

**City of Middleton
Blanding's Turtle Citizen Survey, 2011**



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BACKGROUND:

In 2011, the City of Middleton approved the third year of a plan to involve residents in a non-invasive spring survey of basking turtles. Previously Blanding's turtles were poorly documented in the City, and Citizen Monitors have been enlisted to assist experts including Dr. Mary Linton and Samantha Foster to monitor Blanding's turtle populations in the multiple wetlands and kettle ponds within Middleton. The Blanding's Turtle (*Emydoidea blandingii*) is of particular interest because it is a state threatened species and, of the wetland turtles, may be the most susceptible to roadway mortality. This work has attracted attention and received grants, from the DNR Citizen Monitoring Program and a Besedney Grant from the Natural Resource Foundation.

A diverse group of twenty-two citizens of the City of Middleton monitored basking turtles in four ponds within the city during April and early May of 2011. The group included two families including children, several couples, and numerous veterans of previous basking turtle surveys. Many citizen monitors were delighted to be able to survey turtles in their own neighborhood, and pledged to continue the monitoring throughout the year. These are people who care about the natural resources of Middleton and will support the city in future work. In particular, these citizens will help Middleton identify the places where the state-threatened Blanding's turtle can be found within the city's jurisdiction.

The ponds monitored in 2011 included three where monitors in 2010 indicated possible sightings of Blanding's turtles: Graber Pond, Stricker Pond, and Middleton Hills Pond. In

addition, Esser Pond was added to the list because many turtles are seen basking there and it's habitat is suitable for Blanding's turtles. We did not survey any ponds that had previous positive sightings of Blanding's turtles (Pheasant Branch Conservancy and Dog Park Dorn Creek Pond). The 22 monitors convened at Middleton City Hall for training on April 16, 2011. Monitors first learned the identifying characteristics of the three most common Wisconsin wetland turtles: Blanding's turtles, painted turtles and snapping turtles. They then were given the methodology of the basking surveys. After training they were assigned a monitoring location and began their first day of looking for basking turtles.

2011 RESULTS

The 22 monitors invested 102 hours of time surveying ponds for turtles. The survey began on April 16 and ended on May 7, 2011. The survey ended up being more challenging than previous surveys because the weather condition turned cold and rainy for 2 of those 3 weeks. Since turtles bask to warm, this cold, rainy weather reduced the likelihood that basking turtles would be seen. These data should not be interpreted as the actual number of individual turtles seen because we had no way of identifying individuals and individuals were probably seen several times. It can be interpreted as an estimate of abundance. Painted turtles are much more abundant than Blanding's Turtles and Snapping Turtles.

Table 1. Number of sighting of basking turtles by wetland/pond.

Pond	Turtle Species		
	Blanding's Turtle	Painted Turtle	Snapping Turtle
Graber Pond	1 possible	161	7
Middleton Hills Pond		4	
Stricker Pond		10	
Esser Pond		114	

Graber Pond continues to be one of Middleton's most prolific turtle ponds. There continue to be possible sightings of Blanding's turtles there. In fact, just after the survey period ended, a positive sighting of a Blanding's turtle was made on the north side of Graber Pond by CLC Member John Kloosterboer.

Esser Pond and Stricker Pond prove to be great habitat for painted turtles. In addition, Stricker Pond is known to have a good population of snapping turtles from previous surveys.

Middleton Hills Pond's lack of turtles in 2011 could be due to the survey conditions and the fact that fewer hours were spent surveying Middleton Hill Pond in 2011 than in previous years. In 2010, many painted and snapping turtles were observed basking in the pond, and there was a positive identification of a Blanding's turtle that was documented with a picture. Work done in Middleton Hills Ponds after this year's basking survey documented a healthy painted turtle population with many large breeding adults.

In addition, there was a possible sighting of a Blanding's turtle by Mary Linton and Samantha Foster.

CONCLUSION:

Twenty-two potential citizen turtle monitors learned about Blanding's Turtle biology and participated in the study covering several wetland/pond locations within Middleton that required further study. Our experience with Middleton's citizen monitors continues to be very positive. Citizens have learned to distinguish Wisconsin's wetland turtles by being involved in the surveys and by using the tools that Middleton and Thompson and Associates have developed. We get frequent emails from Middleton residents who are both concerned and enthused by what they are learning about Middleton's wetland habitats. They clearly view Middleton's natural areas as enhancements to their quality of life.

FUTURE DIRECTIONS:

The positive results from the three years of Citizen led basking turtle surveys has led to funding from the Wisconsin DNR Citizen Monitoring Program and a Natural Resource Foundation Besedny grant to pay for equipment to trap, mark and attach transmitters to a limited number of Blanding's Turtles so that they can be tracked to nesting sites, road crossings, and hibernation sites. That work was begun in the Fall of 2010 and continued into the Spring of 2011 and will be reported on shortly.



Blanding's Turtle Survey Citizen Training, 4.14.20011- participants model binoc spotting!



Blanding's Turtle Survey Results Meeting 5.7.2011 - Blanding's Turtle visits City Hall!