Protected Habitat for the Threatened Blanding's Turtle Identified in 2017-18 in the Tay Valley Township



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Summary

The purpose of this document is to provide municipal planning staff with information regarding observations of the threatened Blanding's Turtle near the Tay Valley Township and to apprise municipal planning staff of associated habitat protection, in aid of informed decision-making in municipal planning. As part of the Canadian Wildlife Federation's (CWF) turtle recovery program, we conducted surveys for the Blanding's Turtle during the spring and summer of 2017 and 2018 to assist in the conservation of the species and its habitat and to identify specific areas of high road mortality. This report includes everything contained in the report submitted to the township last year and is updated with new information from 2018.

The Endangered Species Act of Ontario provides protection for threatened and endangered species as well as their habitat. General habitat descriptions produced by the Ontario Ministry of Natural Resources and Forestry outline the extent of habitat protected. The general habitat description for the threatened Blanding's Turtle indicates that wetlands up to 2 km from a valid Blanding's Turtle observation receive protection as category 2 habitat.

Our surveys found nine Blanding's Turtles in the Tay Valley Township. Four turtles were found on Highway 7 west of Perth, one was found on county road 36 near the border with the Township of Rideau Lakes, one was found on county road 10 near Pike Lake, one was found on Black Lake North Shore Road near Black Lake, one was found on country road 14, and one was found in a wetland east of county road 14. There are extensive wetlands in these areas and much of the wetlands around these two observations should be considered category 2 habitat. While many day to day human activities are compatible with Blanding's Turtles, any proposal to drain portions of these wetlands, or to significantly alter the habitat, should be directed to the Ministry of Natural Resources and Forestry office in Kemptville.

1.0 Endangered Species Act and habitat protection, as per the Ministry of Natural Resources and Forestry

The information provided in this section is from the Ontario Ministry of Natural Resources and Forestry (MNRF), who oversees and enforces the Endangered Species Act. The Canadian Wildlife Federation (CWF), being a charitable, non-profit organization, does not have regulatory capacity to enforce this Act, however it believes it is important to present relevant information to the municipality.

The government of Ontario launched the new Endangered Species Act in 2007, which provides protection to threatened and endangered species and their habitat. When species are listed as endangered or threatened, "their general habitat is automatically protected"¹. General habitat is defined as the

"area on which a species depends, directly or indirectly, to carry out its life processes. This includes places that are used by the species as dens, nests, hibernacula or other residences. It doesn't include areas where the species once lived or where it may be reintroduced in the future."

General habitat requirements for each threatened and endangered species are provided in technical documents called general habitat descriptions. Three categories of habitat are considered for species at risk, each with increasing tolerance to disturbance from human activities (Table 1).

¹ How species at risk are protected. Ontario Ministry of Natural Resources and Forestry website: https://www.ontario.ca/page/how-species-risk-are-protected

Table 1. Habitat protection categories for threatened and endangered species.

Category	Description ²			
1	Red: Highly sensitive habitat areas where the species is anticipated to have the lowest			
	tolerance to alteration. With few exceptions, activities with potential to alter category 1			
	habitat areas will likely damage and destroy the habitat, and would require authorization			
	to continue.			
2	<u>Orange</u> : Moderately sensitive habitat areas where the species is anticipated to have a			
	moderate tolerance to alteration. Relatively high impact or large scale activities with			
	potential to alter category 2 habitat areas will likely damage and destroy the habitat, and			
	would require authorization to continue.			
3	Yellow: Highly tolerable habitat areas where the species is anticipated to have the highest			
	tolerance to alteration. Certain high impact or large scale activities that alter category 3			
	habitat areas will likely damage and destroy the habitat, and would require authorization			
	to continue.			

A general habitat description for the threatened Blanding's Turtle (*Emydoidea blandingii*)³ has been prepared by MNRF (Table 2).

Table 2. General habitat description for the Blanding's Turtle.

