## Turtle nest protector permitted to remain in Limerick



## By Mike RileyLocal Journalism Initiative Reporter

At the Limerick Township council meeting on July 19, Victoria Tisdale, the clerk and treasurer, informed council that Kelly Wallace, the managing director of the Think Turtle Conservation Initiative had been in touch with her about keeping a temporary turtle nest protector in place within the township. After a brief discussion, council decided to vote to allow this nest protector to remain where it is to protect the turtle hatchlings within their incubation period of 60 to 90 days.

A grassroots group focused on awareness raising initiatives and species recovery efforts, Think Turtle Conservation Initiative helps turtle species native to Ontario locally and provincially, and does its work throughout Hastings County and neighbouring communities. According to Wallace, turtles are key players in ecosystem management, and are sensitive to changes in their environment, making them what's called an indicator species.

?Turtles serve as a measure of the environmental conditions that exist in any given locale. They can tell us about the health of the ecosystems in which they live. If the turtles are showing signs of not doing well, there may be something wrong in that habitat. If turtles are affected, other wildlife may be as well but are not showing signs,? she says.

Wallace says this could be the impact of pollution on an ecosystem or how well the environment is being managed through natural contributions and/or outward factors such as diminishing biodiversity due to road mortality.

Wallace reveals that all eight turtle species native to Ontario are currently federally designated as a species at risk and seven of the eight species are provincially designated as such.

?This makes it all the more important to protect turtles in addition to other wildlife species that support the aquatic and terrestrial ecosystems we benefit from and depend on. With turtle populations decreasing each year due to road mortality, habitat loss and degradation, poaching, predation, pollution and climate change, this makes the conservation efforts communities throughout Ontario engage in all the more important to ensure future generations of turtles,? she says.

Wallace emailed Tisdale on about the nest protector on July 9, saying that while they had Faraday Township's permission to put these protectors along Old Hastings Road, one of them, north of Hwy 620, falls outside of Faraday. Initially they thought this portion was in Wollaston Township but upon further review, they realized it was in Limerick. Therefore, Wallace asked if they could keep this already installed nest protector at that location. They also requested that if approved, they be able to change over the low-profile nest protector to a wood frame nest protector at the 50-day mark, and to add Old Hastings Road to their list of turtle nesting sites and continue to offer protection to them via these protectors provided they are set back from the main road.

These protectors are essential to ensure the survival of these at-risk nests and hatchlings, because without them, their survival rate is less than one per cent. Think Turtle Initiative hopes that by protecting these nests, they can contribute to helping these turtle species recover.

?Turtles are an imperiled species that are unable to sustain losses to the numbers that are occurring each year, in large part due to motor vehicle strikes. To date, there have been over 900 injured turtles admitted to the Ontario Turtle Conservation Centre, home of Ontario's turtle hospital. Ninety per cent of the injured turtles admitted are the result of being struck by a motor vehicle,? she says.

Wallace says that unlike other wildlife species struck by motor vehicles, turtles are slow to reach sexual maturity, making the rate at which the population is replaced extremely slow and impossible without head starting programs. Species such as Snapping turtles and Blanding's turtles take upwards of 17 years to 20 years to reach the age where they will start breeding.

According to Wallace's letter to Tisdale, the key factors that determine where they place nest protectors are; where the nesting activity is concentrated and where there is a history of predation each year. She also emphasized that the protectors are set back from the road so there is no safety concern for passing motorists.

Nest protectors safeguard vulnerable turtle nests from predators for the first 10 to 21 days, significantly increasing the chances that the nest will thrive and escape predation when it is most vulnerable.

?The locations we requested permission to protect are ones that experience a high degree of predation each year. In most cases, this stretches back decades and means little if any opportunity for localized species recovery. The approval to protect nests at these sites will increase their chances of survival,? she says.

Wallace says the incubation period for turtle nests is 60 to 90 days from when the female turtle lays her eggs.

?This is a general guideline. When a nest will hatch is dependent on the turtle species, where the nest is located, the amount of sunlight, moisture, temperatures the nest is subjected to and other factors. With nest protectors installed and routine monitoring during the incubation period, there is the opportunity to intercept the hatchlings emerging from their nest toward the end of August through to mid-October,? she says.

There are two forms of nest protectors used by Think Turtle Initiative; low profile and wood frame. The low profile one is temporary, prevents the turtle hatchlings from exiting the nest and consists of a sheet of wire mesh securely attached flush to the ground. After around 50 days, it is replaced with a wooden frame protector, which is in place for the following 30 to 40 days. It is partially recessed into the ground and at least two and a half inches of the protector lies above ground. During this time, Think Turtle Conservation Initiative staff monitor the hatchlings and ensure they exit the nest safely and transport them to a safe spot for release,

thus avoiding traffic, predators and other dangers.

?Nest protection approached in this manner will enable Think Turtle and volunteers to help the hatchlings get to the nearest slow-moving body of water, within one kilometre. There, the hatchlings would be released at a shallow water entry point where there is plenty of vegetation for protective covering and resting sites. If there are multiple hatchlings, they will be spread around the body of water as described. If possible, 10 feet apart. This will reduce the chances of predators locating clusters of turtles and increase the number of hatchlings that survive,? she says.

Tisdale thinks it's a good thing that Limerick is working with Think Turtle Conservation Initiative to help protect the species. Wallace says they are particularly pleased that their request to install the nest protectors was approved by Limerick Township.

?Thank you to Mayor Stefanski and council for supporting this conservation initiative and by doing so protecting the role biodiversity and ecosystems have in our daily lives and the invaluable ecological services they provide.?