

FGCA 2023-24 Approved Projects

Project	FGCA 2023-1
Project Name	Pw Renewal Under Climate Change - A Strategy
Project Description	In 2022/2023 FGCA applied to undertake the project- Pw renewal under climate change - an Exploration, with the Objectives: ● Obtain a strong understanding of the role of white pine in crown forests sustainability under climate change and options for maintaining its resilience under climate change. ● Obtain a strong understanding of how changes over the past 40 years has impacted (positive or negative). the value of the Pw Seed Orchards to central Ontario forest managers. ● Understand the value and life span of role of southern Ontario seed orchards for crown forest managers and FGCA members and associates. ● Determine the feasibility and value of collections over the next 5 and 10 years, and options for maintaining and renewing seed production potentials. Deliverables: ● Develop a working group of experts including but not exclusive of, research geneticists, SFLs, Climate change experts, local seed orchard managers, etc. ● Develop a comprehensive account of the last 40 years of white pine management activities, including the management of the within the PwSO. This application is a next step to work with the results of that exploration to develop a strategy for the next 5 years.
Funding Request	\$22,600.00

Project	FGCA 2023-2
Project Name	Genetic Installations
Project Description	This project aids 5 central Ontario Crown Forest Managers in establishing assisted migration plantings in an expansion of a network of assisted migration plantings done to date, with additional seed sources (USA) to allow a comprehensive comparison of performance across sites and climate zones. White pine genecology results from the last 20 years, along with the 10-year FGCA realized gain test results, climate change projections and now the Ontario Tree Seed Transfer Policy all indicate that we need to strategically move southern sources of white pine into the northern range of white pine. Assisted migration continues to be an effective means for SFLs to improve their understanding of climate change and provides them with actions to undertake. This network of plantings will help us monitor the performance of the stock and better inform future assisted migration strategies The white pine seed orchards in southern Ontario continue to be an excellent source of seed for the southern Ontario SFLs assisted migration projects. In addition, the FGCA is building partnerships in the northern United States to obtain high quality, source identified White Pine. If the SFLs are interested we may add an additional source
Funding Request	\$22,600.00

Project	FGCA 2023-3
Project Name	Seed Collection Areas Network
Project Description	The FGCA currently hosts Ontario's Seed Collection Areas Network (SCAN). A project initiated by the FGCA and Ministry of Natural Resources and Forestry in 2013. SCAN consists of a series of stands of many species on both private and public land that can serve as high quality seed sources for SFL partners and in-situ gene conservation units. The FGCA will update the database for central Ontario's SFL use using the most up to date climate change projections and facilitate the use of the SCAN sites by certified seed collectors to supply SFL seed needs, contributing to the SFLs' seed bank under a changing climate. As many of the species are recalcitrant in nature, i.e. seed cannot be stored for long, the identification and management of these 'seed banks' in situ is critical for central Ontario's continued work on forest adaptation in a changing climate. The FGCA believes this database and the associated data will reveal multiple benefits: ● Provide greater access for SFLs when sourcing seed according to the Ontario Tree Seed Transfer Policy. ● Allow for the inclusion of US seed sources. ● Allow for ease of update (including removals if the resource is no longer accessible, additions in areas where gaps in species or locations exist, and revisions in the event of land changing hands etc.). ● Value of these in-situ seed collection units will be realized.
Funding Request	\$22,600.00

Project	FGCA 2023-4
Project Name	Clonal Pw Seed Orchard Collections
Project Description	This project proposes to continue on the work that started in 2017 with the collection of 160 clonally identified open pollinated seedlots from the 3 southern Ontario seedlots. There are more than 200 clones to collect from and secure in long term storage for research and climate change adaptation purposes such as the strategic establishment of seed production areas. These orchards represent a significant part of Ontario's white pine gene pool (seed zones 37, 38 and 32 to 34).
Funding Request	\$22,600.00

Project	FGCA 2023-5
Project Name	White Pine Seed Orchard Database
Project Description	The FGCA maintains over 40 years worth of data associated with the White Pine Clonal Seed Orchards in southern Ontario (predominantly orchards south of the French and Mattawa River). This data is currently in various formats and includes, but is not limited to, the following information: ● Parent tree source information and plus tree, characteristics, ● Geo-located ramets on each site and number of ramets across all orchards, ● Thinnings completed and planned, ● Cone collections conducted and more. Much of the modern data is maintained digitally however based on discussions, a database that contains original historical data along with modern management data can be achieved. This project will involve the review of the existing data and its formats, the development of the database and the partial input of data.
Funding Request	\$22,600.00

Project	FGCA 2023-C
Project Name	FGCA Annual Core Funding
Project Description	Core Funding
Funding Request	\$141,250.00