

Kettle Creek Watershed Association News

Enhance
Preserve
Monitor
Protect



Volume VIII, Issue 1

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REVIEW OF 11 YEARS OF ASSESSMENTS AND STREAM IMPROVEMENTS



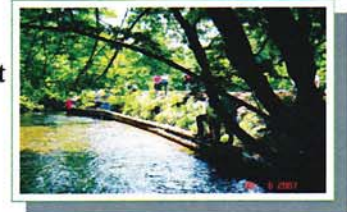
In 1998 and 1999 the original members of the Kettle Creek Watershed Association speculated on the reasons for the lack of holdover stocked trout in the Kettle Creek. They observed that the water was often too warm during the summer months; that the main stem of Kettle was too wide and too shallow; and that there was an

obvious lack of suitable fish habitat throughout the watershed. They concluded that the fish needed deeper, cooler pools and overhead cover to survive when the waters become shallow in the summer.

The Kettle was chosen as Trout Unlimited's third Home Rivers Initiative, and with the help of TU and many other federal and state agencies, watershed staff and volunteers began to assess the habitat, aquatic life and water quality of our watershed. From 1999 through 2007, Amy Wolfe, our then watershed coordinator and full time employee of Trout Unlimited, led teams of assessors from Lock Haven University, interns from Mansfield University, students from Penn State and local volunteers in the comprehensive assessment of more than fifty sites on Kettle and its tributaries. Water and air temperatures were measured, aquatic insects and fish were counted and categorized by species, the amount of oxygen and alkalinity in the water was measured and the pH was recorded. In 2002, Larson Design Group (LDG), a consulting firm, surveyed the entire main stem of Kettle from the Bush Dam upstream to Oleana, and a mile upstream of each of the five main tributaries (Trout Run, Hammersley Fork, Cross Fork, Little Kettle and Kettle upstream of Oleana). This resulted in the Upper Kettle Creek Habitat Conservation Plan which documented in detail the types of problems that needed addressed. That study was followed in 2005 by the Tributaries Addendum, also done by LDG. The results of the assessment in the addendum detailed the condition of each of the five tributaries plus added Beaverdam Run to the report.

LDG recommendations and our (progress to date) are as follows: Very High Priority:

-Establishment of Headwaters Sediment Management and Proper Functioning Channel Geometry.



Basically what this recommendation entails is extensive stream channel redesign using wooden and stone structures to narrow and deepen the channels and to create meanders in the streams at low flow periods. *(The six tributaries in our watershed have over 66 miles of streams that are categorized by the Fish and Boat Commission as fishable waters. Using the assessment data as a guide, that means that there are, on average, at least 6 sites per mile or 396 sites in the tributaries that need work in bank erosion control, canopy addition (more shade) or water channel narrowing. Further, this recommendation implies that when all of projects in the tributaries are completed, the tributaries work would partially resolve these same issues in the main stem of Kettle.*

LDG estimated cost of Mapping, Designing, Permitting and Construction of a 5 mile reach of Cross Fork at over a half million dollars).



(To date, we have constructed structures on six sites on less than three miles of Cross Fork Creek between Yochum and Windfall Runs. The only other construction on a tributary was completed last year in Upper Kettle. Since the work on these projects was done by Habitat Management personnel from the PFBC, Forestry personnel and local volunteers, the work was done at a fraction of the estimated LDG cost. A major funding request to do extensive work on the reach between Yochum and Windfall Runs was rejected in 2005 due to design concerns.)

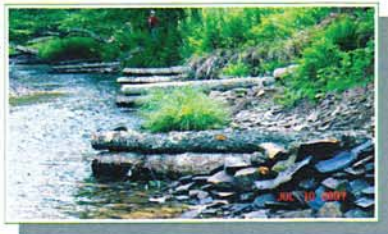
High Priorities:



1. Plant native vegetation such as willows, sycamore, white pine and alder on the main stem of Kettle Creek to improve riparian canopy and root mass. (To date, we have

planted native shrubs and trees on more than 25 sites in the watershed, most of which have been in the main stem).