Category	Description
1	Nest and the area within 30 m or Overwintering sites and the area within 30 m
2	The wetland complex (i.e. all suitable wetlands or waterbodies within 500 m of each other) that extends up to 2 km from an occurrence, and the area within 30 m around those suitable wetlands or waterbodies.
3	Area between 30 m and 250 m around suitable wetlands/waterbodies identified in Category 2, within 2 km of an occurrence.

² Categorizing and Protecting Habitat under the Endangered Species Act (2012): http://files.ontario.ca/environment-and-energy/species-at-risk/stdprod_085648.pdf

³ General Habitat Description for the Blanding's Turtle (*Emydoidea blandingii*): https://www.ontario.ca/page/blandings-turtle

Nesting sites and overwintering sites receive the highest level of habitat protection (category 1), but these sites are often difficult to locate. From a management perspective, a key part of the habitat is category 2 habitat, the wetlands that this species uses during the course of the year. This can include wetlands up to 2 km away from a confirmed observation of a Blanding's Turtle (Figure 1). Wetlands within 500 m of each other are considered occupied by Blanding's Turtle and are protected, but wetlands more than 500 m away from any other wetland are not considered occupied and hence are not protected without an additional observation of a Blanding's Turtle in or near that wetland (Figure 1).

Activities in Blanding's Turtle habitat can continue "as long as the function of these areas for the species is maintained and individuals of the species are not killed, harmed, or harassed"³. Activities that are generally not considered compatible with Blanding's Turtle habitat include: "Significant draining, infilling, dredging, or other significant alteration of wetlands or other suitable waterbodies"³.

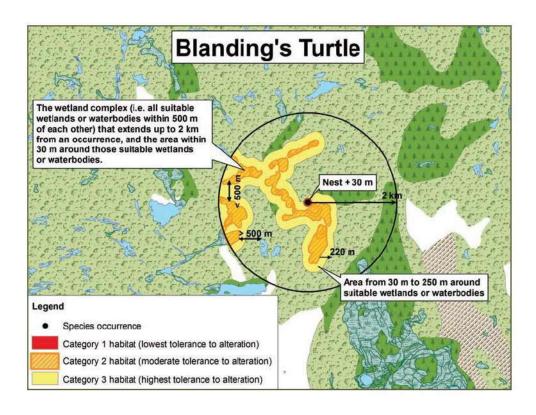


Figure 1. Illustration of general habitat description for the Blanding's Turtle (source: MNRF).

2.0 The Blanding's Turtle

The Blanding's Turtle (*Emydoidea blandingii*) is a medium-sized turtle that can reach almost 30 cm in shell length. It is easily recognized by its domed shell and bright yellow neck (Figure 2). The Blanding's Turtle occupies a wide range of wetland types and individuals are known for using multiple wetlands over the course of the active season. This often results in turtles getting hit as they attempt to cross roads as they move from one wetland to another. The Blanding's Turtle is widespread in southern Ontario but faces a number of threats including habitat loss, habitat fragmentation and high levels of road mortality. Given these threats it was designated threatened by the government of Ontario. For more information consult the MNRF website on the Blanding's Turtle⁴ which provides up to date information on status, distribution, and recovery actions.



Figure 2. Adult Blanding's Turtle.

⁴ https://www.ontario.ca/page/blandings-turtle

3.0 New areas with Blanding's Turtles

The Canadian Wildlife Federation undertook surveys for the Blanding's Turtle in eastern Ontario during the spring and summer of 2017 and 2018. Our goal was to locate previously unknown areas with this species at risk. We found nine Blanding's Turtles in the Tay Valley Township. Four turtles were found on Highway 7 west of Perth (Figure 3), one was found on county road 36 near the border with the Township of Rideau Lakes (Figure 4), one was found on county road 10 near Pike Lake (Figure 5), one was found on Black Lake North Shore Road near Black Lake (Figure 6), one was found on country road 14, and one was found in a wetland east of county road 14 (Figure 7). Wetlands, as defined by the Ontario Ministry of Natural Resources and Forestry, are abundant near these observations. Although Blanding's Turtles were not found at other locations it cannot be assumed the species is absent elsewhere in the municipality. Contact the MNRF Kemptville District Office for information on previous observations. The Blanding's Turtle is quite mobile and not always easily detected. Targeted surveys for the Blanding's Turtle should be carried out prior to activities that would impact wetland habitat. The MNRF has published survey guidelines for the Blanding's Turtle⁵.

