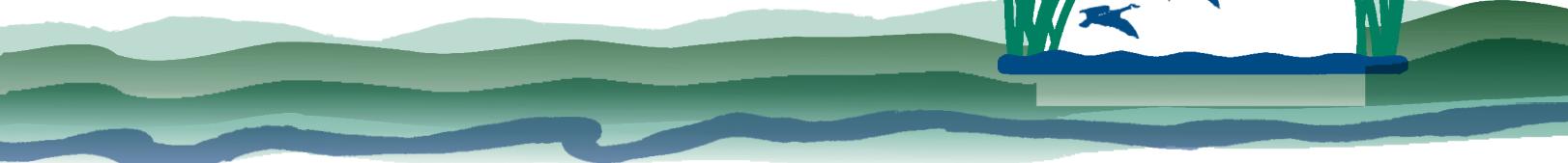




P.O. Box 1071
Mt. Pleasant, PA 15666

From the Ridge to the River



Spring 2011

2010 – A year of growth for JCWA

2010 was a year of renewal, growth and expansion for the Jacobs Creek Watershed Association. Our many watershed improvement projects kept our technical people busy and new members and partners contributed innovative and exciting ideas to propel us into 2011 and beyond. Here are some highlights of our busy year:

JCWA completed three significant watershed improvement projects in 2010:

Greenlick Dam – JCWA's original Growing Greener grant proposed to restore 325 feet of the eroded northeastern shoreline of Greenlick Dam. Due to our partnership with the Pa. Fish and Boat Commission and frugal project management, JCWA was able to restore two eroded shorelines. In the end, over 800 feet of shoreline was stabilized, two wetland areas were created and valuable fish habitat was built within the dam. The stabilized shorelines will prevent an estimated 20 tons of sediment from entering the lake every year.

Stauffer Run – JCWA completed a design for a passive mine drainage treatment system to treat acidic discharges from abandoned mines that render Stauffer Run lifeless. In 2011, JCWA will apply for a grant to construct these treatment facilities.

Scottdale Library Rain Garden/Reading Garden – JCWA partnered with Scottdale Library and Scottdale Borough to construct a beautiful reading garden that actually helps prevent erosion in Jacobs Creek. Rain water from the library's roof drains is used to water the rain garden flowers. The excess water is combined with rain water absorbed by the reading garden's porous pavement and held in an underground collection area. This collected rain water is released gradually to the stream, preventing heavy rain flows from eroding Jacobs Creek.



Bob Shreck and Frank Romeo remove tires from Greenlick Lake during JCWA's Fall Clean-up event

JCWA and Partners' Upcoming Events

March 22: JCWA Board meeting - 6:30 pm at the Scottdale Borough Building. Please come and share your ideas – there will be light refreshments and a door prize!

March 29: Gravel Driveways & Unpaved Lanes Workshop - 7:00 pm to 8:00 pm at the Westmoreland Conservation District. Register by March 25th – cost is \$5.00. Call 724-837-5271 or visit www.wcdpa.com.

April 2: Pick up trees from Fayette County Conservation District's Spring Tree Sale @ the Fayette County Fairgrounds. 9:00 am to 2:00 pm.

April 9: Mountain Watershed Association's Clean Water Banquet & Silent Auction – 5:00 pm at Brady's Restaurant. Call 724-455-4200 or visit www.mtwatershed.com.

April 17: Cache-In-Trash-Out Event at Greenlick Lake at Jacobs Creek Park. Clean the park and geocache, if you'd like. Meet at the main pavilion at 1:30 pm. Bags, gloves, refreshments and trash provided. Call 724-887-8220, ext. 3 or visit www.jacobscreekwatershed.org events page.

April 30: Mountain Watershed Association's Annual Wildflower walk - 9:00 am at the Indian Creek Gorge. Call 724-455-4200 or visit www.mtwatershed.com.

May 24: Fayette County Children's Water Festival at the Fayette County Fairgrounds. Call 724-437-2914 or visit www.fayettecd.org.

June 18: JCWA's summer clean-up - site to be announced. Visit www.jacobscreekwatershed.org events page or call 724-887-8220, ext. 3.

September 16: 10th Annual Riffle Run Golf Scramble at Donegal Highlands Golf Course. Call 724-887-8220, ext. 3 or visit www.jacobscreekwatershed.org for more details.



