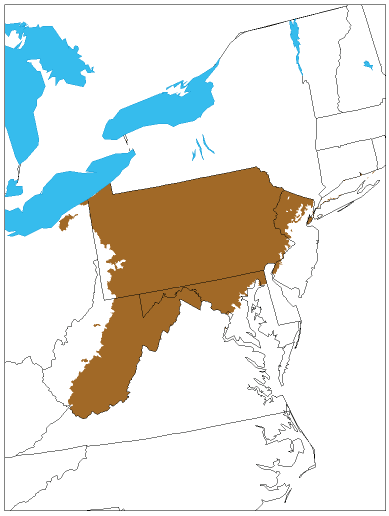
PROTECT, RESTORE, RECONNECT, SUSTAIN

The Eastern Brook Trout Newsletter:
Mid-Atlantic Division

A partnership between
Trout Unlimited And the
Eastern Brook Trout Joint Venture,
Together with all who value
Brook Trout And its Habitat



OHIO, the newest member to enter the EBTJV family, has a wonderful report. It is great to see all areas of the Eastern Brook Trout restoration effort. Our Mid-Atlantic partners are extremely busy as reported by the current articles and the brook trout will be the beneficiary of our work.

Contents:

Welcome Ohio! by Andy Burt, Ohio Division of Wildlife

Conservation

The final report of the Division of Wildlife's ten year brook trout restoration project was submitted in November of 2007. Since the completion of the project, the brook trout streams have not been surveyed. At the completion of the surveys in the fall of 2006, there were 10 streams with sustainable native brook trout populations. Considering there was only one native brook trout stream in the state in 1998, the reintroduction efforts were considered a success. Stream surveys will occur periodically over the next several years to monitor those brook trout populations.

Recently, representatives from two Ohio TU chapters have joined the Brook Trout Advisory Committee. Traditionally, this committee was comprised of state agencies, local conservation groups, local park districts, and other local potentially affected parties, but since Ohio's involvement in the Joint Venture, we have expanded our members and broadened the scope of the Committee.

The development of the Ohio HSI continues. The hope is the use the data collected to better explain why some brook trout restoration streams succeeded while other failed in sustaining brook trout populations. This data will then be applied to other headwa-

ter streams in the region to determine the likelihood of establishing brook trout populations.

The Save-Our-Streams (S.O.S.) organization recently donated funds for the Geauga County Park District to purchase Onset Temperature loggers to place in all of their brook trout streams. The hope is to provide better long-term understanding of how stream temperatures affect the population size and distribution of restored brook trout populations in the area compared with the native streams. The S.O.S. organization was created by a very motivated group of girls who were in 8th grade at the time. They made it there mission to protect the brook trout watersheds by educating students and the community. Because of their efforts, the S.O.S. organization, now in high-school, has won numerous national awards and is a group that should inspire all of us.

Education

The major task of the Brook Trout Advisory Committee over the past several months has been to work in concert with the Cleveland Metroparks Zoo to develop a new brook trout exhibit. The existing exhibit consists of a 100 gallon tank with 5 native brook trout. The new exhibit will relocated to a different venue in the zoo and contain a larger aquarium with better viewing and contain both brook trout and hellbenders. It will also include a detailed interactive display on eastern brook trout with watershed threats and conservation efforts, and will include options for the public to get involved with brook trout and headwater stream conservation initiatives. By partnering with the zoo, millions of people locally and regionally will be made aware of watershed conservation efforts and strategies.

The Geauga County Park District recently developed a webpage to inform county residents on the unique and intriguing story of the Ohio brook trout.

Several members of the Ohio Brook Trout Advisory committee also continue to conduct presentations highlighting the Ohio brook trout story, conservation efforts, and HSI development. These talks are given on an opportunistic basis and are generally target sportsman's groups.

New Jersey by Brian Cowden

NJTU, has recently announced TU's newest Home River, the Musconetcong Home Rivers Initiative. Brian Cowden is the new coordinator. Early work on the "Musky" has turned up several brook trout (and some brook/brown) spawning tributaries in need of restoration. The project will begin by approaching two farmers this week; one for a cattle abatement and riparian planting project and the other for a riparian only project. Both of these tributaries are known brook trout year-round water as well as spawning grounds.

Lisa Barno has asked NJTU to help identify additional brook trout waters in the northern region of the state and we have plans to do so beginning this spring. We will

have more discussion for implementing this project at our April 20th council meeting.