⁵ OMNRF 2015. Survey Protocol for Blanding's Turtle (*Emydoidea blandingii*) in Ontario. This document is not available online but can be requested from MNRF.

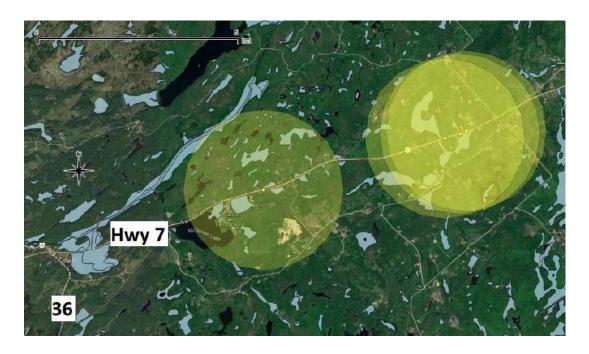


Figure 3. Location of four Blanding's Turtles found west of Perth along highway 7 (yellow points), along with 2 km buffers (pale yellow circles) showing the limit of potential category 2 habitat protection. Wetlands as defined by the Ministry of Natural Resources and Forestry are illustrated in blue.

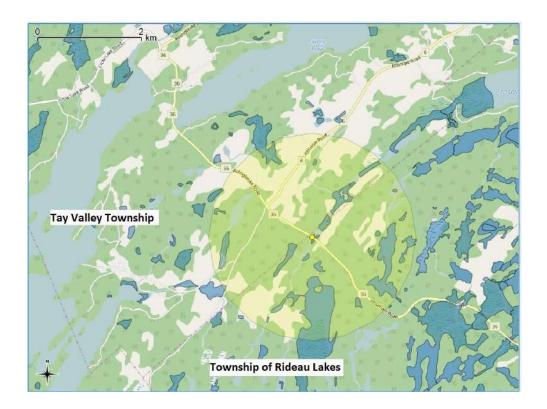


Figure 4. Location of Blanding's Turtle found on county road 36 (yellow point), along with 2 km buffer (pale yellow circle) showing the limit of potential category 2 habitat protection. Wetlands as defined by the Ministry of Natural Resources and Forestry are illustrated in blue.

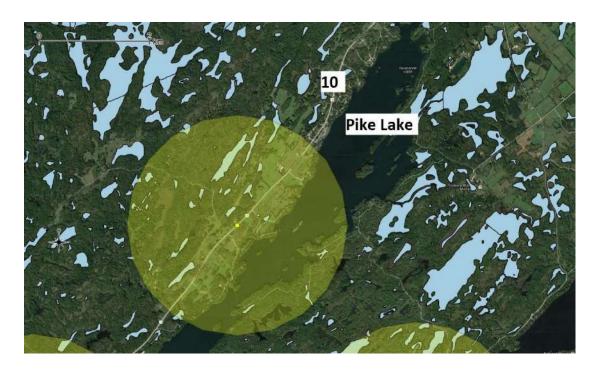


Figure 5. Location of Blanding's Turtle found on county road 10 (yellow point) near Pike Lake, along with 2 km buffer (pale yellow circle) showing the limit of potential category 2 habitat protection. Wetlands as defined by the Ministry of Natural Resources and Forestry are illustrated in blue.