2. Construct structures on Kettle from the Ole Bull Dam to the downstream park limit to provide natural channel design (narrow, deepen and develop a meander) to the water. Plant native trees and bushes to enhance canopy cover. (This project has been discussed, but has not as yet been designed or funded)



3. Promote Public Outreach and Education. Provide information to landowners and visitors about how the streams function and how their actions can impact the stream channel and its habitat. Show how mowing the lawn to the waters edge can promote erosion, or how planting certain low plants along the stream can secure the bank, but not hinder the view of the stream. (Here we have done considerable work though the efforts of Amy Wolfe and Amidea Daniels in providing

Landowner Workshops, professional presentations, public meetings, magazine and newspaper articles, Newsletters, the *Watershed Landowner Handbook*, the webpage, TU Trout-In-The-Classroom programs at Bucktail Elementary School and constructing signs showing watershed boundaries and giving credit to donors at former construction sites. These efforts will continue).

Moderate Priorities:

1. Bridge Maintenance and Reconstruction.

Establish a working relationship with Penn DOT and DCNR parties responsible for bridge maintenance and construction. Work with them to develop channel management at the bridge sites. (To date we have worked with Forestry personnel to encourage them to construct culverts that disperse the water over non-

channeled ground to prevent the run-off from developing a channel to the stream. Attempts to fund a study to make recommendations for channel management above and at the Road Hollow Bridge have not been successful nor has it been supported by local supervisors and some landowners. The concern is that channeling would lead to ice and wood jams and put the bridge in jeopardy).

2. Additional Water Quality Monitoring. (Over the years, many efforts have taken place in the watershed to monitor water quality, temperature, pH, alkalinity and turbidity. Under normal stream flows, the pH has generally been between 7.2 and 7.4, the water quality is "Exceptional" by PFBC standards, especially in the upper reaches, and there is little turbidity [muddy water] except after a large rainstorm. The amount of oxygen in the water is directly related to the temperature of the water [more if cooler]. While periodic monitoring of the water is important to check for changes, we think that this area has been well covered).

3. Dirt and Gravel Road/Drainage Improvement. This recommendation is that when dirt roads are reconditioned with limestone gravel and new culverts are constructed, that they design the water flow to disperse the waters rather than have them direct a large amount of water and sediment into the streams in the watershed. (This work is ongoing with Forestry and Township personnel as Dirt and Gravel Roads programs are funded through the state program. Many of the roads, primarily in Potter County have already been addressed).

STREAM IMPROVEMENT PROJECTS

COMPLETED 1998 - 2008



1998 - Upstream of Bunnell Bridge- Constructed two stream diversions made of logs and stone to provide fish cover and deepen channel. Work was supervised by PFBC, with volunteer help and help from inmates at the Karthus Boot Camp.

1999 - - Kerlin Property- Four J-Hooks constructed by US Fish and Wildlife Service (USFWS) using large limestone boulders with help from local volunteers. The project resolved a serious bank erosion problem.

2000 - - Deb's Place (old) — Construction of two cross vanes, one J-Hook and contouring of the bank which

was seriously eroding. Construction was supervised by the USFWS using 2-4 ton boulders. Local volunteers assisted.

2000 - - Downtown Germania — Construction of Jack Dams using hemlock logs and oak planks and strong backs of the volunteers. The work was supervised by PFBC.



2000 - Oden property on Delayed Harvest Fly Fishing Only section — Construction of cross vanes, root Wads, mudsill and extensive planting. Supervised by USFWS and PFBC and staffed with local volunteers.

2002 -Below Bunnell Bridge — Kettle Creek TU project supervised by PFBC constructing a large mud sill and several log vanes with small boulder and slate rock support. Volunteer help by TU members and Boot Camp “volunteers”.

2002 - - Headgate — Large project covering ½ mile of stream: supervised by the USFWS with assistance from PFBC, Penn DOT, DEP and the Forestry Department. The project involved restoring a wetland, contouring of stream banks, and a series of large boulder cross vanes, a mud sill, and helping to prevent erosion of the roadway. This area has become one of the most popular fishing reaches on Kettle Creek.

