



Habitat Restoration Project 2006

- Cobourg Brook -

Nelson Property Low Level Stream Crossing and Planting

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

Habitat Project Funding Lead: *Ministry of Natural Resources and Forestry*

Date Completed: *September 14th, 2006*

The Nelson property along the Cobourg Brook is a cattle farm, with an area through the stream that is severely degraded by cattle and equipment crossing (see figure 1). The Ontario Federation of Anglers and Hunters suggested pre restoration monitoring including OSAP, OBBN and fish sampling. The cattle were then fenced out of the creek, and the goal was to provide a single stable crossing point for both cattle and farm equipment. Fencing the cattle out aimed to prevent further degradation of the stream channel, allowing the banks to stabilize and re-vegetate and allowing the flow to be unrestricted, therefore allowing for the flow to scour the sediment and expose the substrate needed for productive fish habitat. Water quality will also continue to increase as the system flushes itself out. Restoration efforts included the grades on both sides of the stream being brought back to original slope levels,

the creek bed excavated to a depth of 20'', a layer of sand placed along the approaches, a geotextile laid on top of this sand and across the creek, gravel laid on top of the geotextile and tamped into place, 10'' to 20'' of stone laid down to bring the stream bed up to the existing grade prior to excavation and finally planting on both sides of the creek within the fenced off areas (figure 2). The post restoration monitoring of the area showed immense improvement to the site in 2007 and 2010, shown in figure 3.



Figure 1: Baltimore Creek before bed-level crossing constructed



Figure 2: Laying Sand, geotextile and silt fencing down while re-creating stream crossing.



Figure 3: Baltimore Creek after bed-level crossing construction, 2010.