Success! Brook Trout found Below Middle Branch Passive Treatment

After more than a decade of work by Trout Unlimited to repair damage from highly acidic, abandoned coal mine drainage in the lower Kettle Creek watershed, native brook trout have returned to a once-dead section of Middle Branch, a tributary to Twomile Run.

"Improving water quality so that brook trout, Pennsylvania's state fish, can once again thrive is a major milestone," said Amy Wolfe, director of Trout Unlimited's Eastern Abandoned Mine Program. "The 13 years of our hard work is paying off, thanks to thousands of hours spent by the dedicated volunteers of the Kettle Creek Watershed Association (KWCA) who have helped make this happen."

Trout Unlimited and the Clinton County Conservation District conducted a fish survey on the stream and found that brook trout are now living in the once-biologically dead section of Middle Branch. A healthy population of brook trout have always existed in Middle Branch above the mine drainage.

The stream has also seen an increase in stonefly and caddisfly activity in the restored section, another sign of healthy water quality. The improved water quality in the Middle Branch is a result of the passive treatment system that the KCWA and TU rehabilitated in 2007.

The KCWA and TU continue to work in partnership on additional restoration projects within the Twomile Run subwatershed to address mine drainage impacts. This milestone is proof that those years of hard work are finally paying off.
Yearly Report from the KCWA Board Chair and President

How time flies! The Kettle Creek Watershed Association has been in existence since 1997! What began in controversy; not favored by some local people; has become an effective ongoing organization. We were one of the first such groups formed in the state, and we continue to be a leader among watershed associations.

The KCWA was supported in 1998 by National Trout Unlimited (TU) when they designated Kettle Creek as their third Home Rivers Project. Then in 1999, TU supplied us with Amy (Gottesfeld) Wolfe as the watershed director for the next eight years. Other TU staff, such as Amanda Daniel, also worked with the KCWA from 2004-2006. A great deal of progress occurred during those years. In the past three years we have continued mostly due to the efforts of volunteers, help from Board members and local camp and landowners. The acid mine drainage problem in the lower watershed is in the process of being resolved under the leadership of Amy Wolfe and her staff from TU. John Larson and Dean Mertz of our board continue a strong relationship with Amy and have been working with her to complete the acid mine drainage abatement efforts in Twomile Run and the lower Kettle.

The habitat issues in and along the stream continue to be the focus of the board. We have obtained funds from private, state, and federal agencies to complete over 20 specific stream habitat projects in the watershed. Funds obtained from our members have been used to supplement the construction costs. All of these sites and others are where our “Planting Team” led by Dave Cardellino and others, have planted trees, shrubs and grass to hopefully maintain the contours of the stream bank especially where reconstruction has occurred. This past spring, his team of volunteers planted over 3,500 trees and shrubs at the confluence of Kettle Creek and Little Kettle Creek in Oleona, along with several sites on the main stem of Kettle near Cross Fork.

This past summer, the KCWA supported Danny Flack, 10th grader at Bucktail High School in Renovo, in attending the Pennsylvania Conservation and Fly Fishing Camp held each June on the Yellow Breeches Stream in Allenberry, near Boiling Springs, PA. Also, for the fifth year in a row, we are financially supporting the “Trout-In-The Classroom” program held at the Bucktail schools for fifth and ninth graders.

Our membership group is headed by Mary Hirst and assisted by Rich Wykoff. Mary and Rich prepare the mailings. We had a 26% increase in membership from 2009 to 2010. Members donate between $5 and $300 with an average of about $25. We would like to see our membership (169 members) increase in 2011. Invite a friend or fellow camp member to join. Members are mostly from PA, but also hail from NY, CT, MD, FL, OH, MI, WI, DE, VA, and MO. We appreciate our member’s efforts very much, and donations to our organization are tax deductible. Other than some minor administrative costs, all of the membership money goes towards our stream projects.

Our Fish Habitat Committee has been expanded and divided into small working groups with each having a prospective stream project to work on. They need to obtain funding, prepare a design, get permits and secure landowner permission. Each group will then acquire a contractor to build the stream devices after all necessary steps have been accomplished.
Projects are planned for this year on the Kettle mainstem near Twin Ponds, and on Trout Run. If all parts fall into place, projects in Upper Kettle, and up stream of Leidy Bridge will be completed over the next 2 - 4 years.

