



**BURLINGTON
CONSERVATION
LEGACY
PROGRAM**

Pomerleau Forest Site Assessment

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Executive Summary

The Pomerleau Forest is a young forest with an overstory of native tree species including White Pine, Green Ash, Red and Silver Maple, Yellow Birch, and a variety of oaks. The White Pine trees are around 35 years old (estimated by counting the whorls of branches.) The presence of Witch Hazel in the understory indicates that, while the site was cleared, it was never plowed (Wessels, 1997.) This lower level of disturbance history allows the site to recover a native understory of herbaceous plants and shrubs more quickly. Currently the forest provides habitat for Burlington wildlife such as foxes, hawks, owls and songbirds. If vernal pools are present (which will require a spring season site assessment), it could also be habitat for salamanders and wood frogs. The wetness of the western half of the forest (based on the abundance of Sensitive Ferns) indicates that if it is allowed to mature it could become a rare Valley Clayplain Forest. A soil assessment in the spring would be the next step toward determining the forest's potential as a mature natural community. In addition, the new retention ponds for storm water could be actively managed as wetlands, increasing the habitat on the site for native wetland plants and animals species such as dragonflies. The forest's composition of a dozen native tree species, its connection to other wild lands as a wildlife corridor, its proximity to the lake, its low levels of invasive plants (Norway Maple, Buckthorn, Bittersweet and Honeysuckle), and the diversity of both wet and dry upland habitats all increase the value of the Pomerleau Forest to the City of Burlington as a forested park.

I. Forest Site Review

This 5-acre parcel has two distinct areas. In this report, we have referred to them as the "Northwest Quadrant" and the "Western Half."

a. The Northwest Quadrant:

This northwest quarter of the site is a young forest with an overstory of White Pine and Paper Birches. The White Pine trees are around 35 years old, an estimate based on counting the whorls of branches. The White Pines are not regenerating very successfully in the understory and so the forest will likely become a hardwood forest over time. The soils are a sandy loam. There is Witch Hazel in the understory indicating that the site was cleared but not plowed. This lesser level of disturbance leaves more of a seed bank intact for future generations of native herbs and shrubs. The northern boundary of the property has a small

population of invasive plants including Buckthorn, Norway Maple saplings, Bittersweet vines, and Honeysuckles.

b. The Western Half:

The west side of the forest is lower in elevation and the presence of Sensitive Fern indicates that the site is seasonally wet. It would be worth returning in the spring to look for vernal pools. Further assessment of the soils may indicate that this western half of the site will become a rare Valley Clayplain Forest as it matures. The overstory currently is a mix of Green Ash, Silver and/or Red Maple and a variety of oaks with Yellow Birch in the southern, perhaps slightly drier, section of the forest.

II. Wildlife

During our visit on December 15, we documented the tracks of Red Fox that traveled onto the site from a patch of woods to the north. There were also abundant small mammal tracks like those of Gray Squirrel and mice, which would make it a good hunting ground for foxes, hawks, owls and other predators. It is also good habitat for migrating spring warblers and other songbirds. The site's wetness suggests that a visit in the spring to look for vernal pools is in order. A spring assessment would reveal how valuable the forest is to amphibians like frogs and salamanders.

III. Management Considerations

1. Assess the site in the spring to monitor for vernal pools.
2. Collaborate with the City Storm water team to design and manage native restoration plantings in and around the storm water ponds.
3. Clarify who will maintain the new wooden fence on the eastern boundary.
4. Assess the soils in the spring to determine whether the western forest could mature into a Valley Clayplain Forest Natural Community.
5. Early intervention could prevent the small populations of invasive plants on the northern edge from expanding into the interior forest.

Pomerleau Forest

