

Canadian Tree Fund - Jack Kimmel Grant Report

Alberta Tree Register: Raising the Profile of Significant Community Trees

Project Overview & Goals

Alberta is no stranger to cataloging and mapping heritage trees across the province. In 1986, the Canadian Forest Service published *Alberta Trees of Renown* - a book of notable trees from across the province. In 2008, with the help of tens of thousands of volunteer hours, the now-defunct Heritage Tree Foundation published *Heritage Trees of Alberta*. While both initiatives represented giant leaps forward in the discovery, cataloging, and celebration of Alberta trees, both initiatives met challenges in a few key areas:

- The trees featured in these publications only represent a small subset of the catalogued trees (the realities of publishing a book).
- The publications represent two snapshots (1986 and 2008, respectively) of an inventory of provincial heritage trees that are inevitably changing (again, the reality of printed books).
- The data collected to create these publications have not been made publicly available and, in the case of the Heritage Tree Foundation's database, was believed to have been lost.

The Alberta Tree Register aims to pick up where these initiatives left off by building upon their success and making heritage tree data secure and accessible. We will achieve this by rescuing past datasets and digitizing them using Registree, an established tree inventory platform. We will then market the inventory to municipalities, historians, arborists, academic researchers, industry, and the general public. Making this data



available online will highlight the importance of celebrating these important living and heritage resources and provide an essential tool for facilitating meaningful conversations about their protection.

A vital feature of the Registree software is that organizations and individuals can create accounts to contribute to and edit the inventory. While community contributions will require monitoring and follow-up, evidence has shown that community participation can help grow the inventory and keep data (tree size, height, species, damage, death, etc.) up to date and accurate. Examples of heritage tree inventories using Registree include the Manitoba Tree Register and Notable Trees New Zealand.

Results of Funding

The Canadian Tree Fund, through the Jack Kimmel Grant, supported the Alberta Tree Register. These funds matched the amount quoted to create the Alberta Tree Register website (AlbertaTree.ca) and were thus invested as such. As such, the remaining balance was used to cover the cost of creating and delivering Alberta Tree Register presentations.

The following is a breakdown of how the funds were used and the progress made on the Alberta Tree Register since submitting our application.

- 1. (Funded) Develop the Alberta Tree Registree website, which will host the tree inventory as well as tools and educational resources on the benefits of trees, how to use the inventory, walking, driving, and cycling tours, and instructions on how to identify, measure, and add/updates trees to the Alberta Tree Register.
 - We chose to work with BlackBoxMedia, located in Edmonton and began a series of online brainstorming and planning sessions to determine the website's needs.



- We were assigned a website designer. Maureen Sexsmith-West and I (Dustin Bajer) met regularly to provide design considerations and copy for the website; details from our meetings can be found here.
- Maureen Sexsmith-West and Dustin Bajer worked together to develop content for the website, including How To Measure a Tree and How To Add a Tree guides.
- Blackbox Media registered the domain name AlbertaTree.ca and set up an official email address (info@albertatree.ca).
- Developed the Alberta Tree Registree website, which hosts the tree inventory as well as tools and educational resources on the benefits of trees and how to use the inventory.
- Half of the website fee was paid upfront using the up-front funds from the CTF, and the other half of the fee was covered by Dustin Bajer until this grant is complete and the second half of the CTF funds are distributed.

The Canadian Tree Foundation funds have been vital to developing the Alberta Tree Register website. While the initial grant application contains unfunded activities, we were still able to make progress in these areas:

2 - (Unfunded) Offset the cost of the time to digitize existing datasets into the Alberta Tree Registree manually. We aim to digitize at least 100 records by Arbour Day (May 7th, 2021).