Over the past 13 years, three or four summers have been relatively cool. We had enough rain in those years to maintain a water temperature lower than 70 degrees in the main stem of Kettle Creek. The other years the water temperature warmed beyond the tolerance of the trout in most of the main stem and the fish moved out or died. Since we can’t control the weather, our only hope of having the water in the main stem maintain a temperature lower than 70 is to narrow and deepen the channels. With overhead cover, places for fish to hide and cooler water temperatures, we stand a chance of having Kettle Creek sustain trout at least in the upper reaches. That is our goal. Planting trees that would one day provide shade is essential.

Will the watershed association be around for another 13 years? Who knows, but I doubt that all of the work will be done by the year 2024. We should continue the efforts until the entire watershed has exceptional water quality that is capable of sustaining trout year around. This effort is as difficult as eating an elephant. How do you do that?? ---One bite at a time!

Volunteers install fish habitat structures along Kettle Creek. Photo provided by A. Wolfe

Photos provided by R. Wykoff
Member Profile – John Larson

Most of our members know John Larson. He has been with the KCWA since 1998, most of that time as its president, and most loyal volunteer.

John had a long career with the Consolidated Gas Company (now called Dominion) from 1954 through 1986, retiring as superintendent of the Greensburg plant. He and his wife Phyllis built and now live in a beautiful log home along Kettle Creek near the mouth of Hammersley Fork.

John worked with fellow board member, Dean Mertz and TU employee Amy Wolfe as they defined the problems and set out to resolve the acid and metal issues that resulted in the polluted water in the lower Kettle Creek watershed. Those streams were devoid of life due to abandoned deep and strip mines in the area. Much progress has been made as that work goes forward today.

John also led the board as design, funding, and construction of more than 20 fish habitat project sites in the watershed were accomplished.

John is a “no nonsense” demeanor and has kept the board on the right track. If he thinks an idea is bad, believe me he will tell you straight out. He turns 81 years old this March, and shows no signs of slowing down in his efforts to make the Kettle Creek Watershed second to none. John continues his membership as its vice president and vice chair of the board. Thanks John, for all of your guidance, leadership and hundreds of hours of dedicated service.

Abandoned Mine Drainage Projects Update

Swamp Area Passive Treatment System
The permitting phase for this project was recently completed with all permits now in place for construction. The next task is contractor selection. It is anticipated that project construction will begin late this spring or early summer. Completion of this project, in combination with the other completed treatment systems and the Robbins Hollow 10A/10B passive treatment system (read below), will restore Twomile Run downstream to where Huling Branch enters.

Robbins Hollow 10A/10B Passive Treatment System
Recent grant awards from the DEP Growing Greener Grant Program and National Fish Wildlife Foundation have now fully funded the design, permitting, and construction for this project. This system will address the remaining mine drainage flows that pollute Robbins Hollow downstream of the Robbins Hollow Headwaters Treatment System Complex. If all goes well with the design and permitting phases, it is possible construction could occur in tandem or immediately following the construction of the Swamp Area project.

Area 7 Reclamation and Remining
Based on the recommendations in the Twomile Run Watershed AMD Remediation Master Plan, approximately 100 acres of abandoned strip mines (also referred to as the “Three-Fingered Devil”) in the Huling Branch and part of the Middle Branch drainages, are slated for reclamation. The project is scheduled to be put out to bid by the DCNR Bureau of Forestry within the next month.

Monitoring
Biological and water quality monitoring continues on all the streams in the Twomile Run subwatershed. This helps to document the return of aquatic life, such as native brook trout, and water quality improvements as a result of the remediation activities that have been completed over the past decade and serves as baseline data for tracking improvements from future projects.

