**The Impact of Two Road Salts on Aquatic Macroinvertebrates**

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De-icing salts have been shown to damage vegetation, birds, and other wildlife. These salts often run off roads, accumulate in freshwater, and negatively impact organisms in these habitats that are not adapted to higher levels of salinity. While these salts are applied to mitigate winter ice conditions, Toronto waterways have been shown to exceed the federal chronic limit for chloride even in the summer. Our research contrasted how two common road salts (NaCl and CaCl2) impact amphipod survival and their role as decomposers, as well as colonization of aquatic ecosystems. We compared mesocosms with no added salts, added NaCl, and added CaCl2 (6 tanks each) that were left undisturbed for a month. We found that road salt significantly impacted amphipod survival across treatments. We also found extensive colonization by macroinvertebrates across all treatments. From this research, we are able to gain an understanding of how salinization impacts amphipods, and how it may influence colonization of aquatic ecosystems by Ontario macroinvertebrates.