

**WISCONSIN DEPARTMENT OF NATURAL RESOURCES**  
**Riparian Area Habitat Maintenance of Southwest**  
**Wisconsin Trout Streams Iowa, Richland, Grant**  
**and Dane Counties Fall/Winter 2023-24**



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A stream habitat maintenance crew for the Wisconsin Department of Natural Resources (DNR) was established to control invasive species and to create accessibility for anglers in riparian areas along trout streams in Southwestern Wisconsin. Many DNR owned Fishery Areas and fishing easements were heavily overgrown and inaccessible, especially if intensive habitat improvement was previously conducted. To manage this overgrowth, the DNR and Trout Unlimited collaborated to create a habitat maintenance plan for Southwestern Wisconsin trout streams. Through the coordination of TUDARE; Southern Wisconsin, Lee Wulff, and Elliot Donnelly Trout Unlimited Chapters contributed \$8,000 to help fund two Limited Term Employees (LTE) to complete this work.

Jared Myers and Josh Jonet, LTE fisheries technicians, were employed to conduct fish and habitat surveys during the summer. After sampling season, they were retained to conduct the habitat maintenance projects during the Fall and Winter Seasons of 2023/24.

Brushing, cutting, mowing, herbicide application, and easement inspections began in August 2023 and ended December 2023. The main nuisance species that were targeted include Willow species (*Salix spp.*), Box Elder (*Acer negundo*), Honeysuckle species (*Lonicera spp*), and European Buckthorn (*Rhamnus cathartica*). Habitat maintenance brushing and cutting was completed using chainsaws and a brush cutter with saw blade attachment. Chainsaws mainly targeted honeysuckle, box elder, and willow with a diameter of over 4 inches. The brush cutter was primarily used to cut down smaller brush under 4 inches in diameter or plant species closer to ground level such as willow, reed canary, and honeysuckle.

Element 4, an oil-based herbicide, was applied to all cut woody vegetation over 8 feet away from any waterbody. Element 3A, a water-based herbicide, was applied to all woody vegetation that was within 8 feet of the waterbody. Herbicides were sprayed on the Xylem and Phloem, using 1-liter hand-held sprayers and Stihl backpack sprayers. This process killed off the entire root systems and prevented regrowth of the invasive willow, box elder, and honeysuckle.

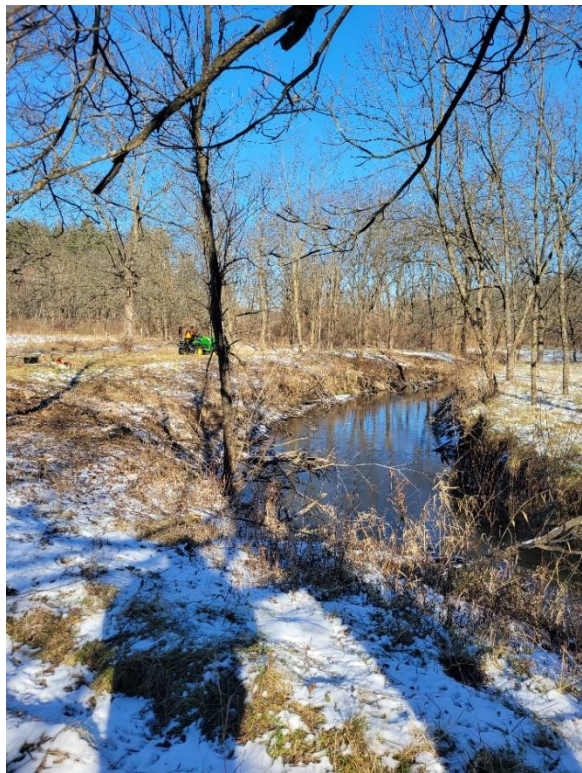
Easement inspections were conducted to identify areas of vegetation overgrowth, check for proper fishing regulation and easement boundary signage, and presence of angler access stiles. Easements were inspected for compliance issues with easement conditions. We have used the inspections to help plan work that will be completed in the fall and winter of 2024/25. Our Parks and Recreation Operations Specialists have been notified of easements that need signage and angler stiles. These corrective actions should be completed in the upcoming months.