Visit JCWA on facebook

JCWA History Corner

First Suspension Bridge in the United States

In a quiet, unmarked area along a well-travelled road in the heart of the Jacobs Creek Watershed is the location of a little known historical first – the site of the first iron suspension bridge built in the United States. If you have ever travelled on Mt. Pleasant Road on your way to the Countryside Shopping Plaza, you've likely passed a place commonly known as the "Iron Bridge" area. Few people realize that this is the site where Judge James Finley built the first chain link, level-deck suspension bridge.

James Finley (1756-1828) is commonly known as the Father of the Modern Suspension Bridge, even though he had no formal engineering background. Judge Finley lived in Uniontown and served as a Justice of the Peace, County Commissioner and Judge of the Court of Common Pleas. The late 1700's was a time of great growth and development in the newly formed United States. As America grew, so did the need for more roads and stronger bridges. Judge Finley saw this need and developed a design for a suspension bridge that would be stronger and more stable, to accommodate horse and wagon travel. He improved on the age old "swinging suspension bridge" by designing his bridge with a rigid, level deck which prevented the surface from sagging as heavy wagons passed. His design was the first to include wrought iron chains to suspend the bridge, making it much stronger than wooden bridges. Judge Finley was anxious to test his new design, but where would the bridge be placed? Two bordering counties joined together to help with that decision.

Portions of the Fayette County and Westmoreland County border are formed by Jacobs Creek. In 1800, the main road between Uniontown in Fayette County and Greensburg in Westmoreland County had no bridge to cross Jacobs Creek. People had to wait on the banks to be ferried across the stream. When Fayette and Westmoreland counties agreed to jointly pay for the cost of constructing a bridge across Jacobs Creek, they chose Judge Finley to build his newly designed suspension bridge. The bridge was built in 1801 for a cost of \$600.00. It spanned 70 feet and was 12 ½ feet wide. The bridge performed well until it was demolished in 1833 and replaced by a timber bridge. To this day, it is regarded as the link between the ancient rope bridges and the modern day suspension bridges, like the Golden Gate Bridge in San Francisco.

An historical marker commemorating James Finley's notable suspension bridge stands in front of the Uniontown Library on Jefferson Street in Uniontown. No signs or markers are at the actual site of the bridge, possibly because there is still uncertainty to the exact location of the bridge. Most believe the historic bridge was located along Jacobs Creek directly beneath the bridge that carries Rt. 119 over the Iron Bridge area. Unfortunately, this unmarked historic site has become an area for illegal dumping. This past June, tires, shingles, mattresses, a couch and enough litter to fill an entire roll-off box were removed from the site during JCWA's summer clean-up. The area will be closed for construction this summer, but JCWA will make this an annual summer clean-up site in the future. If you'd like to help JCWA clean up a notable area in the watershed, please join us in the summer of 2012 to help clean up a site that deserves recognition, not littering.

This newsletter was funded by a grant from the Richard King Mellon Foundation.

JCWA plans on making 2011 another productive year by increasing our community outreach events, conducting more stream monitoring and completing more watershed projects. The projects scheduled to begin in 2011 include:

Scottdale Storm Water Retrofit - JCWA will renovate the parking lot across the street from the Scottdale Library bordering Spring Street, Mulberry Street and Pioneer Way. Best Management Practices such as porous pavement, storm water collection and grass strips with trees and plants will help prevent storm water runoff from surging into Jacobs Creek and causing flooding and additional stream bank erosion.

Brush Run Restoration – JCWA will work with two farmers to implement agricultural Best Management Practices including runoff control, fencing 4,200 feet of stream and creating four livestock crossings. This project will also repair and stabilize 2,500 feet of steeply eroded stream banks along Brush Run.

Little Sherrick Run – JCWA will partner with the Scottdale Firemen's Club to install storm water measures in its large parking lot, collecting heavy rain flows that currently cause stream erosion. JCWA will also work to address erosion in a nearby field and conduct residential stream bank restorations.

Shupe Run Restoration – JCWA will work with Mt. Pleasant Borough and Mt. Pleasant Township to stabilize 2,000 feet of severely eroded stream bank along Shupe Run as it flows through Willows Park.

JCWA was recently notified that we are the recipients of two 2011 Growing Greener grants – a \$69,100 grant to design an acid mine drainage treatment system for an unnamed tributary of Jacobs Creek along Rt. 119 and a \$41,700 grant to restore over 1,000 feet of eroded stream bank in Upper Tyrone Township. These additional projects should keep us busy well into 2012 and 2013! JCWA thanks our supporters and members for your ideas and your help in 2010 – we could not have made watershed improvements, cleaned dumping sites and made the public aware of the importance and beauty of our watershed without all of your support!



