The abundance of Vaccinium Myrtilloides in Mer Bleue Conservation Area - effects of water drainage

By
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BIO1130 Section A10

Demonstrators:
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1. Vaccinium myrtilloides are adapted to ecotone, moderately moist habitats, environments.

2. a) If partial water drainage were to occur in the Mer bleue marsh, thus decreasing the water level to half its current depth, then the ecotone would suffer from a lack of hydration. Ecotones are transitory ecosystems thus they reflect surrounding, overlapping ecosystems. At the Mer Bleue Conservation Area the ecotone environment serves as a transition between the bog and the forest. The bog maintains moisture via access to the high water levels in the marsh. In the case of a water drainage at the Mer Bleue marsh the bog would lose its source of water. This causes for a decrease in water levels in the ecotone since it relies on the bog for some water provision. The environments are interdependent thus a water drainage in one ecosystem will affect surrounding ecosystems.

   b) If partial water drainage were to occur in the Mer Bleue marsh, decreasing the water level to half its current depth, then the abundance of vaccinium myrtilloides in ecotone environments would decrease. Due to the decrease of water level depth in the marsh, the bog and thus the ecotone will suffer from a decrease in water levels as well. Since the vaccinium myrtilloides plant species has adapted to the ecotone ecosystem, and subsequently adapted to the water levels, it will be disturbed. The lack of water may not allow for some of the population to survive thus decreasing the abundance of the vaccinium myrtilloides as a whole species in the ecotone ecosystem at Mer bleue.