RESEARCH STUDY FINDS ANCESTRAL WILD BROOK TROUT STILL INHABIT NEW JERSEY STREAMS by NJ DEP

TRENTON - Wild brook trout swimming in some of New Jersey's waters are descendants of the native species that first appeared here more than 10,000 years ago, according to the results of a genetic-research study released today by Department of Environmental Protection Commissioner Lisa P. Jackson.

"The remarkable finding of ancestral brook trout in New Jersey's streams is a testament to the importance of our strategies to protect water quality in our watersheds," Commissioner Jackson said. "We will use the findings of this valuable research to further guide conservation of New Jersey's wild brook trout and the natural ecosystems they depend on for survival."

Wild brook trout populations maintain themselves in New Jersey's streams through natural reproduction. Hatchery-reared brook trout stocked in high-quality streams can survive, reproduce and interbreed with wild trout. Ancestral or "heritage" brook trout, however, are wild fish that have not interbred and retained the original genetics of their native ancestors.

Although New Jersey ceased a century-old practice of stocking hatchery trout in some wild-trout waters in 1990 to protect the wild trout population, state biologists feared that heritage brook trout might have been lost to interbreeding. Further, secondary impacts of development over the years have impaired many of the cold, clear, highly oxygenated waters that wild trout need to survive, taking a toll on brook trout populations.

The DEP's Division of Fish and Wildlife embarked on the research study to evaluate the genetic diversity and structure of New Jersey's wild brook trout populations. The study included 22 wild-trout streams from four major watersheds, which still support wild trout populations:
Delaware, Hudson, Passaic-Hackensack, and Raritan. Nineteen of those streams were thought to have high potential for the presence of heritage brook trout, and three were selected because of their known history of trout stocking.

Blood samples from 218 wild trout were collected from those streams and from 20 trout raised at the state's Pequest Trout Hatchery, and DNA analysis was conducted.

The genetic analysis revealed the presence of heritage brook trout populations in 11 streams in two major river basins, the Passaic-Hackensack and the Rar itan, and that each of the 22 wild brook trout populations studied have a unique genetic identity. The research revealed that the gene

pool of at least one wild brook trout population (Cooley's Brook in the Passaic-Hackensack watershed) has been affected presumably by interbreeding with hatchery-reared trout stocked before 1990. The analysis of samples from the remaining 10 streams were inconclusive as to genetic origin of those populations.

New Jersey's only native trout species and the state's official fish, brook trout colonized after the last glacial ice sheet receded more than 10,000 years ago. Today, wild brook trout inhabit more than 120 small streams cradled in the forested hills and mountains of north Jersey, and one stream in south Jersey.

Partial funding for the brook trout genetics study was made possible through natural-resource damages that the DEP's Office of Natural Resource Restoration recovered from p arties responsible for contamination and natural resource injuries at the GEMS Landfill in Gloucester County.

To review the research report, visit
http://www.njfishandwildlife.com/bkt_genetics.htm
For more information contact:
Darlene Yuhas (609) 984-1795
Elaine Makatura (609) 292-2994

PENNSYLVANIA by Jack Williams, NLC & BTB Chair

Trout Unlimited Receives $895,863 from Growing Greener

LOCK HAVEN - The Pennsylvania Department of Environmental Protection awarded Trout Unlimited four Growing Greener grants totaling $895,863 to continue its work on abandoned mine drainage projects in Pennsylvania.

Trout Unlimited (TU) received $595,000 for a passive treatment system that will continue clean-up efforts of abandoned mine drainage (AMD) in Twomile Run, a native brook trout tributary to Kettle Creek in Clinton County, Pennsylvania.

TU also received a grant of $99,363 to stabilize the elevation of a deep mine pool in the Kettle Creek watershed in Clinton County that will work to prevent a catastrophic mine blowout. The coal mine was abandoned over 100 years ago.

“We are grateful for the grant from DEP so we can move forward with this critical project,” said Amy Wolfe, TU’s Director of Abandoned Mine Programs. “In most instances, there is no forewarning that a mine blowout will occur. But here we have the opportunity to prevent a disaster from happening and to ensure protection for the fish and other aquatic life that are making their way back to Kettle Creek and the West Branch of the Susquehanna River.”

Protect, Restore, Reconnect, Sustain

Pennsylvania has over 5,000 miles of streams that are impacted by historic, unregulated coal mining. As a result, these streams often have a high concentration of metals like aluminum and iron which are toxic to fish and other aquatic life. Currently Trout Unlimited is leading the West Branch Susquehanna Restoration Initiative that is working to restore the more than 1,200 miles of streams polluted abandoned mine drainage in this region of the Commonwealth.

Since 1998, TU has worked in partnership with the local Kettle Creek Watershed Association on a variety of watershed restoration projects in the area. These two AMD projects will help to bring TU and KCWA closer toward restoration of the lower portion of the Kettle Creek watershed.

