2020 Interim Report for Ganawenim Meshkiki and the Eastern Georgian Bay Initiative

For the

Simcoe County Forest - Packard Tract Forest and Habitat Restoration Project

Completed By Will Cox, Associate R.P.F

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Introduction

In fulfilment with the contribution agreement with Ganawenim Meshkiki, an annual report is to be prepared for each year of the project that details the project status. The project for the 'Enhancement and Restoration of Habitat for the Kirtland's Warbler began in 2019 and the contribution agreement continues until 2022. This report covers the details of the project from January 1, 2020 to December 31, 2020.

This report includes a summary of project activities, any alignment/deviation from the project proposal and alignment with EGBI initiatives completed to date. Project financial details for 2020 are also included.

Project Overview

The Packard Tract Habitat and Forest Restoration Project is creating approximately 53 hectares of early pine/oak forest within the Eastern Georgian Bay Initiative area. This habitat is specifically designed to provide habitat for Kirtland's Warbler. The project includes approximately 41 hectares of young existing pine plantation and includes an additional 12 hectares of area that will be reforested. Once completed, this site will provide a large area of suitable habitat for the Kirtland's Warbler and other species that rely on this regionally rare habitat type. Full project details and descriptions are available in the project proposal.

Summary of 2020 Project Activities

All planned activities for 2020 were completed. Additional planned activities from 2019 that were not completed in that year were also moved to 2020 and completed. This includes final work on the low level crossing and invasive species control work. Most activities planned for 2020 involved preparing the site for tree planting and seeding, with planting and seeding being planned for 2021.

A prescribed burn was completed in 2020 to prepare the site for seeding and tree planting while also reducing site debris and improving soil nutrients. Fireguards were constructed to establish the fire boundaries. Several access roads were also deleted, moved or re-aligned to maximize the overall area of the project. This also increased the overall interior forest area.

Extensive tilling with a rototiller, disk and chisel plow and mulching machine were also used to prepare the site for seeding, tree planting and reduce competition from weeds.

Seed collection activities continued through 2020 which focused on wild collection of seed from target species that will be sown on the site in spring 2021.

Enforcement of the County of Simcoe Forest Recreation By-law was completed by county by-law staff and OPP in a continuing effort to reduce impacts from off-road motorized vehicles.

Year	Activity Notes		Status	
2020	Site Preparation - fireguard preparation	Excavator and mulching machine to move debris from edge of burn area and to expose mineral soils for fireguards	Complete	
2020	Project Consultation		Not required	
2020	Seed scouting/collection/cleaning/storage/ purchase/sowing for establishment of native herbs, shrubs, grasses, etc.	85 species of native seed were collected, cleaned and stored in 2019-2020 including 130 kg of oak acorns and 107 kg of other species.	Complete	
2020	Enforcement to control un-authorized access	OPP paid duty enforcement to reduce off road vehicle use and enforce compliance	Complete	
2020	Invasive species control	Management of insects and weeds to prepare site and maintain existing plantation	Complete	
2020	Site Preparation - layout and development of meadow/structural features	Moving of debris to add structure to future habitat openings/meadows, spatial layout and GPS of openings	Complete	
2020	Site Preparation – road re-alignment and deletion, final fireguard work	Deletion of roads that are not required and re- alignment of roads to stand boundaries to increase interior forest area	Complete	
2020	Site preparation - prescribed burn	Controlled burn of debris to prepare for tree planting, seeding and add soil nutrients	Complete	
2020	Site preparation – rototilling, plowing, levelling, mulching	Rototilling and plowing of all open areas using tractors and implements	Complete	
2020	Final work on low-level crossing	Started in October 2019 with minor amount of follow up work completed in 2020.	Complete	
2020	Annual progress reporting and budget update	Expense tracking and project reporting	Complete	
2020	Project Administration		Complete	

Summary of 2020 Project Expenses

Project expenses were approximately 31% under budget for 2020. This has resulted in a budget surplus of \$26,301 in 2020. The largest surplus was from the cost of the prescribed burn, which was budgeted as a two-day event and was able to be completed in one day. There were not any costs associated with outside project consultation in 2020 as anticipated in the budget. OPP paid duty enforcement was difficult to schedule due to COVID-19 impacts in 2020 and fell under budget. Many other planned expenses also fell below budget.