For more information on all AMD projects in the Kettle Creek watershed, please contact Amy Wolfe, Trout Unlimited’s Eastern Abandoned Mine Program Director (awolfe@tu.org or 570.786.9562).
Come Join Us at Our Next Tree Planting

Planting seedling bushes and trees can be one of the most rewarding activities you can do for yourself and future generations. Imagine the area you are sowing in twenty to thirty years... the banks of the nearby stream are stabilized by mature bushes and tree roots...fish take cover under the protruding roots of the trees at the water's edge as you approach, and that fallen tree that clear water runs over hides a lunker trout just waiting for your fly to hit the surface of the pool. Large hemlocks and sycamores help to keep the water cold even in the summer. We forget that cold clean water in streams is provided in part by the trees and bushes on the banks, but by planting trees and bushes, this resource is protected for years to come.

You can see for yourself what a past planting has accomplished by visiting a section of Kettle Creek below the Headgate camp. This site is north of Cross Fork along RT 144. In this area trees and bushes have been planted by KCWA, TU, beginning after the streambank stabilization and fish habitat project was completed in 2002. The project was strategically placed near an “S” curve on Kettle Creek. As these trees mature, they work to stabilize the banks. Currently, in-stream structures work to maintain the bank, but as time goes on the trees will grow to take on this role.

Each year KCWA’s annual membership meeting is held on the first Saturday in May. We start the day with our tree planting, and we could use your help. KCWA will provide most of the tools you will need, as well as a boxed lunch and drinks. The trees and bushes will be separated and ready to plant. A lesson on proper planting technique will be given. Predetermined areas along Kettle Creek and its tributaries have been mapped out for this year’s plantings.

If you would like to help, meet at the Kettle Creek Hose Company parking lot in Cross Fork at 8:30 AM on Saturday, May 7, 2011. Please bring gloves and a carpenter’s cloth bag to hold fertilizer pellets as you plant. Also if you feel comfortable crossing the stream to reach the other side, bring appropriate wading apparel. Children are welcome to come help (please plan on providing adult supervision for your children).

If you have any question or would like other details please contact Dave Cardellino at (570) 923-0778.

Abandoned Mine Drainage Education

Trout Unlimited and the West Branch Susquehanna Restoration Coalition (of which the KCWA is a member organization) have been working on an AMD education series. These events aim to educate middle and high school students on the history of coal mining, formation of AMD, impacts of AMD both environmental and economic, and treatment of AMD. One of the major goals of these education programs is to encourage participation in local watershed activities by students.

TU has identified the five schools where the events will take place. There will be a classroom activity time and field trip for each of the participating schools. Long term monitoring supplies will be provided as well.

One of the participating schools is Bucktail Area Middle/High School in Renovo. On December 6, 8, and 10 in 2010, TU staff presented an educational program to more than 70 students in grades 8 and 9. Rich Wykoff and Dave Cardellino of the KCWA traveled to the school on the 10th to give a short presentation on what the watershed association does in the area.

A field trip is being planned for these students on May 6, 2011. The students will be taken to a passive treatment system in the Kettle Creek watershed, as well as to both an AMD impacted stream and a clean, healthy stream so they may investigate the differences. If you are interested in coming along on the field trip to help with the program and give the students an idea of what you do as a KCWA member, as well as to help with the event, please contact Rebecca Holler (rholler@tu.org or 570-748-4901) prior to April 4th to allow for planning.
Important Dates to Remember

Saturday, April 16, 2011 — Opening Day of Trout Season for Kettle Creek. More information can be found at www.fish.state.pa.us.com.

Friday, May 6, 2011 — Bucktail Middle School AMD Field Trip. If interested in assisting, please contact Rebecca Holler (rholler@tu.org or 570.748.4901)

Saturday, May 7, 2011 — Annual Kettle Creek Tree Planting. Meet at 8:30 AM in the Kettle Creek Hose Company parking lot in Cross Fork.

Saturday, May 7, 2011 — Annual KCWA Public Meeting and Potluck Dinner. Dinner begins at 6:00 PM, to be followed with presentations and updates on the KCWA’s projects. Please bring a covered dish to share.

Saturday, August 2, 2011 — KCWA Membership Meeting. Meeting will begin at 9:30 AM at Deb’s Cross Fork Inn in Cross Fork.

Saturday, November 5, 2011 — KCWA Membership Meeting. Meeting will begin at 9:30 AM at Deb’s Cross Fork Inn in Cross Fork.

For more details on these and other events, or changes regarding meeting dates and times, please visit www.kettlecreek.org.