

# ***HARRY AND LAURA NOHR CHAPTER OF TROUT UNLIMITED***

## ***BLUE RIVER HABITAT IMPROVEMENT PROJECT 2015***



Report Prepared by the  
Project Committee  
Harry and Laura Nohr Chapter of Trout Unlimited

### **Sponsorship and Partners**

The role of the Harry and Laura Nohr Chapter in this project was to serve as a project sponsor and leader. The chapter does not have the physical or financial resources to undertake a project of this magnitude alone; it is necessary to collaborate with other organizations for volunteer labor and financial assistance. The Nohr chapter, as always after any major project, is indebted and grateful for the financial and physical efforts it has received through the year. We also look forward to continuing these joint ventures in our ongoing habitat improvement efforts.

The partners for the 2015 Blue River Habitat Improvement Project are as follows:

Wisconsin Department of Natural Resources  
Elliot Donnelley Chapter TU  
Madison Fishing Expo  
Badger Fly Fishers  
Friends of Wis Trout  
Southern WI Chapter TU  
Lee Wulff Chapter TU  
Dave Roh Excavating



The small back water area in center of photo is one of several that were created or enhanced

## **Background**

The Harry and Laura Nohr Chapter of Trout Unlimited undertake habitat improvement projects as a part of its mission “to conserve, protect, and enhance the cold water streams of Southwest Wisconsin”. In 2003 the Harry and Laura Nohr Chapter approved a plan to improve the habitat of the Blue River and its tributaries.





Because of the importance of the Blue River and its tributaries as cold-water resources in a matrix of lands with unusually great potential for conservation, the Harry and Laura Nohr Chapter has focused on habitat restoration along these streams. This report addresses our work on the Blue River conducted in the fall of 2015 on a segment upstream of the project completed in 2013. This stream segment is approximately 2,000 feet in length. Early in 2015 the DNR concluded the purchase of a public stream easement for this property.



## **Stream Conditions Before the Project**



Eight to ten foot raw vertical banks and wide stream channels with heavy sediment were common throughout the project length.







Outside stream banks typical in the project segment were long sweeping bends with vertical banks







A large amount of bank spoil was removed from the immediate flood plain

### **Stream and Riparian Improvement Work**

In 2015 the Harry and Laura Nohr Chapter of Trout Unlimited along with its partners improved stream habitat along approximately 2000 feet of the Blue River. Incised stream banks were tapered. Several thousand yards of stream-bank soil were removed from the immediate flood plain. Rip-rap medium were used to armor stream banks and improve habitat. Riffle-pool topography and sinuosity of the stream were improved. Structures added to improve fish habitat included log deflectors, vortex weirs, boulder retards, cross logs and root wads. In addition, several backwater areas were created or enhanced to benefit turtles, amphibians, and forage fish. A shallow scrape was also created away from the stream next to one of the hillsides. This should benefit critters in the riparian area as well. A cattle crossing and one equipment crossing were also installed. Most of the project site is pastured for cattle so it was seeded with an appropriate cold season pasture mix. Getting to the lower site was limited to an old steep logging road that had to be improved to allow heavy equipment to access the site.



Starting to shape the high banks and help the stream reconnect to the floodplain





The above picture is another example of high eroding banks. The fires in the background are from boxelders removed during the project as well as a lot of debris from the 2013 flood. Most of the trees that had to be removed during the project were utilized as log deflectors or root wads. The inside bank was also tapered some to remove a lot of sand that had been deposited from past high water events. The lower picture is the same site with vegetation starting to establish.







Most of the trees along the stream in the top picture were undercut and falling over and had to be removed to taper and armor the banks. With the banks more stable the sediment load in the stream should decrease and as the channel flushes out some of the silt and sand they should become deeper and provide better trout habitat. The larger rocks and trees that were incorporated into the stream should also provide good habitat for fish and other stream inhabitants.







There were 3 large walnut trees next to the stream on the upper end. The 2013 flood washed enough bank away to put one tree in the stream with the other two undermined enough where they were ready to fall, unfortunately they had to be removed to taper the bank. The lower picture is the site after bank shaping and removal of trees.





## Conclusion

The 2015 project on the Blue River is one landowner upstream from the work we completed in 2012 and 2013 on the Drew's property. After observing and asking about the work we did on the 2012-13 project the landowner was willing to sell the WDNR an easement to allow us to continue our work on the Blue River on his property. This will help preserve and protect the work done on the Drew's property in 2012-13 and the future worked planned downstream of that in 2016. Our work on this section also figured in the decision of the landowners upstream to want to do similar work on their property. All of these landowners were respectful and appreciative of the work we have been doing.

Generations of wise landowners have preserved the remarkable landscape of the area. In the present day, strong commitment of landowners to conservation ensures that the picturesque geology and diverse plant communities of the Blue River watershed will persist into the future. As a result, the Blue River and its tributaries are a remarkable cold-water resource. There are enough miles of trout water of sufficient flow to accommodate many anglers. The streams offer diverse management practices. Some reaches provide the opportunity to catch the trout of a lifetime under trophy-preserving catch-release regulations. Other reaches offer trout for a meal under regulations that allow sustainable harvest. The 2015 project has improved habitat and angling opportunity as well as opportunities for enjoying the native plants and animals of Wisconsin. The Harry and Laura Nohr Chapter of Trout Unlimited is proud to have sponsored this project, and is deeply grateful to our many partners listed in this report. A special thanks to the DNR fisheries biologist, Gene Van Dyck, for all of his help in the permitting process. As with every stream conservation program, partnerships among landowners, businesses, anglers, county, state and federal government officials, and the state and national TU organizations are essential for the success of our Habitat Improvement projects. With your help we hope to continue this work into the future.



One of the many redds that were visible in the project site approximately one month after completion