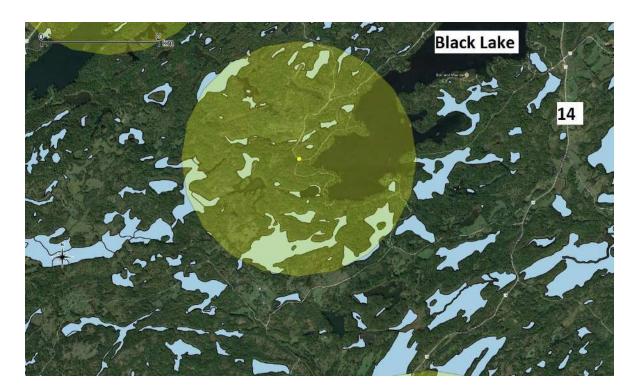


Figure 6. Location of Blanding's Turtle found on Black Lake North Shore Road near Black Lake (yellow point), along with 2 km buffer (pale yellow circle) showing the limit of potential category 2 habitat protection. Wetlands as defined by the Ministry of Natural Resources and Forestry are illustrated in blue.

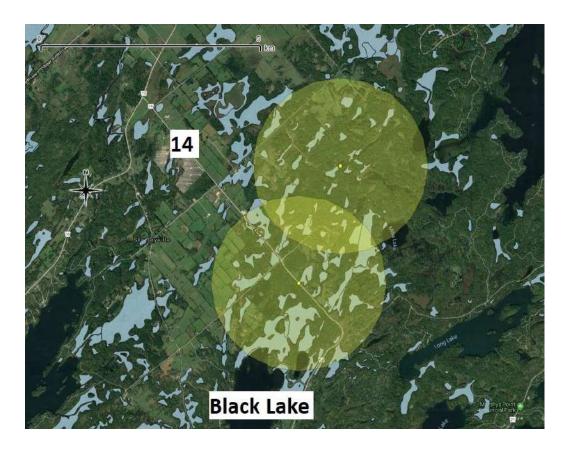


Figure 7. Location of two Blanding's Turtles north of Black Lake, one on county road 14 and one in a wetland on private land (yellow points), along with 2 km buffers (pale yellow circles) showing the limit of potential category 2 habitat protection. Wetlands as defined by the Ministry of Natural Resources and Forestry are illustrated in blue.

4.0 Management implications

Some, but not all, of the wetlands near the Blanding's Turtle observations along Highway 7 should all be considered category 2 habitat (Figure 8). Many of the wetlands near the Blanding's Turtle observation along County Road 36 should also be considered category 2 habitat (Figure 9). While most of the category 2 habitat occurs in Rideau Lakes Township, some of it occurs in the Township of Tay Valley. Many of the wetlands near the Blanding's Turtle observation along County Road 10 should also be considered category 2 habitat (Figure 10). Most of the wetlands near the Blanding's Turtle observation along Black Lake North Shore Road 36 should also be considered category 2 habitat (Figure 11). All of

the wetlands near the Blanding's Turtle observation along County Road 14 and near the observation in a wetland on private land should also be considered category 2 habitat (Figure 12).

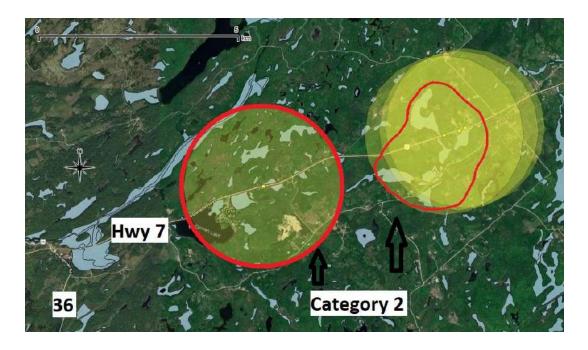


Figure 8. Location of category 2 habitat for the Blanding's Turtle west of Perth along highway 7. Wetlands (blue patches) circled in red within the 2 km buffers (pale yellow circles) should be considered category 2 habitat.



