Lab: Distribution of plants at Mer Bleue

BIO 1130

Department of Biology

University of Ottawa

Hypothesis

Based on the graph (Figure 1), the *Populus tremuloides* shows that it tends to grow in a more dryer environment. This is shown in the forest station, and more specifically, it tended to have a higher count when the elevation started to grow, where the source of water is from precipitation.

Prediction

a) If the Mer Bleue marsh had partial water drainage, it would have more of a impact on the lower forest region where the *Populus tremuloides* grows rather than in the higher region. As there still were some recordings of the *Populus tremuloides* in the ecotone, and with the lower forest region being a quite similar environment, the trees in this region would decrease and the moisture level would slightly go down while still receiving precipitation as a water source.

b) Regarding consequences that the *Populus tremuloides* may face from the marsh water drainage, the population would decrease noticeably in the lower forest region, but not drastically since there is a second source of water (precipitation). Furthermore, it was noticed that the incidence grew as you go higher from the ecotone. Therefore, since the higher forest region is not significantly linked to the marsh as a water source, the abundance of trees should remain unaffected as it will receive the water it needs from precipitation.