2005 - Heivly Property (Kettle Creek TU Project). Bank erosion was abated and large pine trees saved by a series of log vanes constructed under the supervision of the PFBC. Local and Boot Camp volunteers assisted.

2006 - Bear Trap Lodge on Cross Fork Stream— Mudsill constructed on 90 degree bend in stream. Supervised by PFBC and staffed with local volunteers.

2007 –Five sites on Cross Fork were completed to avoid further bank erosion and narrow the stream. Three are upstream of Bear Trap Lodge, one at the Kiski Camp, and one in the “Meadow”. Projects were

supervised by the PFBC with help from volunteers from local TU Chapters, the “Trail Blazers” from Potter County, Boot Camp guys, and many local volunteers. Work involved construction of log vanes and mud sills.

2007 –Kissel property at Twin Ponds - Log vanes and a very large mudsill were constructed under supervision of PFBC with help from a host of volunteers.

2008 -Upper Kettle near Slider’s Branch — Log cross-vanes and single log vanes constructed by work crews from two different Forestry Districts under the supervision of the PFBC

Some of these projects took a few people a few hours to complete, while others took several years to plan, design, permit, construct and plant. Coordination with multiple agencies of the federal, state and local governments was required, and there were often delays and problems to overcome. While the list of projects already completed is impressive, many more need to be planned and completed, especially in the tributaries, if we are to accomplish our priority recommendations.

The bottom line is that our assessors have agreed that if we can plant vegetation and build structures in the headwater streams that narrow, deepen, and provide stream meanders and to shade to our waters, the Kettle Creek Watershed will be cooler, and will provide better habitat to our fish. Our original board members had it right. The waters in our watershed get too warm during most summers because the stream is too wide and too shallow, and they are in need of better habitat. Past and future efforts address these issues.

What have we accomplished? – As far as we know, we have done no harm to the stream. Those stream reaches where we have done work have better fish habitat than pre-construction, and the streams in those reaches are narrower and deeper. We have tested the water extensively and we know that the quality is very good, if not exceptional, but warms in the main stem of Kettle during most summers making the temperature of the water inhospitable for trout. We have raised the level of concern for the watershed among local residents, campers and other visitors to the watershed. We have partnered with state, federal and local agencies to further our goals.

What was accomplished in 2009?

(1) **-Kid's Area at Cross Fork.** The Pa Fish and Boat Commission and local volunteers built five stone deflectors within log framework in the stream above and below the bridge to provide better fish habitat for the kid 痴. A generous memorial gift from the family and friends of Denny Toth, supplemented funding from the PFBC and the KCWA. Work was completed this summer. Check our webpage at www.kettlecreek.org for pictures.

(2) **-Kettle above Slider's Branch.** -. Work will continue with more log structures on several sites. Work is coordinated by Jason Detar, Fisheries Biologist from the PFBC.

(3) The PFBC will also be working on sites in the **Trout Run** stream over the next few years with funding from the Eastern Brook Trout Joint Venture funds.

(4) **Planting** day is Saturday May 1, 2010. Meet at the Forestry Bldg. at Cross Fork at 8:30 if you can help.

What is ahead?

2010 -2014 — Grant money is being sought to fund projects that would

- (1) complete the work in Cross Fork Creek;
- (2) design and construct structures to narrow and deepen Kettle Creek between the dam at Ole Bull and the downstream end of the park;
- (3) do extensive planting on Kettle particularly on the lateral (inside) bends on the stream; and
- (4) plant vegetation and build structures on Upper Kettle from area below Sliders Bridge to Oleana
- (5) and to assess the stream reaches upstream and adjacent to the bridges at the mouths of Cross Fork Creek and Hammersley Fork, and at Road Hollow Bridge and the Leidy Bridge.

What can you do to help?

- (1). Join, rejoin or invite a friend to join the Kettle Creek Watershed Association and support us financially.
- (2). Consider becoming a KCWA board member. If you have skills in grant writing, accounting, membership solicitations, web page maintenance, pick and shovel work, tree planting or a concern for the future of the watershed, we could use your help.
- (3) stay up-to-date with KCWA activities by visiting our webpage at www.kettlecreek.org.

