



Vermont Land Trust

CONSERVING LAND FOR THE FUTURE OF VERMONT

ECOLOGICAL REPORT: *Town of Westford/Pouliot, Westford*

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Visit Date: May 18, 2016

Report Date: August 29, 2016

Technology Used: ESRI Collector on Galaxy Note 3

Data: 'Pouliot eco.shp' and 'Pouliot streams.shp' in VLTRegions folder (Pouliot)

FEATURES OF ECOLOGICAL SIGNIFICANCE

The Town of Westford property sits in a rolling forested swath between Brookside Rd. and Woods Hollow Rd., where hilltops, saddles and wetlands all run roughly northeast-southwest. Elevation ranges from around 500' near Brookside Rd. to around 760' in the northwest corner. The property has an interesting mix of wetland and stream features, including two wetland areas associated with stream headwaters. Hemlock forest and hemlock-hardwood forest are the dominant cover types. Shortly after crossing a stone wall and entering the woods on a well-defined woods road from the open fields on the farm, one passes a small vernal pool on the right. Though not a pristine vernal pool due to its small size, hydrologic impact of the road and possible human-caused origin, the pool nevertheless provides breeding habitat for forest amphibians such as wood frogs and spotted salamanders, and is very easy to access for educational purposes. Just a bit further in the woods, the road crosses a wetland surrounding a small stream that begins further north. Sensitive fern and cinnamon fern dominate this wetland (or at least were the most obvious plants on our spring visit), which also has scattered small elm and hemlock trees. At its southern end, the stream begins to descend through a steep ravine. It is joined near the southern property boundary by a second stream that also originates on the property and receives outflow from two ponds to the west. These long, narrow, peaceful and isolated ponds have long been influenced by beavers, and their surface elevations may vary slightly depending on the level of beaver activity. They are surrounded by hemlock forest. Ledges are present along parts of their margins, and both drain to the northeast with water ending up in the previously described stream. North of the westerly pond, a narrow band of forested wetland fills a gentle saddle, and gives rise to this stream. Seeps, mossy fallen tree trunks, and spongy organic soil characterize this area, where hemlock, red maple, sensitive fern, cinnamon fern and ostrich fern occur.

Hemlock and red oak dominate the upland forest, with occasional seeps or small wet hollows. The entire property is underlain by metamorphosed sedimentary bedrock of the Pinnacle Formation, which covers broad swaths of northern Chittenden and Franklin Counties.

In one wet swale, we noted the West Virginia White, an uncommon small butterfly that is closely associated with toothwort, a native mustard found in the wetter hollows of this property and flowering in the spring. The butterfly lays its eggs on toothwort and the caterpillars feed on the plant upon hatching. This species is threatened by the invasive garlic mustard, which attracts adults to lay eggs but is toxic to the caterpillars; we did not note garlic mustard on our visit but it is found in the general area.

The Vermont Conservation Design (2015), a landscape-level conservation prioritization from Vermont Land Trust and the Vermont Agency of Natural Resources, considers the forests and wetlands here to be 'Priority Interior Forest Blocks' providing ecological function on a statewide level.

Photos



Vernal pool along trail, just inside woods opening



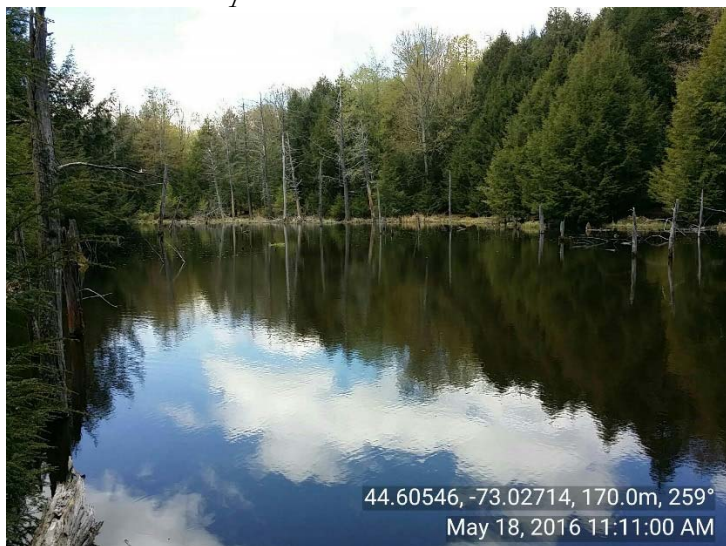
Looking toward woods road, where visitors are standing, across vernal pool



Stream near northern end of seepage wetland, looking upstream



Beaver dam on lower pond



Upper pond

MAP