TU also was also awarded $120,500 for its AMD Technical Assistance Program, which provides technical assistance to Pennsylvania watershed and sportsmen's groups, county conservation districts, TU chapters, and others for AMD projects. An additional grant of $81,000 will help TU evaluate and document water quality and aquatic life conditions on the West Branch Susquehanna River between Curwensville and Renovo, Pa. It has been over 20 years since this stretch of the river has been thoroughly evaluated.

"Every little bit of water quality improvement that is made within tributary watersheds will eventually benefit the West Branch of the Susquehanna River itself," explained Wolfe. "It is important to document these improvements and also to chart what still needs to be done."

SUMMARY OF PENNSYLVANIA BROOK TROUT PROJECTS

*__Williams Run__, Venango Co.
Partners: So. Sandy Creek Watershed Assoc., PA Senior Environmental Corps., Private property owners, TU, Knouse Foods Coop., Allegheny Mineral Corp., Mineral Twp., Irwin Twp., PADEP, PA Game Comm., PA Fish and Boat Comm, National Fish and Wildlife Found. ,US OSM.
9.0 miles of in-stream habitat restored. (completed)
*__Cross Fork Creek__, Potter Co.
Partners: Nat. TU, Kettle Creek Watershed Assoc., Kettle Creek Chap. TU, Volunteers from other TU Chapters, Quehanna Prison Boot Camp, Potter Co. Trailblazers.
3.5 miles of in-stream habitat restored. (completed)
*__Rock Run__, Westmoreland Co.
Forbes Trail Chapter TU
Acid abatement, 2 miles of in-stream habitat restored. (on-going)
*__Indian Run and Trout Run__ tributaries to __Kettle Creek__, Potter Co.
Partners: Kettle Creek Watershed Assoc., Kettle Creek Chap. TU, PA Fish and Boat Comm.
Habitat enhancement. (planned, partially funded)
*__Clear Run__, Somerset Co.
Partners: Chestnut Ridge Chap. TU, USGS
Highway runoff abatement. (planned)

*__LickRun__, Clearfield Co.
Allegheny Mountain Chap. TU (ACMTU)
Acid abatement. (CHP Coldwater Conservation Plan completed)
*__Trout Run__, Clearfield Co.
Partners: AMCTU, Water's Edge Hydrology.
Acid abatement, restore in-stream habitat. (on-going)
*__Mosquito Creek__, Clearfield Co.
Partners: AMCTU, Water's Edge Hydrology
Acid abatement. (on-going)
*__Morgan Run__, Clearfield Co.
Partners: Clearfield Co.Conservation Dist., PA Senior Environmental Corps (PSEC).
Acid abatement, restore 2 miles of in-stream habitat. (on-going)
*__Montgomery Creek,__ Clearfield Co.
Partners: Clearfield Co. Conservation Dist., PSEC.
Acid abatement. (planning).
*__Deer Creek__, Clearfield Co.
Partners: Clearfield Co. Conservation Dist., PSEC.
Acid abatement. (planning)..
*__Moravian Run,__ Clearfield Co.
Partners: Clearfield Co. Conservation Dist., PSEC.
Acid abatement. (planning).
*__Hartshorn Run,__ Clearfield Co.
Partners: Clearfield Co. Conservation Dist., PSEC.
Acid abatement. (planning).
*__Reservoir Creek,__ Luzerne Co.
Partners: Earth Conservancy, Stanley Cooper Chap. TU, PA Fish and Boat Comm.
Habitat enhancement. (planning).
*__Rausch Creek,__ Lebanon Co.
Doc Fritchey Chap. TU
Acid abatement. (on-going).
*__Bushkill Creek__ (upper reaches), Northampton Co.
Partners: Bushkill Stream Conservancy, Northampton Co. Conservation Dist., Forks of the Delaware Chap. TU, Bushkill Twp., Moore Twp., Bushkill Twp. EAC, Jacobsburg Environmental Ed. Center, PA DCNR and the Delaware and Lehigh National Heritage Corridor.
Protect, enhance, sustain. The EBTJV Status Map shows brook trout extirpated in the Bushkill watershed. Preliminary surveys for this project have confirmed wild brook trout in the upper reaches of the watershed. (planning).
*__Crabby Creek,__ Chester Co.
Partners: Valley Forge Chap. TU (VFTU) and the PA Fish and Boat Comm. (PFBC).
Habitat enhancement and restoration of wild brook trout (on-going).
*__McIlvane's Run,__ Chester Co.
Partners: VFTU and PFBC.
Habitat enhancement and restoration of wild brook trout (on-going).

