

The Environmental Impact Beavers Have on Aquatic Ecosystems

Introduction: Beavers are essential to the aquatic ecosystems as they improve water quality by filtering out the water sediments through their dam building skills while they also provide habitat for aquatic creatures by providing wetlands. By building dams, beavers decrease flooding and erosion.

Methods: Testing for northeast, southwest, and south CMN campus ponds' turbidity (cloudiness) to screen for PH, nitrate, phosphate, dissolved oxygen, arsenic, and lead. Chemical screenings were identified to observe if there is a difference between the ponds' sediments. Sampling jars were used for each pond to obtain the water. She measured 5 milliliters (about 0.17 oz) of sampled water, and placed drops with a pipette, then waited to see if there was a physical change from the chemicals.

Results: Between each pond, there was a consistency as the PH levels measured a neutral 7.5. For the phosphate, arsenic, and lead the ponds had tested a 0 while nitrate tested 4 milligrams per liter. Lastly, the dissolved oxygen had measured 4 milligrams per liter. While the turbidity testing is ongoing, this is important for water quality because this shows how well nutrients are balanced and shows no disturbances in the water caused by erosion.

Conclusion: She personally had not seen any beaver activity, there were beavers that were previously in these ponds in the past that were removed and safely relocated, she concluded that these beavers could have contributed to filtering these ponds sediments. Turbidity testing is important to the beaver population because this indicates that they contributed to the ponds' health by filtering out sediment to better the life in the aquatic ecosystem.

Relevance of study: Beavers are known to be aquatic engineers as they improved aquatic ecosystems. Without beavers, the life of the aquatic ecosystem would drastically change as there would be less aquatic life because there would be no habitat. There would be an increased chance of erosion, and flooding. Without a dam, the balance of the water sediment unfiltered could go into other parts of waterways damaging their aquatic ecosystems.