Figure 9. Location of category 2 habitat for the Blanding's Turtle found along County Road 36. Wetlands (blue patches) circled in red within the 2 km buffers (pale yellow circles) should be considered category 2 habitat.

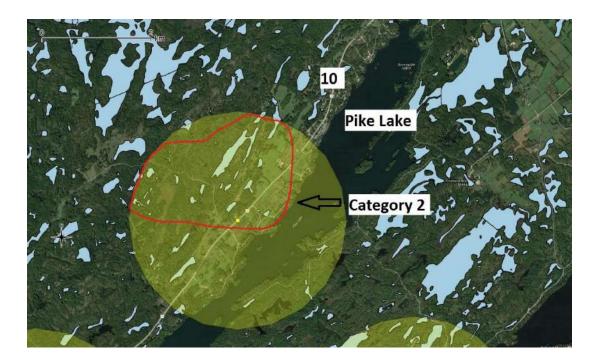


Figure 10. Location of category 2 habitat for the Blanding's Turtle found along County Road 10. Wetlands (blue patches) circled in red within the 2 km buffers (pale yellow circles) should be considered category 2 habitat.

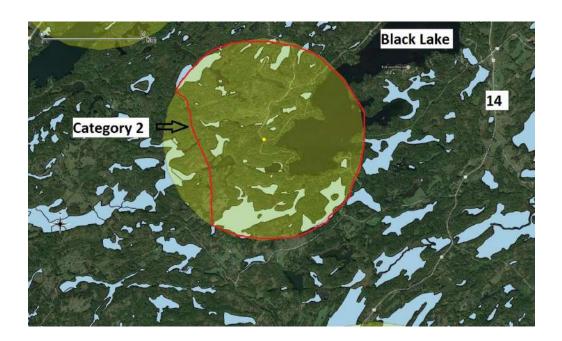


Figure 11. Location of category 2 habitat for the Blanding's Turtle found along Black Lake North Shore Road. Wetlands (blue patches) circled in red within the 2 km buffers (pale yellow circles) should be considered category 2 habitat.

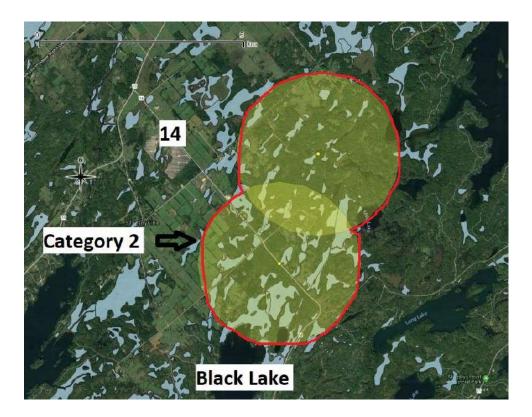


Figure 12. Location of category 2 habitat for the Blanding's Turtles found along County Road 14 and in a wetland to the. All wetlands (blue patches) within the 2 km buffers (pale yellow circles bordered in red) should be considered category 2 habitat.

While category 2 habitat may be tolerant of a moderate level of alteration (see Table 1) any proposed wetland draining or habitat conversion activities in these areas should be directed to the local Ministry of Natural Resources and Forestry office in Kemptville. We have also provided details on our Blanding's Turtle observations to the Kemptville office to be included in their species at risk database and to update their protected habitat mapping. Further questions regarding habitat protection associated with the Endangered Species Act should be directed to the MNRF Kemptville District Office.

5.0 Locations of Blanding's Turtles

Location	Latitude (°N)	Longitude (°W)
Highway 7	44.85519	-76.43921
Highway 7	44.85478	-76.44063
Highway 7	44.85403	-76.44398
Highway 7	44.84586	-76.48468
County Rod 36	44.73568	-76.49280
County Road 10	44.77889	-76.35650
Black Lake N Shore Rd	44.75495	-76.32746
County Road 14	44.80067	-76.28271
Private land	44.81763	-76.27425