Reported by Deb Nardone

Coldwater Heritage Grants that have been funded. All of these plans are on brookie streams.

Furnace Run and Segloch Run: http://www.coldwaterheritage.org/grantinfo/2003Grantees/furnace.htm
S. Fork of the Little Conemaugh: http://www.coldwaterheritage.org/grantinfo/2003Grantees/conemaugh.htm
Beaverdam Run: http://www.coldwaterheritage.org/grantinfo/2003Grantees/beaverdam.htm
Northkill Creek: http://www.coldwaterheritage.org/grantinfo/2004Grantees/Northkill.htm
Mill Creek: http://www.coldwaterheritage.org/grantinfo/2004Grantees/Mill.htm
Lick run: http://www.coldwaterheritage.org/grantinfo/2004Grantees/lick.htm
Shober's Run: http://www.coldwaterheritage.org/grantinfo/2004Grantees/shobers.htm
Loyalhanna Creek: http://www.coldwaterheritage.org/grantinfo/2004Grantees/Loyalhanna.htm
Sober's Run: http://www.coldwaterheritage.org/grantinfo/2004Grantees/sobers.htm
Hells Run: http://www.coldwaterheritage.org/grantinfo/2005Grantees/HellsRun.htm
Bear Run: http://www.coldwaterheritage.org/grantinfo/2005Grantees/Bear.htm
Hunts Run: http://www.coldwaterheritage.org/grantinfo/2005Grantees/Hunts.htm
Schoolhouse Run: http://www.coldwaterheritage.org/grantinfo/2006%20Grantees/Schoolhouse.htm
Laurel Run: http://www.coldwaterheritage.org/grantinfo/2006%20Grantees/Laurel.htm
Clearshade Creek: http://www.coldwaterheritage.org/grantinfo/2006%20Grantees/clearshade.htm
Beech Creak: http://www.coldwaterheritage.org/grantinfo/2006%20Grantees/BeechCreek.htm
Williams Run: http://www.coldwaterheritage.org/grantinfo/2006%20Grantees/williams.htm
S. Branch of Roaring Creek: http://www.coldwaterheritage.org/grantinfo/2007Grantees/Roaring.htm
Canoe Run: http://www.coldwaterheritage.org/grantinfo/2007Grantees/Canoe.htm
Cold Run: http://www.coldwaterheritage.org/grantinfo/2007Grantees/ColdRun.htm

Deborah Nardone, PA Council of TU / Coldwater Heritage Partnership
450 Robinsone Lane, Bellefonte, PA 16823, (814) 359-5233, www.coldwaterheritage.org

WEST VIRGINIA

by Lee Orr, Fisheries Chair WVTU, and the P. Pendleton Kennedy Chapter of TU, and Gary Berti, TU Potomac Headwaters Program Director

Legislation:

Anti-degradation: WV has been pretty much tied up with anti-degradation issues in the WV legislature; almost to the point that it has consumed all of our time.
Ed– In mid-March the WV legislature passed Clean Water Act Anti-degradation rules which provide the highest protection (tier 3– no degradation allowed) to publicly owned headwater streams with reproducing trout populations. It is estimated that 85% of the wild brook trout water in the state is located within the scope of tier 3 protection. The legislation also provides a clear cut nomination process for private landowners. This is a great leap forward for brook trout interests in this state. Kudos to all involved in this effort.

Wilderness: The WV congressional delegation has proposed additional wilderness areas within the Monongahela National Forest. Original legislation proposed an additional 45,000 acres including some containing brook trout populations. As the legislation moves through the congress, counter proposals have been offered and the final package is still in process as this is written.

Project Work:

WV BTB/Fisheries Committee plans to lime a stream in Greenbrier County are developing with the WVDNR. Habitat work in the Williams River watershed are currently in the idea stage for now.
Two ongoing brook trout restoration projects are Little Laurel and Beaver Creek.
http://www.ppktu.org/projects.html
See the Potomac report for additional project reports.

Publicity/Outreach:

Trout Unlimited Receives National Grant Award

WASHINGTON, D.C. – The National Association of Counties (NACo) recently announced that Trout Unlimited is a recipient of a 2007 Five Star Restoration Challenge Grant. NACo will award $134,291 in grants through the Five Star Program partnership to support 10 projects, located in 12 counties across the country to help implement locally-driven wetland and watershed restoration projects. The other partners that participate in the program are the National Fish and Wildlife Foundation, the Wildlife Habitat Council, U.S. Environmental Protection Agency's (EPA) Office of Wetlands, Oceans and Watersheds and corporate sponsor Southern Company.