This article was written by Dick Sodergren, President of the of the KCWA. If you need more information or want to join in our efforts on the stream, contact Dick at (814) 355-9798 or email at ktlcrik@aol.com.

KCWA Board

President – Richard Sodergren

Vice President – John Larson

Secretary – Dave Flack

Treasurer – Mark Chambers

Acid Mine Drainage Committee Chair – Dean Mertz

Fish Habitat Committee Chair – Richard Sodergren

Membership Chair – Mary Hirst

Additional Board Members: Jack Bruno, Dave Cardellino, Nancy Dingman, Joe Letcher, Dave McIntyre, Rick Rose, Jim Toth, Rich Wykoff

KCWA Contacts: Dick Sodergren – email: ktlcrik@aol.com

Amy Wolfe, Director of Abandoned Mine Programs at Trout Unlimited (for specific information about Kettle Creek AMD projects) email: awolfe@tu.org or call (570)726-3118.

KCWA Website: <http://www.kettlecreek.org>

Kettle Creek Mine Pool Stabilized to Avoid Potential Blowout Disaster

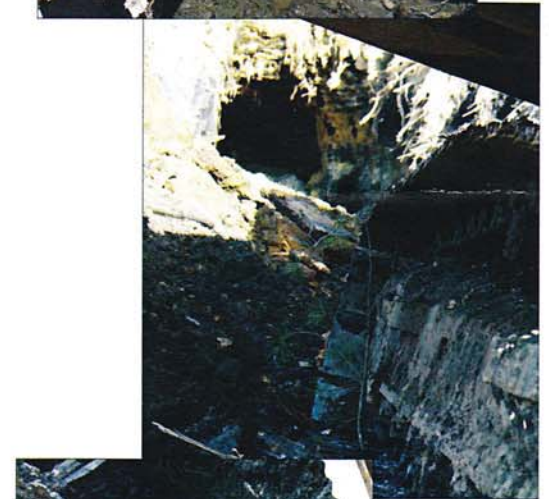


The Kettle Creek Watershed Association, in partnership with Trout Unlimited, completed a mine pool stabilization project on an abandoned deep mine in western Clinton County, preventing a mine blowout that could have released millions of gallons of acid mine drainage to Kettle Creek and ultimately into the West Branch Susquehanna River.

The mine, located in Bitumen, Pa., has been abandoned for nearly a hundred years and the mine entries have been collapsed for decades. The collapsed mine entries caused water levels to increase in the mine that could have, under the right conditions, resulted in a significant blowout of highly polluted water that would flow directly into Kettle Creek. By installing an underground water collection system, the water does not build up in the mine.

The project is located on state forest land in Noyes Township and was funded by grants from the state's Growing Greener Grant Program, the Richard King Mellon Foundation and the Foundation for Pennsylvania Watersheds. The project cost just over \$200,000, including evaluation of the mine pool conditions, the installation of the new drainage system and the weekly monitoring that will continue for the next six months to ensure the project's success.

Please contact Amy Wolfe, Trout Unlimited's Eastern Abandoned Mine Program Director, for more information about this project or other abandoned mine projects in the Kettle Creek watershed. Amy can be reached at awolfe@tu.org or (570) 748-4901.





Dean Mertz (left), Kettle Creek Watershed Association Board Member, and Derek Stevenson (right) with Smith Lumber are carrying 10-inch pipe that will be used to collect the polluted water flowing from the deep mine.



Glimpse into the Past - view looking into the deep mine when the collapsed mine entry was opened (was later backfilled and closed); can see that the roof and pillars are still in relatively good condition; Kettle Creek Coal Company started mining here in the late 1880's until they went out business with the stock market crash in 1929.



Ted Weaver (left) and Neil Wolfe (middle) of Hedin Environmental, and Bob Fitterling (right) from the DCNR Bureau of Forestry, at the collection trench where pipe is installed to directly collect the polluted flow of water from the deep mine.



Onlookers - "Manny" Probst (left) and "Bud" Dowling (right), both of Renovo, watch the construction activities and get a peek at history.

