

HARRY AND LAURA NOHR CHAPTER OF TROUT UNLIMITED

BLUE RIVER HABITAT IMPROVEMENT PROJECT 2017



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

Sponsorship and Partners

The Harry and Laura Nohr Chapter of Trout Unlimited is once again proud to serve as the sponsor for this year's projects. The chapter does not have the physical or financial resources to undertake projects 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 an ongoing habitat improvement effort.

The partners for the 2017 Blue River Habitat Improvement Project are as follows:

- Natural Resources Conservation Service
- Wisconsin Department of Natural Resources
- Elliot Donnelley Chapter TU
- Madison Fishing Expo
- Badger Fly Fishers
- Friends of Wis Trout
- Lee Wulff Chapter TU
- Jim and Rose Sime
- Doug Stockli
- Arthur Beyda
- Dave Roh Excavating



One of several backwater areas that were constructed , These are beneficial to amphibians, reptiles and forage fish.

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 have focused on habitat restoration along these streams. This report addresses the work on the main stem of the Blue River conducted in the summer of 2017. This section of stream flows through a valley between Snow Bottom Rd. and Bowers Rd. It is approximately 5,000 ft. in length and is located on the Chuck Zwolanek property in the Snow Bottom State Natural Area.

Stream Conditions before the Project



Examples of eroding banks found throughout the project. They ranged in height from about eight to thirteen ft.





This long sweeping section of eroding bank was as high as 13 feet. These were some of the highest of this project.



The project area is located downstream from our 2010 project work. We didn't target this property previously because it lacked an easement. The landowner recently graciously donated an easement to Trout Unlimited. This allowed us to become involved and help to complete a habitat improvement project on this site. This stream section was similar to other areas on Blue River where we have previously done stream improvement work. This site had areas that were severely entrenched with vertical eroding banks. Some were as high as 13 feet. Prior to the project, the stream held trout, but the habitat was in poor condition. The stream bed was heavily silted in many places and very wide in some. The project section ran through actively grazed pasture, with a small section bordered by row crops. In addition, some of this stream section ran against steep hillsides which caused continuously eroding banks and made the work much more difficult.

Stream and Riparian Improvement Work

The 2017 Blue River project improved stream habitat along approximately 5,000 feet of the Blue River. Deeply incised stream banks were tapered at a ratio of six or seven to one where possible. Approximately 10,000 cubic yards of stream-bank soil were removed from the immediate flood plain. Because a majority of the stream flowed through pasture most of this soil was removed off site, requiring hundreds of trips with dump trucks. Rip-rap medium was used to armor stream banks and improve habitat. Riffle-pool topography and sinuosity of the stream were improved. Structures added to improve habitat included stream barbs, log deflectors, lunger structures, rock deflectors, vortex weirs, boulder retards, and root wads. In addition, several backwater areas were created or enhanced to benefit turtles, amphibians, and forage fish. Several cattle crossings and one equipment crossing were also constructed.



Bank spoil being removed from the flood plain.



Reshaping what was a high vertical bank. Also visible is the rip rap to be installed next.

Lunkers and rip rap being installed on lower end of project.





Before and after bank shaping with a backwater area installed.





Lower photo is after reshaping. The sand deposited on the right in the lower photo was from a large flood event prior to the project. A lunger set is visible below the island in the bottom picture.