Trout Unlimited – Pendleton and Grant Counties, W.V.;
The P. Pendleton Kennedy Chapter of Trout Unlimited will partner to restore and protect 23 acres of riparian habitat, including 5,000 linear feet of stream bank along Whitethorn Creek and Mill Creek, in the South Branch of the Potomac Watershed. Fifty-five middle school science students from Pendleton and Grant counties will be involved in the project through tree plantings, stream surveys, habitat surveys, future site monitoring and the testing of water quality parameters. Project partners include Trout Unlimited, Pendleton County, Grant County, Natural Resources Conservation Service, several local middle schools, Farm Services Agency, US Forest Service, US Fish and Wildlife Service, Dominion Foundation, WV Conservation Agency, WV Department of Environmental Protection, WV

Division of Natural Resources and local landowners.

Potomac Headwaters Report:

TU and our extensive partnerships have been active in the Upper Potomac Headwaters. We have been actively working in Whitethorne Creek, Spring Run, Blackthorne Creek, and Big Run. We have lined up additional work in Smith Creek (of South Branch), Whitethorne, Upper South Branch, Mill Run of the South Branch, and both upper and lower Big Run. Pending agreements are on Abram Creek, Lunice Creek and additional work in Whitethorne are in the wings, pending Farm Bill programs re-authorization. The majority of this work includes stock exclusion fencing, riparian forest restoration, and instream habitat restoration/enhancement. With the exception of Spring Creek, this work supports native brook trout exclusively.

Blackthorne Creek: This fall, TU and its partners completed the fencing of almost two miles of stream and spring fed tributary and installed one fish friendly water crossing. Plantings along both the tributary and mainstem were accomplished by students, TU volunteers and local residents. Water troughs and pads were installed for stock watering. Partners include the NRCS (WHIP, EQIP), Farm Services Agency (CREP), USFWS (Partners For Wildlife), and Pendleton County School System.

Whitethorne Creek: Beavers have moved in on one restoration site immediately above our next work area. Student monitoring was accomplished in November to assess the effects of our efforts. Scheduled for April-May, we will fence and restore approximately 3 acres of riparian forest. Instream work is scheduled for June – July 2008. This project is supported, in part, by a cooperative agreement with the EBTJV.

Big Run - Phase One: Working with the Monongahela National Forest, Phase One has been completed with the exception of one crossing which must be re-designed. This past fall an additional 3,500 feet of stream fencing was constructed protecting 11.4 acres of riparian forest, and 1500 feet of stream channel. Big Run Phase One has restored 37.4 acres of riparian forest; installed 14,300 feet of fencing; installed four dual trough water supplies; developed three springheads for water supplies; and designed and installed 3 brook trout friendly water crossings. Brook trout were observed in these headwaters, and young of the year were observed within the system in the fall of 2007. Other partners on this project include Fish America Foundation, USFWS Partners for Wildlife, and the EBTJV (through NWFW).

Big Run - Phase Two: again working closely with the Monongahela National Forest, the partnership is focused on regenerating the historic riparian spruce forest on the upper section of Big Run mainstem. This work scheduled to begin this spring and run through the fall of 2009. This watershed, the highest in the Chesapeake Bay drainage, holds brook trout in numbers limited by habitat impairment. Native spruce regeneration replicates the native ecosystem before logging of the early 1900's devastated the area. Volunteers will be descending in this area on April 19 to plant spruce seedlings propagated from native spruce in this immediate area. Other partners include the Mountain Institute, Pendleton County Schools, WV Highlands Conservancy, TU's

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Lower Big Run: Project staff and TU Potomac Headwaters committee volunteers installed temperature loggers along the lower 2.2 miles of Big and recorded huge temperature gains when the stream emerges from the forest and runs adjacent to the road. Using this information, TU volunteers will focus information gathering on this section of stream to isolate the points of most significant warming and attempt to mitigate the worst offending conditions. This project is funded by a Trout Unlimited Embrace-A-Stream grant procured by the Mountaineer Chapter of TU.

Abram Creek: Working with partners from WVU, WVDEP, Md Bureau of Mines, WV DNR, Office of Surface Mines, the WV Brook Trout Working Group and local landowners, the Acid Mine Drainage restoration plan for Abram Creek is progressing to the final design phase. This is a target watershed as identified in the EBTJV Brook Trout Restoration Strategy. Work to begin the restoration of this coal mining impacted watershed is planned to begin this spring.

Anyone interested in joining up with the Potomac efforts, or for more information, contact Bill Thorne at anglerbill@frontiernet.net.