

Big Creek Advisor

A newsletter dedicated to the Big Creek Watershed Project



Cover Crops - Practical Strategies for Your Farm

The Soil And Water Conservation Society is sponsoring a day and a half long cover crop conference targeted to farmers and cover crop service providers. It will be held on December 13 & 14th, 2012 at the Prairie Meadows Hotel and Conference Center in Altoona. Registration fee is \$49.

On behalf of the Big Creek Lake Watershed Project the Boone and Polk Soil & Water Conservation Districts are offering **\$25** towards the registration fee for each of the first **10** Big Creek Lake Watershed residents that register for the conference! All you need to do is contact Sean or Zach.

Be sure to act quickly because this is a limited time offer!

Go to www.swcs.org/covers12 for more information about the event.

Project Showcase: Broadbase Terraces/Basins

One Big Creek landowner was tired of seeing his good top soil ending up in Big Creek so he decided to do something about it. The landowner had an existing waterway and some terraces but they were not functioning properly. Runoff was bypassing the waterway and his intakes were getting silted in.



He heard about the Big Creek Lake Watershed Project and the 75% cost share so he stopped by the NRCS office. After some survey and design work, construction of the broadbase terraces was started in July, 2012 and was completed in August, 2012. By making these improvements the landowner is reducing 26 tons of sediment and 44 pounds of Phosphorus from entering Big Creek per year.

Are your crops out? Now is the perfect time to set up a site visit with one of your watershed coordinators. Get a plan in place for spring of 2013! Call Sean or Zach today!

New Big Creek Fish Barrier is Finished!

The Iowa Department of Natural Resources (IDNR) Boone Fisheries Management team has been monitoring the muskie and walleye populations at Big Creek since 2006. Sampling results indicate that the muskie population dropped significantly in 2007. The IDNR speculates that this was due to the outmigration of muskie over the spillway. In 2007, intense spring rains and high discharges coincided with the muskie spawning period (April). Adult muskie are often found in shallow water, searching for quality spawning habitat this time of year. It's likely that these fish could have been swept away with the strong current at spillway while "cruising" the shoreline.

More evidence of fish outmigration was discovered when two adult walleye that were tagged at Big Creek Lake in 2010 were caught by anglers later that summer in the Des Moines River system. One tagged fish passed over the Big Creek spillway and also through the Saylorville Dam, before it was caught in the Saylorville tailrace. The other tagged fish passed over the Big Creek spillway and then migrated nearly 100 miles up the Des Moines River before it was caught below a dam in Fort Dodge.

Fish outmigration from lakes is quite common; however it can reduce angling opportunities and create difficulties for fisheries managers, particularly with stocking recommendations. Fortunately, the IDNR discovered a similar issue and a potential solution in Illinois. The Illinois Department of Natural Resources Fisheries staff observed significant muskie outmigration at Kinkaid Lake in the mid 90's. In response, they installed a horizontal bar style fish barrier in 1998 to prevent adult muskie from passing over the spillway. Illinois Fisheries staff is pleased with the barrier and they have been able to reduce the muskie stocking density at Kinkaid Lake by nearly 30%.

The IDNR Fisheries & Parks staff partnered with the U.S. Army Corps of Engineers at Saylorville, Central Iowa Anglers, Recycled Fish and other volunteers to install a similar fish barrier at the Big Creek spillway in July. The barrier is 29" tall and consists of 1 5/8" bars mounted in a horizontal fashion, with a 2" gap between each bar. The barrier was designed to keep adult muskie from swimming over the spillway, however it should prevent larger walleye (>17") from leaving the system as well. Test section results and personal communication with Illinois Fisheries staff indicate that vegetation from the lake should pass through the barrier, but IDNR staff will routinely monitor and clean the barrier.



Spillway after a heavy rain



Installation



Finished fish barrier

**For more information visit www.bigcreeklake.org
or contact**

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