Overall, brushing was completed on 5.11 miles of easements along 10 different streams (Table 1). Additionally, easement inspections were performed on 7.9 total miles on trout streams (Table 2). The brush piles from the Pine River brushing were burned during the winter. The habitat crew assisted with a TU workday on Big Spring Branch where box elder, honeysuckle and willow were cut and treated. We will be using a forestry mower on Trout Creek Fishery Area for better angler access in the coming months. The crew will be assisting with a TU workday in Spring of 2024 on Big Spring Creek and Conley-Lewis Creek. They will also be helping with the Foremost Farms volunteer group on their Adopt a Fishery Area workday in Spring of 2024.



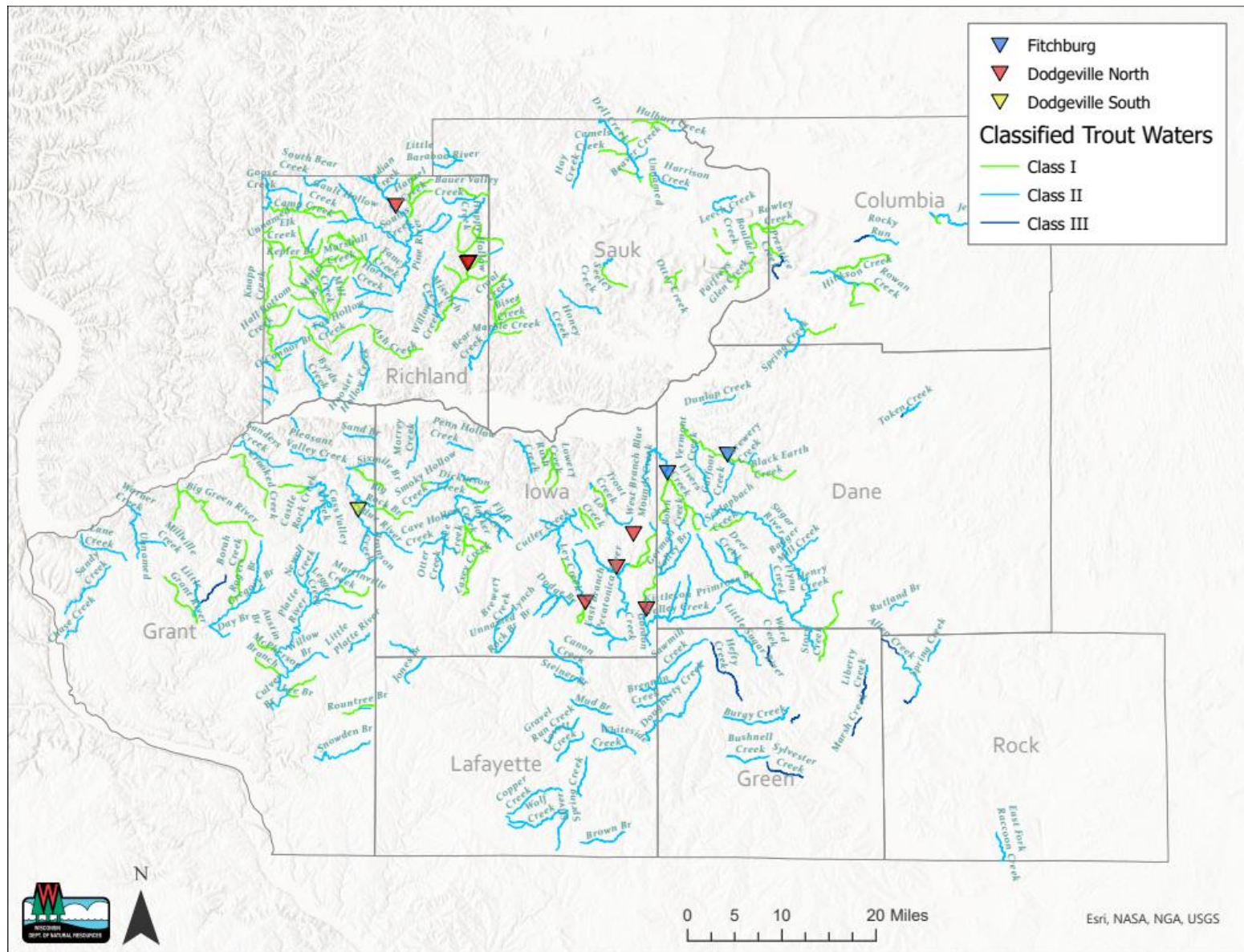


**Figure 1.** Before and After photos on Black Earth Creek



**Figure 2.** Before and after work photos on Gordon Creek





**Figure 3.** Locations of sites completed in 2023-24

**Table 1.** Properties where crews conducted habitat maintenance in 2023-24

Easement Property	Counties	Stream Length Worked On (Feet)	Activity
Smith Hollow Cr	Richland	4308	Brushing
Smith Conley Cr	Iowa	3438	Brushing
Ryan Cr	Dane	210	Brushing
Whitford Cr	Iowa	3241	Brushing
Willow Cr	Richland	804	Brushing/Mowing
Gordon Cr	Iowa	4820	Brushing
Black Earth Cr	Dane	6312	Brushing
East Br. Pecatonica R	Iowa	2034	Brushing
Pine River	Richland	705	Brushing
Big Spring Br	Iowa	1129	Brushing
Total		27001	

**Table 2.** Easement inspections of Southwest Wisconsin in 2023-24

Stream	Miles Inspected	Number of properties	Corrective action needed	
			Easement Signs	Access Stiles
Blue River System	7.9	19	8	6
Totals	7.9	19	8	6

**Table 3.** Annual work completed summary.

Year	Hours Worked	Easement Miles Inspected	Brushing length completed (miles)
2019-20		34.8	3.07
2022-23	752.5	21.8	7
2023-24	431.75	7.9	5.11
Totals		64.5	15.18

