Ontario Wildlife Foundation Final Report

Trout Unlimited Canada Suite 304- 100 Stone Road West Guelph, Ontario N1G 5L3 Canada

Project Title: Rehabilitating Redside Dace Habitat

Project Objective: Restore the habitat of the Redside Dace, an endangered species of minnow which is particularly susceptible to habitat disturbance.

Project Location: Irvine Creek, near Fergus, Ontario

Project Overview: The Redside Dace requires clear, cool water with lots of overhanging branches that provide insects for the fish to jump out of the water and catch. Much of the Redside Dace's range in Irvine Creek has been extensively degraded through agriculture use and the historic logging of riparian areas.

This project sought to improve habitat for the Redside Dace through tree plantings and instream structures. TUC identified two sites along Irvine Creek that lacked riparian cover and had already begun to erode and over widen – a process which would increase the water temperature. In total, 575 trees and shrubs were planted across the two locations, with emphasis on planting species adapted for this region and for living next to the stream.



Fig 1. Volunteers and TUC staff planting trees and shrubs alona Irvine Creek

As part of our first volunteer planting event, TUC ran a tree planting orientation day with 10 members of several local chapters to aid them in planning their own tree planting events as part of TUC's larger Cooling Streams project. TUC planned on running a second workday with students from a local high school but encountered administrative difficulties at the last moment which prevented their participation. TUC staff completed the tree planting, with help from a local landowner, but we are hopeful of successfully engage with local schools for future aspects of this program.

In the process of identifying sites for tree planting, TUC engaged with numerous landowners and developed new connections in the area. The increased access to Irvine Creek has allowed TUC to identify several locations where in-stream restoration will be beneficial to the river's health and the quality of habitat for the Redside Dace.



Fig 2. TUC staff planting trees and shrubs along Irvine Creek



Fig 3. Recently planted Ninebark shrub next to the creek



Fig 4. One of the local landowners helping to move the trees and shrubs to the site

Project Budget:

Native plant material was purchased from Verbinnen's Nursery Ltd and Native Plant Source in select numbers to increase biodiversity and promote species that would provide overhanging vegetation. Multiple nurseries were used so that larger individual plants could be included, increasing the chance for immediate benefits to the stream. Weed mats and tree wraps were purchased from outside suppliers, Wayfair and Dubois respectively.

Ninebark (Physocarpus	40-75cm 1 Gallon	40
opulifolius)		
Serviceberry (Amelanchier	40-75cm 1 Gallon	35
canadensis)		
Nannyberry (Viburnum lentago)	75-100cm 1 Gallon	100
Spicebush (Lindera benzoin)	40-75cm 1 Gallon	50
Gray Dogwood (Cornus	40-75cm 1 Gallon	40
racemosa)		
Red Osier Dogwood (Cornus	40-75cm 1 Gallon	45
sericea)		
Red Osier Dogwood (Cornus	2x5 inch plugs	75
sericea)		
White Cedar (Thuja occidentalis)	60-80cm 1 Gallon	10
Pussy Willow (Salix discolor)	40-75cm 1 Gallon	10
Red Maple (Acer rubrum)	40-60cm 2x5in plug	45
Elderberry (Sambucus	40-60cm 2x5in plug	100
canadensis)		
Total		517
Weed Mat	29cm round	225
Plastic Tree Wraps	120cm	50

Project Financial Report:

In total, \$9,091 of the funding from Ontario Wildlife Foundation went towards the native vegetation, weed mats, and plastic tree wrap.

Preparatory site visits and landowner outreach occurred over the summer of 2023 with the tree plantings occurring in October and November of 2023 with the help of TUC chapter volunteers and a local landowner.

On behalf of Trout Unlimited Canada, we thank Ontario Wildlife Foundation for their support!

Thank you,

Trout Unlimited Canada

