

Projet de restauration de l'habitat de la Paruline à ailes dorées à la
Place EcoRubin
Golden-winged Warble habitat restoration project at Place EcoRubin-
2022

Soumis à/Submit to
ACRE



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Introduction

The Golden-winged Warbler is a species designated as threatened in Canada and in Québec due to its steep decline in the past several decades. Threats to this species includes the inbreeding with the Blue-winged Warbler and nesting habitat loss which is young forest stands dominated by deciduous species and interspersed with herbaceous sections. The species' habitat is also often found adjacent to mature deciduous forests.

In Québec, the species was found in the 1980s mainly in the Outaouais region in the Gatineau and Ottawa River valleys and in the Montérégie region. The species is still present in the Outaouais region but has greatly decline.

Dendroica Environnement et Faune coordinates a 3-year project to restore the species nesting habitat with protected areas and close or within the Critical Habitat of the species. In 2022, the project will be implemented on Place EcoRubin and in 2023 and 2024, expected to be hold in the Meech valley, in Gatineau Park.

The project had received full funding from the 2 billion tree program from Natural Resources Canada and Fondation de la faune du Québec. No funding is required from ACRE.

Project objectives

In 2022, we are planning to restore Golden-winged Warbler habitat by converting 5 ha of old hay fields into young forests by planting 10 000 trees. We are planning to restore the equivalent to 2 breeding territories of warblers (a territory being in average 2 ha).

Activité/Activity	Date	Description	Notes
1- Plantation plan and soil analysis	September 2022	<ul style="list-style-type: none">- 6000 trees could be planted on the central hay fields (total 3 ha)- 4000 trees could be planted in the northern field (2 ha)- Overall, 80% deciduous trees will be planted (red oak, bur oak, red maple) and 20% conifers (white and red pine, larch),- The southern field (1 ha near garden) could also be planted instead of 1 ha of northern field as it	<ul style="list-style-type: none">-Tree species will be planted together and no monoculture of one species will be apparent-Only local trees present on site or close by are planted

		<p>has sand soil (to be confirmed with ACRE)</p> <ul style="list-style-type: none"> - North section is mostly clay soil and could support wetland tree species such as red maple, bur oak and larch - Central and southern sections have a sandy-loam soil and more suit for species such as red oak, white and red pine. (it is also easier to plant) 	
2-Soil preparation	Septembre 2022	<ul style="list-style-type: none"> - Shredding current herbaceous cover to better expose the soil and help planters. - Only above soil plants will be impact - A local farmer can be hire for a day 	Soil preparation greatly increase tree seedling survival and reduce cover for rodents
3-Planting 10 000 arbres	15-31 octobre 2022	<ul style="list-style-type: none"> - Planting density= 2000 stems/ha - No planting done in wetlands (NE corner) - At least 10% of project area won't be planted and stay in herbaceous cover. The wet field in the NE section will remain unplanted 	Following methods from Bédard 2017 on how to create habitat for GWWA
4-Planting staff		<ul style="list-style-type: none"> - 1 professional tree planter - Volunteer students from college La Cité (under the supervision Vincent McCulluch) - Member of ACRE and the Place EcoRubin stewardship committee members 	
5- Tree protection	15-31 octobre 2022	<ul style="list-style-type: none"> - All deciduous will be protected again rodents (spirals) and herbaceous competition (i.e. coco mats) 	This activity is done during plantation and greatly increase tree seedling survival
6-Bird survey	2027	<ul style="list-style-type: none"> - Surveys done by CS and some ACRE members to validate the presence of the GWWA in the plantation as long as other species on nesting birds 	
7- Plantation maintenance	2025 and 2027	<ul style="list-style-type: none"> - Every 2 years following the plantation, herbaceous surrounding trees will be cut 	This will reduce competition for nutrients and light

