



North Central Pennsylvania Stream Habitat Restoration Projects

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The NPC and the KST (Dr. Mel Zimmerman and Dr. Peter Petokas, Co-Chairmen, <http://www.keystonestreamteam.org>) have been compiling a list of stream restoration projects in North Central PA. The NPC list examines the Fish and Boat Commission structures. For more information on the Fish and Boat structures, refer to their *Habitat Improvement for Trout Streams* book (can be found on their website). The KST list focus is on the Natural Stream Channel Design (Rosgen) projects in PA. I will be highlighting one KST (Roaring Branch) project and three Fish and Boat projects. My project is to collect and analyze pre-restoration and post-restoration data on fish, macro invertebrates and water chemistry of some of these local sites.

Roaring Branch

Purpose: The Roaring Branch Project was to provide bank stabilization and fish habitat. It was designed and built by Us Fish and Wildlife in cooperation with the Lycoming Creek Watershed Association in 2007.



2006 Fish Pop. Estimates: 1,336 fish/200m
Trout: 35/200 m

2008 Fish Pop. Estimates: 2,045 fish/200 m
Trout: 15/200 m

The Keystone Stream Team uses Natural Stream Channel Design following the Rosen Technique. Roaring Branch is just one of the local projects. Others include Big Bear Creek (Loyalsock Creek), Trout Run Park (Lycoming Creek), and Gavitt Site (Muncy Creek). For more information on this go to <http://www.keystonestreamteam.org/>.



Northcentral PA Conservancy helped coordinate these stream projects(only a partial list- list will be updated)

Stream	County	Modified Mudsill	Bank Crib	MLV	SLV	RB	Stack							
							LFSD	RW	SD	DLV	LCV	RCV		
North Branch Mahantango Creek	Snyder	1 (60')	1 (25')	4	1	15								
Little Shamokin Creek (Burgess)	Northumberland	1 (80')	1 (100')			20		1						
Mill Creek	Lycoming	1 (40')	1 (40')			3	1							
Little Shamokin Creek (Who's Hill Farm)	Northumberland	1 (120'), 1 (55'), 1 (45')				20		2						
West Branch Chillisqueague Crk	Montour			6				1						
Rapid Run	Union	1 (70')		5	10						3	2		
Limestone Run	Union	1 (40')		1	1									
Lycoming Creek	Lycoming	1 (50')		2	1	4								
Wallace Run	Lycoming	1 (100')		4	3	4								
Penns Breek	Centre	1 (600')		2	25									
Beaver Run	Clearfield													
Cold Stream	Centre	1 (100')		5	20									
Cedar Run	Clinton	2 (40')	3 (30'), 1 (60'), 1 (45')	14	20	6	8	1	1					
Antes Creek	Lycoming					1		1						
First Fork Sinnemahong	Potter	1 (200')		5	20					1				
Long Run	Tioga	1 (140')		3										
Alkey site	Lycoming	1 (40')		5										
Delmer site	Northumberland	1 (40')		2										
Long Site	Northumberland			4										
Who's Hill site	Northumberland			6										
Ross	Northumberland	1 (55')		4									1	
Sportsman's	Northumberland	1 (45'), 1 (100')		4	5	10								1
Robinson	Montour	1 (90'), 1 (100')		4										
DCNR	Clinton			5	4	14					1			
	Tioga					1								
				Totals Overall	78	22176	3	28	1	10	4	4	1	
				Total:	327									

2009 site (upstream)

*These are post restoration pictures for both restoration sites.

2012 site (downstream)

2009 Fish Population Estimates: 266 fish/200m
Trout: 24 brown trout/200m
Pre-restoration

2012 Fish Population Estimates: 392 fish/200m
Trout: 35 brown trout/200m
Post-Restoration

*This estimate might be low due to deep poles that could not be shocked.

Key: MLV=Multi log vane, SLV= single log vane, LFSD= log-faced stone deflector, RW= root wad, Stacked= log vane stacked deflector, SD= stone deflector, LCV=log cross vane, RCV=rock cross vane

Sheshequin Campground



Purpose: The Sheshequin Campground Project in Trout Run, PA was to provide bank stabilization for highly eroding banks after the September 2011 flood and to provide fish habitat. It was designed and built by the Fish and Boat Commission in cooperation with the Lycoming Creek Watershed Association. The project was built in summer of 2012 with the help of Lycoming College Clean Water Institute's Interns.



*Studies of fish population will be collected in summer of 2013.

Mill Creek

Purpose: The Rose Valley Mill Creek Watershed Association received a PA Growing Greener Grant in 2008 to develop fish habitat improvement at up to two sites along Mill Creek, utilizing structures recommended by the PA Fish and Boat Commission. Lycoming College was contracted to provide pre-construction fish, macro invertebrates, and water chemistry data at the Larson and Winter Lumber sites.



Larson site:

2008 Fish Population Estimate: 156 fish/200 m
Trout: 15/200 m
Pre-Restoration

2012 Fish Population Estimate: 387 fish/200m
Trout: 28 brown trout/200m
Post-Restoration