**Sheboygan River AOC Mink Monitoring Project – 2015 Overview**

We completed the 2nd year of a 3 year mink monitoring project within the Sheboygan River Area of Concern (AOC) and a second, similar length of river starting 5 miles upstream from the AOC (control area). This project utilizes 39 floating rafts (20 in the control area, 19 in the AOC) that carry a clay-substrate filled basket to passively collect mink tracks, which are recorded at least once a week (usually twice a week). In addition, if mink activity is detected, a live trap is set in an effort to capture the mink for collection of a blood sample. These blood samples would be used for environmental contamination testing. This is a novel, non-lethal approach to surveying the population of mink using these two segments of the Sheboygan River, and should allow us to estimate the populations of mink within these river stretches without depleting their numbers.

Two additional survey efforts were added for the 2015 and 2016 field seasons. The first is a survey of local trappers regarding their experiences and observations of the mink population of the Sheboygan River and the Kewaunee River. The information gathered from these interviews may help to provide a context for our own experiences and difficulties in capturing mink. Some of these trappers have likely been trapping mink along the Sheboygan River for several years or possibly longer, and may provide some historical insight into fluctuations in the mink population, or how the population now may compare to observed numbers from previous decades.

Additionally, we are carrying out on-foot searches for mink sign (tracks and scat) along the river bank on 200 meter long segments of each river section. The purpose of these searches would be to provide a check on the efficacy of and reactions of mink to the floating tracking rafts. It is possible that mink are present on the river, but are actively avoiding the rafts as man-made structures. Periodically checking river bank segments for signs of recent mink activity would help us understand if our success rates from 2014 are a product of mink raft avoidance or low mink numbers.

**Results**

The monitoring efforts of 2014 provide an uncertain picture, with 4 tracks recorded within the control area, 2 tracks recorded within the AOC, and 0 mink captured in live traps.

This year (2015) we collected 17 mink tracks within the control area, and 16 mink tracks from within the AOC. There still have not been any mink captured for blood sampling.

We have had collected 2 freshly road-killed mink from within the control area, and these will be submitted for analysis if enough of the correct tissue remains.

On-foot searches of 200 meter sections of river bank have been carried out twice in each section, with limited success. Some very old mustelid scat was found in the AOC and some possible mink tracks were located in the control area. Variable tracking substrates, including large sections of rocks, made tracking difficult to impossible in most locations.

Trapper surveys were provided to local conservation wardens and handed out at the Sheboygan County Conservation Association Meeting. Other surveys were emailed to individuals who are known to have trapped the Sheboygan River for mink. We have 3 completed surveys, all for the Sheboygan River.

**Challenges**

Though we had more success collecting mink tracks this year than we did the previous, there have been some differences in the efforts needed to monitor the rafts and the availability of individuals to collect blood samples. Water levels in 2014 stayed above the long-term averages, and consequently made navigating the river easier and the time it takes to check all 19-20 rafts shorter. In 2015, water levels and flow rates regularly stayed below the long-term averages. This made travel down the river much more difficult, and time to check all the rafts each day increased by several hours. This is much more pronounced in the upstream control area, which has an abundance of shallow riffles that impede paddling.

We have also had complications in coordinating schedules and communicating with wildlife health folks. There have been increased demands upon their time with high profile wildlife work, such as the closely followed elk releases in Jackson County. Consequently, despite having more mink tracks collected by our monitoring rafts, we have not been able to set any live traps and have not collected any live mink since we are uncertain we will have anyone available to work up any mink that would possibly be captured. In 2016 we suggest that local veterinarians be considered as an alternative resource to staff from Wildlife Health.

Trapper surveys did not generate the amount and quality of data that would be needed to be useful for the monitoring efforts. There are only a small number of trappers who target these two rivers, and we were unable to find anyone willing to submit a completed survey for the Kewaunee River. The decision was made to end this effort due to lack of reporting/responses.