



Habitat Restoration Project 2017
- Duffins Creek: Claremont, Ontario -

Transport Canada Pickering Lands - Live Staking

Habitat Project Lead: *Ontario Federation of Anglers and Hunters*

Habitat Project Funding Lead: *Ontario Federation of Anglers and Hunters*

Date Completed: April 11th, 2017

UTM: 648805 m E, 4870110 m N

In 2014, OFAH assisted in the removal of an online pond in the headwaters of Duffins Creek (Durham Region) on a tributary called Mitchell Creek. The project is located on the Transport Canada Pickering Lands Site (near Claremont, Ontario) and is in partnership with the Toronto and Region Conservation Authority. Initial construction funding was provided by the federal Recreational Fisheries Conservation Partnerships Program (RFCPP) and the Toronto Dominion Friends of the Environment Foundation (TDFEF) (2014). The first phase of the project was the disconnection of Mitchell Creek from the on-line pond and the construction of a by-pass channel.

Phase two of the bypass channel project, which began in 2015, is the reforestation of the surrounding property. In 2017, phase two continued with additional tree and shrub planting activities. The roots from the planted trees and shrubs will stabilize the soil of the stream banks, and the leaves of the shrubs will help to shade the stream, cooling water temperatures during the summer. The entire shrub structure will also add to the riparian buffer of Mitchell Creek, which provides structural protection from physical debris such as blowing garbage, and chemical protection as the plants take up nutrients that may be in excess due to adjacent land uses. This habitat protection benefits juvenile Atlantic Salmon, as they utilize stream habitat for up to three years before traveling to Lake Ontario.

On April 11th, the LOASRP planted dogwood live stakes along Mitchell Creek with the help of two co-op students from Fleming College and another co-op student from Durham College. Over 2,000 dogwood live stakes were created from cuttings on site and were planted by inserting these stakes at least 70% into the ground throughout the riparian area of Mitchell Creek. After a few year's growth, these live stakes will provide cover for Mitchell Creek and soil stability along it's banks. Figure 1 shows the location of the live staking along Mitchell Creek, and Figure 2 is a picture of the stakes in place.



Figure 1: The Transport Canada project site is located near the intersection of Durham Regional Road 5 and Sideline 22. The live staking occurred along sections of Mitchell Creek that are highlighted in red.



Figure 2: The Red Osier Dogwood stakes are visible along the shoreline of Mitchell Creek.