8- Plantation monitoring for tree mortality assessment	2027	- Dead trees will be replaced if mortality exceed 40 % of stems after 5 years	Replaced stems will likely be replaced by other species that grow better at these site
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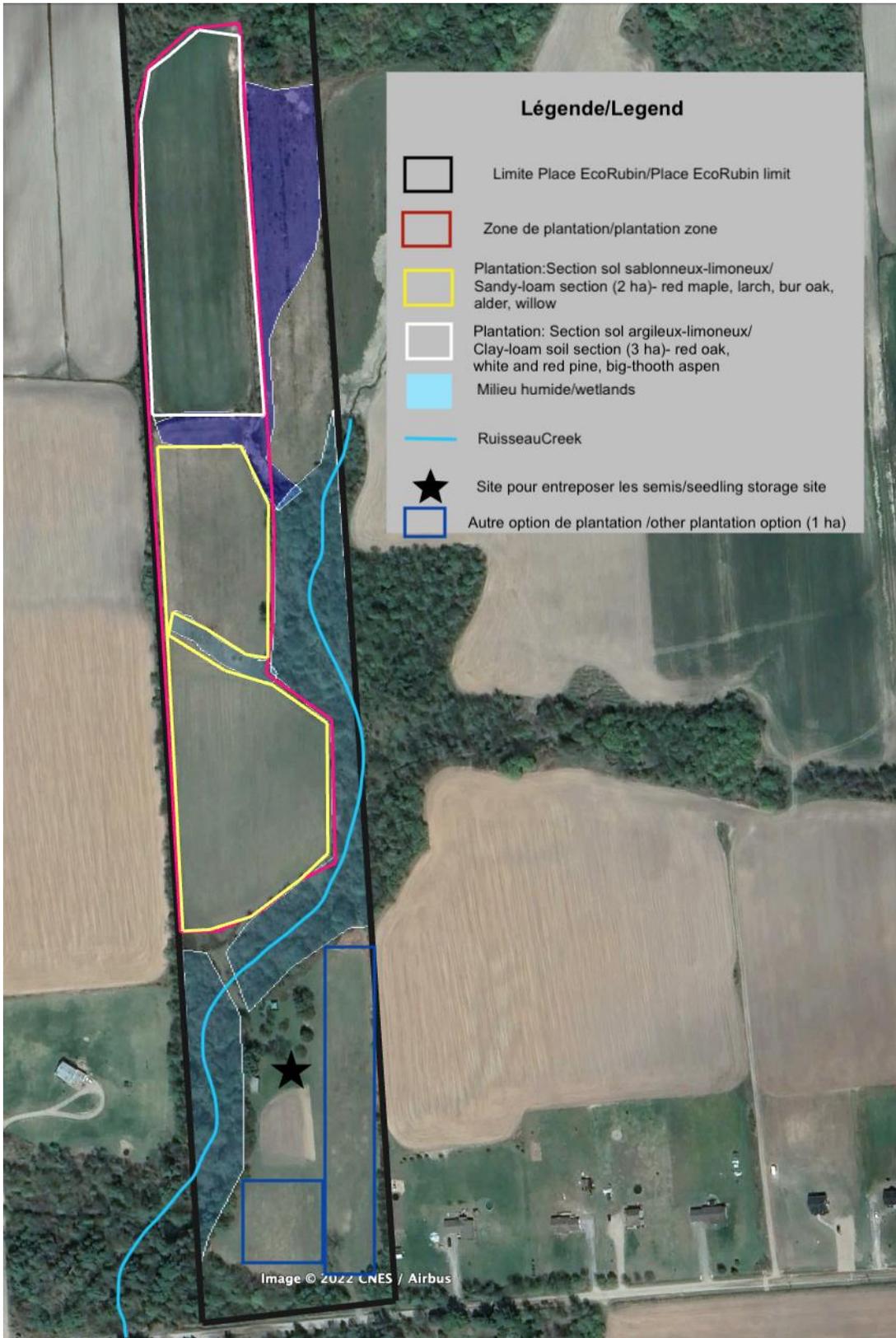


Figure 1: Details of the tree planting project at Place EcoRubin- October 2022

Assistance needed by ACRE and the stewardship committee member

Volunteers are needed from October 15 – 31th to assist in the project. Activities include:

- Planting trees with a special shovel that remove a soil carrot
- Installing coco mats (50cm diameter disc of coco fiber put in place with 2 picks) and rodent plastic spirals around planted trees
- Assisting tree planters during the plantation
 - o Following them and providing trees