VOLUNTEER PROFILE

The Maggots - submitted by Kevin McCormick

As for most groups and organizations, the origins can be traced to friends and/or functions for the greater good, and that are linked by common interest. In the case of the Maggots, it is both. The group origin can be traced to a man that had a love for fishing and enjoying the great outdoors. The man you will get to know is family to some of us, but is considered by all of us who knew him, as a best friend.

In 1980, the official year we began, a group of boys from Ohio were invited to go fishing in Pennsylvania and ended up on the banks of the Kettle Creek. This was not by chance, but instead by a seasoned outdoorsman who knew the area as a local. This man knew the beauty the area provided, but most of all, knew that the fishing was the best in the state. The man we know as Uncle Con or Con Novak by others.

Uncle Con has taught the majority of us the finer points of fishing a stream, but most of all, that we must enjoy this area carefully to maintain its natural beauty. The other thing he taught us is that our lives are too short and we have to live them to the fullest.

That year was a beginning for a group of boys who now have their sons carrying our same enthusiasm to return to Kettle Creek as we did when this began 29 years ago. My son said to me last year on our trip back home, "Dad, we only have 361 days till next year's camp!" Our group began with the original four-Uncle Con, Ken Skala, Lee Mercer and Kevin McCormick. The second year saw the addition of Dan Fry and Jim McClintock. Since then, we have spawned to seventeen. The additions have not been all sons, but also close friends. The group was known originally as the Boys from Ohio, whom Mer. Hood had affectionately referred to us, but has changed to The Maggots for who those who know us refer affectionately to us now.

A new candidate is of 100% acceptance by each member, meaning all members must approve. The

subsequent years a candidate returns are also voted on and they must ask a different member for sponsorship each subsequent year for a total of ten years. After ten years of attendance, the candidate is nominated for a vote and, if he carries a unanimous vote, he is then made a Maggot. For the offspring of a Maggot, they can begin coming to camp at the age of 12, and must also seek sponsorship for ten years and must be 21 years of age to be voted in as a Maggot.

Anyone who knows this group of guys and has a concept of what it means to have a group of great friends is envious. This same diverse group of guys has endured the many hardship and exuberant experiences that life has given, and has been there for each other like brothers.

The Cross Fork area has not changed much over the years and that is a good thing, The fishing continues to improve with the work that the many groups of sportsmen and sportswomen have done over the years. We know we must also contribute in the preservation of the Kettle Creek so our children, grand children and future generations can continue this great tradition.



The Kettle Creek Watershed Association would like to thank the Maggots for their volunteer time during our last two May planting days. They make short work of the tasks at hand, and make the day fun. Their contributions to our banquet have brought funding to the KCWA. We appreciate them cutting into precious fishing and bonding time to fellowship with us for a few hours and help us achieve our goals for the Kettle Creek.

**Kettle Creek Watershed Association
P.O. Box 317
Cross Fork, PA 17729**

Address Correction Requested

Join us ! May 1, 2010

Event #1: Spring Planting

Time: 8:30 A.M.

Place: Forestry Building at Cross Fork

Event #2:

Annual Members Meeting and Dinner

Time: 6:00 P.M.

**Place: Kettle Creek Hose Company
in Cross Fork**

Dinner: Covered Dish

(Meat and Beverage will be provided)

Election of Board Members

Short Presentations

Chinese Auction Fundraiser

50-50

**KCWA Quarterly Membership
Meeting Dates**

2010 Meeting Dates and Times:

February 6, 2010 at 9:30 A.M.

May 1, 2010 at 6 P.M.

August 7, 2010 at 9:30 A.M.

November 6, 2010 at 9:30 A.M.

Membership meetings are held every three months on the first Saturday of the month at the Kettle Creek Hose Co. in Cross Fork. Check the website at www.kettlecreek.org for more information or changes regarding meeting dates and times.

Financial support for the newsletter is provided by the Dominion Foundation which is dedicated to the economic, physical, and social health of the communities served by the Dominion Companies.

This grant was administered by the Western Pennsylvania Conservancy in commitment to its core mission of conserving Pennsylvania's diverse ecosystems through science-based strategy, leadership, and collaboration.