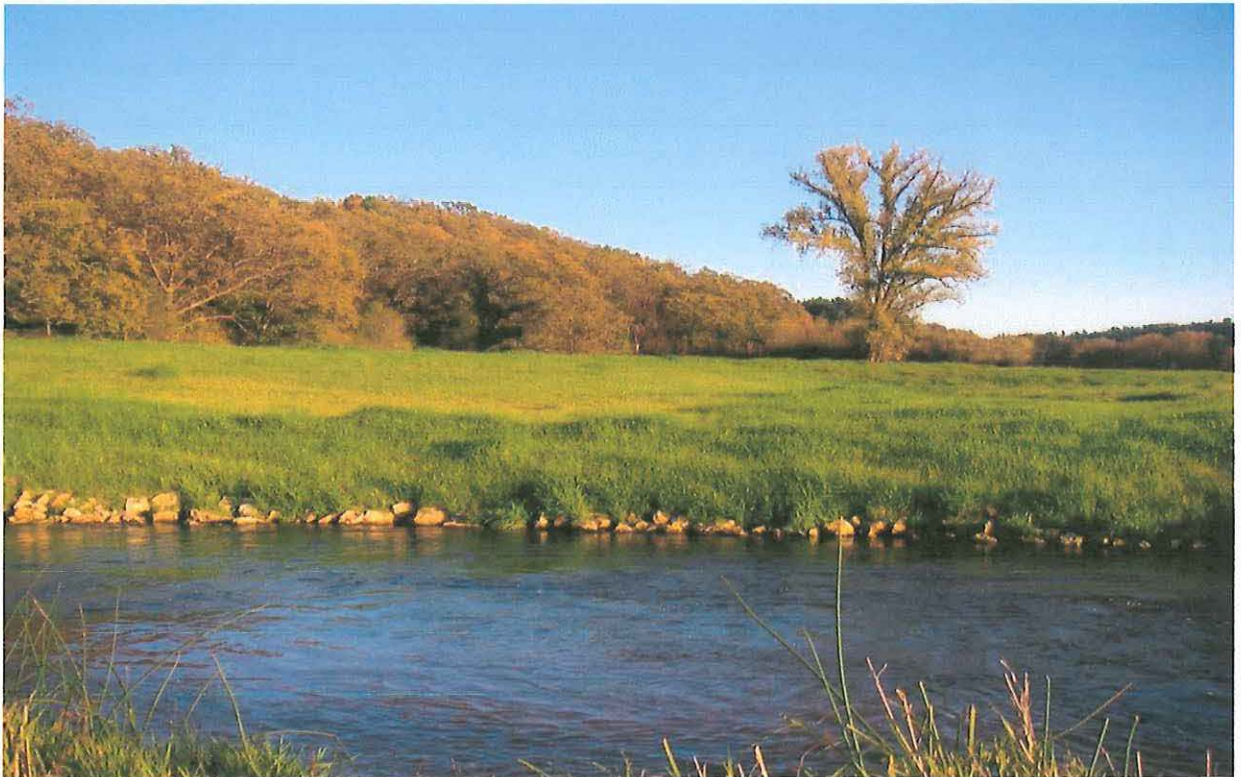


Before and After





Before and After





These last three photos are before, during and after construction of a long very high eroding section of stream bank.





Conclusion

The Blue River is among the most popular and significant of the many beautiful trout streams of Southwestern Wisconsin. 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 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 the frying pan under regulations that allow sustainable harvest. The 2017 Blue River project has improved habitat and angling opportunities as well as opportunities for enjoying the native plants and animals of Wisconsin. The Harry and Laura Nohr Chapter of Trout Unlimited are proud to have sponsored this project, and are deeply grateful to our many partners listed in this report. A special thanks to Grant County NRCS District Conservationist Joe Schmelz and his office, and DNR fisheries biologist Bradd Sims for all of their help in facilitating this project. As with every stream conservation program, partnerships among landowners, businesses, anglers, county, state and federal governments, and the state and national TU organizations are essential for the success of our habitat improvement projects. The successful completion of the 2017 Blue River project resulted in a neighboring land owner requesting us to become involved in habitat improvement on his section of the Blue River in the near future. We hope to do this work in 2018.

BORAH CREEK HABITAT IMPROVEMENT PROJECT 2017



We also finished our project on Borah creek above Bluff road in Grant County. This was a smaller less intensive project than we normally tackle. The stream work segment was approximately 1800 ft. in length. Above and below this section the stream runs through pasture, but in the project area it flowed through a thick box elder canopy which contributed to erosion problems. In the spring of 2016 we held a brushing work day. It was attended by volunteers who helped remove and burn brush and trees from the work site. We worked hard but barely put a dent in the needed removal. Our contractor removed the rest with heavy equipment. Many of the large box elders were set aside to be used for instream log deflectors and root wads. This concluded the work we did on the site in 2016.





In the summer of 2017 we went back to this site and finished the project. After burning numerous brush piles the riparian area was mowed to allow work access.



After some bank shaping a number of log deflectors and root wads were installed. This helped to narrow a couple of wide areas. It will also help deflect current away from some of the tapered banks. These structures will not only provide good overhead cover for fish, they also provide good habitat for amphibians and reptiles.





The land owner was appreciative of the project and said he would spread the word about Trout Unlimited and our work. We hope to return to this stream and do more habitat improvement in the future.