Year	Activity	Budget	Actual	Under or (over) budget	Status
2020	Site Preparation - prepare fireguards for prescribed burn	\$14,246.00	\$12,854.83	\$1,391.17	Complete
2020	Project Consultation	\$2,544.00	\$-	\$2,544.00	Not required
2020	Seed scouting/collection/ cleaning/storage/purchase/ sowing for establishment of native herbs, shrubs, grasses, etc.	\$20,352.00	\$17,449.12	\$2,902.88	Complete
2020	Enforcement to Control Unauthorized access	\$1,018.00	\$450.35	\$567.65	Complete
2020	Invasive Species Control	\$3,053.00	\$2,281.83	\$771.17	Complete

Total		\$83,510.38	\$57,208.87	\$26,301.51	
2020	Final work on low level crossing*	\$2839.95	\$2,971.23	(\$131.28)	Complete
2020	project administration	\$3,841.43	\$2,724.23	\$1,117.20	Complete
2020	Annual progress reporting and budget update	\$-	\$-	\$0.00	Complete
2020	Site Preparation - Rototiller	\$3,053.00	\$3,035.96	\$17.04	Complete
2020	Site Preparation - Prescribed Burn	\$25,440.00	\$12,553.88	\$12,886.12	Complete
2020	Site Preparation - Finalize fireguard preparation	\$2,544.00	\$1,068.48	\$1,475.52	Complete
2020	Site Preparation - layout and development of meadow/structural features	\$4,579.00	\$1,818.96	\$2,760.04	Complete

*Budget amount carried over from 2019

Funding

The 2019 project funding received by the County of Simcoe was \$54, 172 and the total expenses for that year were \$37,260. This resulted in a surplus in 2019 of \$16,912. The 2019 surplus was applied to the expenses incurred in 2020, which totalled \$57, 209. Therefore, the amount invoiced for in 2020 to cover project expenses was \$40,297.

Project Year	Funding	Expenses	Year End
2019	\$ 54,172	\$ 37,260	\$ 16,912*
2020	\$ 16,912*	\$ 57,209	\$(40,297)**

*2019 funding surplus applied to 2020 expenses

**funding request to cover 2020 project costs

Summary

The project began behind schedule in 2019 with a few activities not completed that year. However, these activities moved to 2020 and the project is on schedule and under budget by the end of 2020. No major changes to the project activities or budget are anticipated for 2021.

Appendices

Project photos



Part of the 41 hectare plantation area that was rototilled in preparation for seeding in 2021. Seeding these naturally open patches will establish a mix of 85 native grasses, herbs, wildflowers and shrubs on the site that are typical of Kirtland's Warbler Habitat. The area previously consisted of non-native vegetation and plants associated with past agricultural use. These open areas within young conifer plantations are a key habitat feature for Kirtland's Warbler and many other species.



A rototiller working up the soil behind a tractor. Several types of equipment were used to prepare the site for seeding and planting.



In 2019, non-native species such as Scot's pine and Norway spruce along with some areas of poorer white pine were harvested. The remaining debris was burned under controlled conditions in 2020 to prepare the site for tree planting and seeding in 2021. Prescribed burns mimic the natural fire disturbances that typically create the young pine forests required by Kirtland's Warbler and other species for habitat. Burns also help add nutrients to the soil while reducing small debris to allow space for trees to be planted and seed to be sown.



Controlled burn



Controlled burn



Areas of controlled burn in lower and centre of picture. Existing Packard Tract plantation in top of picture.



Herbicide application to control weeds and non-native plants.