Geocaching – A high-tech way to enjoy Jacobs Creek Watershed



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Fayette County Conservation District

Rob Cronauer
Westmoreland Conservation District

Mission

Jacobs Creek Watershed Association is a non-profit organization dedicated to the conservation of our natural resources, rehabilitation of the creek and watershed, environmental education and recreation.

For More Information

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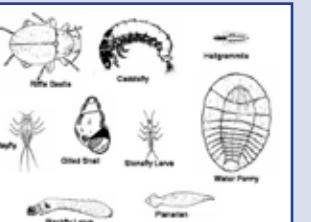
Watershed Words: Macroinvertebrates

Have you ever looked into a stream and wondered if anything is lying under the pebbles and leaves on the bottom? Next time, turn over a rock and see what happens. You'll likely find a little creature or two – these are called macroinvertebrates. Macroinvertebrates, or macros, are aquatic animals that are visible to the naked eye (macro) and have no backbone (invertebrate). They live under the rocks, leaves and sediment at the bottom of our streams and ponds. They are an important part of the aquatic food chain, as they eat dead and decaying plants and animals in the water and then are themselves eaten by fish. Examples of macros are crayfish, snails, worms and immature forms of aquatic insects, such as stone flies and mayflies. Some macros, such as water striders, live all of their lives in the water. Others, such as dragonflies, spend their early stages in the water but live outside of the water as adults.

Macros are an important indicator of how clean the water is and are used as a gage of water quality. Macros can't move very far so they are unable to flee when the water is disturbed or when pollutants are present. This immobility and their relatively long lifespan helps make them reliable indicators of water quality. What happens to the water directly affects the macros. Some macros are very tolerant of pollution but others are less-tolerant and require clean, undisturbed water to survive. The number, type and diversity of macros found in a stream are used to determine water quality.

To assess the quality of a stream or pond, water samples are collected for chemical analysis, a physical survey on the stream is done and then macroinvertebrates are collected. To collect macros, samplers turn over rocks and disturb the stream bottom, using nets to scoop up the creatures that are dislodged. They then identify the number of creatures found, the number of different species found and whether the species found are tolerant or intolerant of pollution. When samplers find few species and many pollution-tolerant macros, it's an indicator that water quality is impaired. When scientists find many species and lots of macros that can only live in clean, undisturbed water, it's a good indication that water quality is good.

Macroinvertebrates – a big word for very important little creatures.



Submitted by Frank Romeo, JCWA board member

Jacobs Creek Tour Bus

Highlighting interesting places in our watershed

The Confluence of Jacobs Creek and the Yough - Big Industry, A Miracle and Old Man River

After flowing through the area known locally as Crick Hills, Jacobs Creek flattens out and widens as it makes its way to the Youghiogheny River. Standing on the bridge that crosses Jacobs Creek near the confluence, it is hard to imagine that only 200 years ago, Native Americans would have paddled dugout canoes into the Yough from Jacobs Creek.

Looking south from the creek, the massive 160 feet tall 1582 feet long Banning Railroad Trestle crosses the Youghiogheny River. From this trestle, railroad tracks head for Crick Hills and link the Jacobs Creek Watershed to mainline railroads and the rest of America. The Banning Trestle was built as part of a man's dream to complete the first transcontinental railway. Jay Gould and his son George would go broke pursuing the endeavor but this impressive K-Truss style trestle, a rare design in Pennsylvania, stands as a reminder to their efforts.

Looking north from the mouth of the creek, the St. Nicholas Orthodox Catholic Church at the outskirts of the town of Jacobs Creek is clearly visible. Across the river is the town known as Van Meter and the site of the former Darr coal mine. In the days of the Darr Mine, the town of Jacobs Creek was connected to Van Meter and the Darr mine by a cable car, the Jacobs Creek Sky Ferry. For only a nickel, a person could be shuttled over the Youghiogheny River by the Sky Ferry in a basket.

To understand the significance of the Darr mine, we need to go back in time to when immigrant workers tolerated deplorable safety conditions to earn a meager living in the coalmines of America. The lack of safety standards in the mines came to a tragic climax in December of 1907, a month that came to be known as the "Dreaded Month". Thousands of people across the country lost their lives in coalmining accidents during this month. On December 19th of this terrible month, 240 men went to work at the Darr Mine, but only one came home alive. This is the worst coalmining accident in Pennsylvanian history and the fourth worst in all of the U.S. history. The Darr Mine Disaster was also the last large-scale mine disaster in the United States, after which tougher laws were enacted and mining safety standards were raised.