This has been the third year of this project, the first year was 2019 and second year was fall/winter 2022/23. The Billy Goat Brush mower has had an internal failure and is no longer operable. We will need to replace the brush mower. We recommend purchasing a DR Field and Brush Mower PRO MAX34 (22HP) at \$4000. This brush mower also has a chipper attachment that would cut down on the amount of brush that would be needed to burn. The 3.5 Inch Chipper Attachment costs \$1600. We also recommend purchasing a couple smaller Stihl hand blowers to aid in the burning of future brush piles. We will be looking into renting a skid steer with grapple bucket for a couple of days to assist with larger brushing projects.

A total of \$7155 of trout stamp funding has currently been spent for travel expenses, vehicle mileage and supplies. \$3500 was moved from the supply budget to the LTE Budget to help keep the LTEs on to complete more work. The 2 LTEs worked a combined 451.75 hours spending \$8000 of the Trout Unlimited contribution and currently \$1667 has been spent from LTE Trout Stamp Budget. The total amount of FTE hours allocated was 92.5. It costs roughly \$1732 to employ two LTEs for one week, including fringe and administrative costs.

Overall, the third year of the habitat maintenance crew accomplished a great deal of work on many trout streams in Iowa, Richland, Grant, and Dane Counties. With a dedicated crew in the fall and winter we were able to accomplish 5.11 miles compared to 7 miles of brushing in 2022/23 and 3.07 miles in 2019 (Table 3). We were able to inspect 7.9 miles in 2023/24 compared to 21.8 miles of easement in 2022/23 and 34.8 in 2019. Anglers will enjoy the increased accessibility on DNR easements and none of this work would have been accomplished without the support and cooperation of Trout Unlimited. However, in 23-24 the crew didn't complete as much as the previous year. We are hoping to increase the project budget to \$24,000 in total to increase the amount of work from our habitat crew for fall/winter 2024/25. This total reflects an equal contribution from TU donations and DNR Trout Stamp funding of \$12,000 each.