In the fall of 2022, Dustin Bajer secured the services of four NAIT (Northern Alberta Institute of Technology) students from the Bachelor of Technology Program to merge disparate tree databases into a single source containing 525 tree records:

Alberta Tree Register Tree Inventory

Students were able to create a program to lift relevant tree data from scanned PDFs from a handful of recovered Alberta Heritage Tree Foundation documents. This tool will



be valuable as we hope to acquire more AHTF records. We have contacted Libby Fairweather, editor of Heritage Trees of Alberta and current keeper of tree data collected by the defunct Alberta Heritage Tree Foundation (AHTF). We have been sharing our progress with Libby, and she has agreed to give us the AHTF data once we form a not-for-profit.

Dustin Bajer has reviewed each record to update their GPS coordinates, addresses, municipalities, and addresses. At present, Dustin is working to identify and merge any duplicate records.

In the new year, the Nait capstone students will create a tree-scoring algorithm to identify especially unique trees and create a guide for growing and tending a heritage tree in Alberta. By April, the students hope to have an up-to-date inventory and map of all trees in the inventory.

Outside of the trees identified in previous mapping efforts, Dustin Bajer teamed up with a local Jr. High student to create an offshoot of the Alberta Tree register, the Alberta Grade 1 Tree Register (Grade1Tree.com). In a few short months, we gathered information, stories, photos, and the location of 767 white spruce, blue spruce, and lodgepole pines planted by Alberta first-grade students. Alberta Agriculture has since contacted us with the hope of printing. The grade 1 trees will likely be integrated into the final iteration of the Alberta Tree Register.

We have contacted Libby Fairweather, editor of Heritage Trees of Alberta and current keeper of tree data collected by the defunct Alberta Heritage Tree Foundation (AHTF). We have been sharing our progress with Libby, and she has agreed to give us the AHTF data once we form a not-for-profit.

3. (Partially Funded) To develop and deliver targeted presentations to Alberta



municipalities, historians, arborists, academic researchers, and the general public.

Since receiving funding, we have created a handful of heritage tree presentations, including one for the Canadian Tree Fund on July 6th, 2021.

On October 17th, 2022, Maureen Sexsmith-West attended the International Society of Arboriculture Prarie Chapter conference in St.Albert, intending to connect with heritage-minded arborists.

Now that we are close to having a single dataset of Alberta trees, we are in a better position to solicit new tree nominations through targeted presentations.

Community Benefits

While still in its infancy, the Alberta Tree Register continues to progress towards its vision of a publicly available dataset of unique, uncommon, and heritage trees across the province. We continue to believe that the benefits of the Alberta Tree Register go beyond cataloguing individual trees. By making tree data publically accessible, the Alberta Tree Registree will create opportunities for municipalities, historians and academic researchers, the arboriculture industry, and the public to use and build upon the data in various ways.

Here are two small examples of how the Alberta Tree Register, even at this stage, has been used by a historian and a municipality:

- A historian working in the Edmonton neighbourhood of Griesbach reached out to us for more information about the Edmonton Griesbach Maples along 97th street.
- In preparation for replacing the Latta Bridge, the City of Edmonton reached out for information on the Latta Maple tree adjacent to the construction site. We were



able to provide information on the tree, including its age and who planted it, and the City is taking precautions to protect it during construction.

While these are seemingly trivial examples, we believe these small inquiries add up and offer protection to the important heritage resource that is our trees.

Project Milestones & Results

Due to some of the challenges of COVID, our timeline has not materialized as expected. Still, we would like to provide an update on the following milestones achieved since submitting our application.

- (Done) Commission the creation of the Alberta Tree Register website
 - o After gathering references, we contracted Black Box Media to design and create a website for the Alberta Tree Register. The domain AlbertaTree.ca was registered, and info@albertatree.ca was selected as our email address.
- (Done) Finalize the data tables for Registree software (species lists, municipality and neighbourhood information
 - o Registree software requires a set of tables detailing how trees appear in the inventory. Tables include species, region, municipality, public access type, and registration category types. See table here.
- (In Progress) Work with past members of the Heritage Tree Foundation to rescue tree data.
 - o We have contacted Libby Fairweather, editor of "Heritage Trees of Alberta (2008)" and past board member of the defunct Alberta Heritage Tree Foundation (AHTF). Libby was kind enough to share AGTF data for Edmonton but will hold the rest of the provincial data until a not-for-profit can be created to hold and maintain the records.
- Maureen was able to acquire AHTF data from Brook Alberta.