The accident would have been much worse if it had not been for the Carpatho-Rusyn Feastday of St. Nicholas. On the day of the disaster, over 200 men of the Orthodox Catholic faith would take a rare unpaid day off from work to attend church services. The Intercession of St. Nicholas at Darr Mine is considered a modern day miracle by many Orthodox Christians. People from around the world came to Jacobs Creek to remember the centennial of the miracle in 2007 and visit the St. Nicholas Church built by unemployed and laid-off coalminers in 1960. They would also visit the nearby Olive Branch Cemetery where a mass grave of some 71 poor and unidentified miners bodies are buried.

Looking across the river from Jacobs Creek today, the gob piles, or spoils, from the old mines are clearly visible. The Darr mine closed for a time after the disaster of 1907, but was reopened as the Banning Number 3 mine from 1910 until it closed for good in 1919. Also, across the river is the nearly complete Great Allegheny Passage, a continuous bike trail from Washington D.C. to Pittsburgh PA that is built upon abandoned railroad beds.

If you would like to see this historic area for yourself, follow Rt. 981 to Smithton PA. Travel south off of Rt. 981 onto Second Street, towards the Jones Brewery Company. Second Street becomes State Route 3029; follow this road south along the river for about a mile to the town of Jacobs Creek. The St. Nicholas Church is obvious as you leave the south end of town. The confluence of Jacobs Creek and the Youghiogheny River is a short distance south of the Church. The Banning Trestle is another quarter mile south of the confluence.

To see the miner's mass grave at the Olive Branch Cemetery, travel north on Rt. 981 from Smithton. It is worth mentioning the Smithton Trail, part of the Great Allegheny Passage, and the Youghiogheny River access are to your right just after you cross the Youghiogheny River on the way out of Smithton. The Olive Branch Cemetery is about a mile from Smithton and is marked with a roadside Pennsylvania Historical and Museum Commission sign explaining the Darr Mine disaster.

Submitted by Frank Romeo, JCWA board member

Attention bird and nature enthusiasts – spring is coming!



Westmoreland Bird & Nature Club and JCWA members viewing birds at Jacobs Creek Wetlands

Have you noticed that it's staying light later each day now? Soon, trout lilies, bloodroots and other Pennsylvania wildflowers will be popping up and our migratory friends will be flying back into the watershed. It's time to clean your binoculars and dig out your hiking boots so you're ready for JCWA's spring bird and nature walk at the Jacobs Creek Wetlands.

JCWA was fortunate enough to partner with area bird experts to hold two bird outings in the past year and has another planned for spring 2011. In May and September of 2010, Westmoreland Bird and Nature Club (WBNC) members led JCWA members on bird and nature walks at the Jacobs Creek Wetlands. These outdoor adventures left JCWA participants in awe of WBNC members' vast knowledge of not just birds but everything outdoors. WBNC

members are experts on everything that flies, swims, buzzes or blooms outdoors. President Tom Pearson noted that most birders are interested not just in birds, but all of nature, so they reflected that in the name of the club. JCWA will follow Tom's guidance and rename our future bird outings as 'bird and nature' outings.

The spring and autumn mornings with our knowledgeable guides were a relaxing and informative way to spend a few hours enjoying nature while learning about things we never knew existed. We identified galls on plants, insects and their larvae, and plant species that we'd only read about but were second nature to WBNC members. We saw – and heard – so many different types of beautiful birds. WBNC members can identify birds by just hearing their calls. Great Blue Herons, Cedar Waxwings, Solitary Sandpipers, Belted King Fishers, Red Winged Black Birds and so many other birds greeted us on those mornings.

WBNC has agreed to educate and entertain JCWA members and friends again at the Jacobs Creek Wetlands area this spring. We haven't set the date yet, so please visit our website's events calendar for updates at www.jacobsckewatershed.org. You can also call or email JCWA and we'll be sure to notify you when the date is set. For information on the Westmoreland Bird and Nature Club, please visit www.westol.com/towhee/wbnc.htm.



Be The Change You Want To See In The World -- Gandhi

Members and volunteer efforts help the JCWA to continue our mission. Without them the strength of our voice and the power of our actions is diminished.

Please become a MEMBER today.
You'll be glad you did!

Yes! I want to help preserve and protect the Jacobs Creek Watershed

Date _____

Name _____

Address _____

Phone _____

Fax _____

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Annual Memberships

\$ 5 Student

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Jacobs Creek Watershed Association

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