hunters! Did you know anyone can buy Duck Stamps? This is the easier

wetland habitat? Thank you hunters! Did you know anyone can buy Duck Stamps? This is the easiest way for people who enjoys the outdoors to give back to conservation. Duck Stamps are available at your local post office or online at www.duckstamp.com. The 75th anniversary stamp for 2008-2009 will be available July 1, 2008. This year is also the 50th anniversary of the Small Wetlands Program, which uses duck stamp funds to purchase wetlands across the upper Midwest. Buy a Duck Stamp and do your part to conserve vital habitat right here in the Midwest.

Chequamegon Bay Birding & Nature Festival, May 16-18, 2008



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