

# WATERSHED *moments*



**LOCATION:**  
Heart Lake Conservation Area, Etobicoke Creek Watershed

**DATE:**  
April, 2019

**REGION/MUNICIPALITY:**  
Region of Peel, City of Brampton

**IN COLLABORATION WITH:**  
Toronto and Region Conservation Authority (TRCA),  
Region of Peel, York University



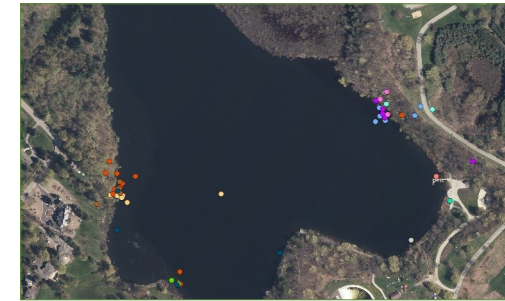
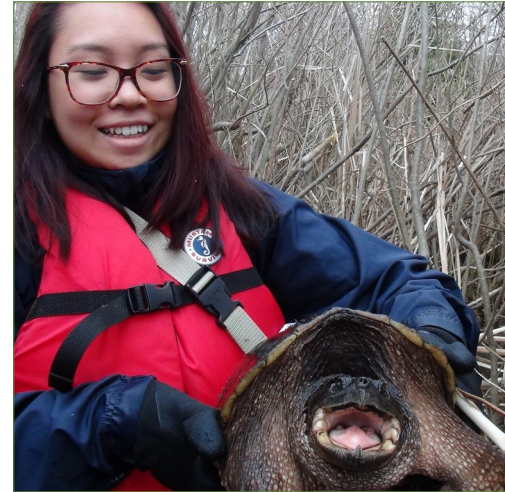
## Heart Lake Conservation Area, Turtle GPS Tracking Unit Recovery

Heart Lake Road bisects an area of designated Provincially Significant Wetlands (PSW) which are home to diverse and significant wildlife. Since 2011, Toronto and Region Conservation Authority (TRCA), has conducted the citizen science Heart Lake Road Ecology Volunteer Monitoring study to collect data on wildlife-vehicle collisions (WVCs).

All eight of Ontario's turtles are listed on Ontario's Species at Risk list and in 2014 and 2015, a turtle population study was conducted at two of the PSWs to gain a base-line population of turtles prior to the installation of a dedicated wildlife passage and wildlife directional fencing. In 2018, the study area was expanded to include seven wetlands and Heart Lake, with a total of 333 turtles captured. Five female snapping turtles and one female northern map turtle were outfitted with a GPS transmitter in order to study nesting and movement behavior.

Five of the GPS units were recovered in 2018, but due to movement and hibernation, one turtle had the unit attached over winter. Staff and a member of York University went out in early spring to track and remove the unit.

Data from these GPS transmitters will be used to give TRCA an idea of the types of habitats adult female turtles are utilizing in the Heart Lake Wetland Complex. These units will be preserved for use in future turtle population studies.



### Positive Environmental Impacts

# of Turtles Tagged with GPS	Turtle Species Tagged 2018	# of GPS Units Recovered 2018	# of GPS Units Recovered 2019
5	Snapping	4	1
1	Map	1	0

*In collaboration with:*