- (In Progress) Register Alberta Tree Register as a not-for-profit organization.
 - o (In Progress) As of the wiring of this report, the Alberta Tree Register is searching for volunteer board members to come together and apply for not-for-profit status.
 - o The creation of a board will be instrumental in implementing the work needed to accelerate the progress of the Alberta Tree Register, secure public donations for long-term financial sustainability, and acquire the remainder of the AHTF data.
 - o (Next Steps) Establish board bylaws and terms of reference.
- (Ongoing) Curate a list of potential partnering municipalities, heritage organizations and researchers, arboriculture industry members, and community organizations.
 - Dustin Bajer has partnered with the Edmonton Heritage Council and created a working relationship with capstone students from Nait's Bachelor of Technology Program.
 - o Maureen Sexsmith-West has connected with the arborist community and specifically market the Alberta Tree Register at the ISA Prarie Chapter Annual Meeting.
- (Done) Begin inputting tree data into Registree (Goal of 20 trees)
- (Done) Set up social media platforms.
 - o The Alberta Tree Register Group was created on Facebook and contains 104 active members.
 - o It has been determined that Twitter and Instagram profiles are not necessary at this time, though this may change capacity and need grow.
- (Done) Develop the first draft of the Alberta Tree Register presentations.
 - o An Alberta Tree Register presentation was created and delivered to multiple community leagues within the City of Edmonton.
- (In Progress) Embed Registree on the Alberta Tree Register website.



- o For technical reasons associated with Registree, we have been unable to embed the Registree directly within the AlbertaTree.ca website. However, we have multiple links to Registree and are exploring ways to embed the map within the website.
- (Done) Curate a series of how-to guides on the Alberta Tree Register website (ex., How to measure a tree's DBH and height, tree identification, and how to add data to Registree).
 - o We have created two how-to guides included on AlbertaTree.ca
 - How to Measure a Tree
 - How to Add a Tree
 - How To Plant a Heritage Tree (Nait Students; In Progress)
- (In Progress) Finalize draft presentations for Municipalities, Heritage Foundations, Arborists, Horticultural Organizations, and General Public
- (Next Steps) Begin hosting presentations.
 - o Continue to host presentations and promote the Alberta Tree Register.
 - o Use presentations as a way to share sponsorship opportunities.
 - o Gather sponsorship from municipalities, heritage foundations, the arboriculture industry, and individuals to build the Tree Register's financial stability.
 - o Use social media to share profiles of individual Alberta trees.
- (In Progress) Develop a new strategic plan for 2023

Success Metrics

The Heritage Tree Foundation's short-term goal is to build a repository of Alberta trees that is useful to municipalities, historians and academics, the arboriculture industry, and the general population. How successfully we have met these goals can be measured, in part, by the following metrics:



- Metric 1: The total number of trees on the Alberta Tree Register (database usefulness)
 - o At present, we have 32 trees in Registree but over 500 trees catalogued in Airtable due to work by the NAIT capstone students, and 767 trees added to the Grade 1 Tree Register.
- **Metric 2**: The number of active user accounts on the Alberta Tree Register (size of contributing community)
 - We have 17 active users in Registree, 104 members on the Alberta Tree
 Register Facebook Page, and 639 unique contributors to the Grade 1 Tree
 Register.
- Metric 3: Website traffic to the Alberta Tree Register (how often the database is Accessed)
 - o In progress we are setting up Google Analytics to monitor website traffic.
- Metric 4: We believe that the success of metrics 2 and 3 will correlate to our presentations' effectiveness. Our presentations' attendance (number of people) and effectiveness (positive feedback) can be considered a fourth short-term metric.
 - o In Progress