

WATERSHED *moments*

Heart Lake Conservation Area, 3-D Turtle Models, Louise Arbour Secondary School Students



LOCATION:
Heart Lake Conservation Area, Etobicoke Creek Watershed

DATE:
Monday May 13, 2019 and Friday June 7, 2019

REGION/MUNICIPALITY:
Region of Peel, City of Brampton

IN COLLABORATION WITH:
Toronto and Region Conservation Authority (TRCA), York University, Louise Arbour Secondary School Students, Brampton Library Springdale Branch



Since 2011, Toronto and Region Conservation Authority (TRCA), in collaboration with the City of Brampton, Ontario Road Ecology Group, York University, and local citizen scientists, have monitored Heart Lake Road for wildlife-vehicle collisions. This data has been used to implement mitigation to assist wildlife movement and help prevent road mortality of sensitive resident species, including at-risk turtles.

In an effort to reduce the wildlife-vehicle collisions along Heart Lake Rd, wildlife fencing and a dedicated wildlife passage were installed in 2016, under Heart Lake Road. Turtles often use the gravel along road shoulders to lay eggs. In an effort to deter this nesting behavior, raised nest beaches were installed on both sides of the road to provide alternative nesting areas.

Since the installation of the nesting beaches, there have only been a few confirmed instances of turtles on or around the beaches. In an effort to encourage turtles to nest on constructed beaches, students from Louise Arbour Secondary School, collaborated with the Springdale Brampton Library, to create realistic 3-D turtle models which were placed on the three nesting beaches. The models were created using a 3-D printer, paint, and weather-proof sealant.

A motion-activated camera was also set up on one beach and a Midland painted and snapping turtle were captured nesting beside the decoys. Another video captured a raccoon interacting with a decoy. It is anticipated that exposure to turtle decoys on the nesting beaches will encourage additional turtles to explore beaches as potential nesting habitat.

Activities of this nature educate on the importance of enhancing natural spaces within urbanized environments. Students are allowed to develop a greater appreciation and understanding of how species at risk co-exist in urbanized environments.

Positive Environmental Impacts

# of 3-D Turtles Created	# of Hours to Create Models	Turtle Species Created	# of Nesting Beaches
4	240	Snapping	3
3	180	Midland Painted	3



In collaboration with:

