

2024 Annual Project Report

Project Forest Wihnemne School
Food and Medicine Forest



Project
Forest

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Land Acknowledgement

| Traditional Territories



Member of Cumberland House Cree Nation (CHCN) at the CHCN Food and Medicine Forest

Project Forest acknowledges that our work is conducted on both Treaty and non-Treaty lands. These lands are the traditional territories of First Nations and Indigenous Peoples. We recognize that our work is intertwined with the deep and diverse histories of Indigenous Peoples. We are grateful for the opportunity to work in these territories and are committed to the recognition and respect of those who live or have lived, travelled, and gathered on these lands for time immemorial.

About Us

| Our Mission and Values

Rewilding Canada, one forest at a time.

Project Forest is a non-profit organization working in partnership with conservation groups, Indigenous communities and Canadian businesses to make a positive environmental and social impact in our communities through planting forests. The forests we plant clean the air and water, increase biodiversity and contribute to the overall health and well-being of our communities.



Our work is rooted in our values.

Responsibility

We believe it is our responsibility to use our skills, knowledge, and experience to bring about positive change in the world.

Reciprocity

We recognize that we have benefited from the earth's resources and are committed to giving back through careful and thoughtful solutions.

Humility

We are grateful for the opportunity to learn from nature, to contribute to improving our environment, and to make a positive impact in people's lives.

Transparency

We document, monitor, and share our processes and findings with partners and the public—every step of the way, on every project.

Community

We create spaces where people can connect with nature, and each other. We respect every community we are invited into, and work together to make positive change.

Overview

| United Nations Sustainability Development Goals

Goals to Transform Our World

Planting new forests is critically important in addressing the challenges of our time, particularly when aligned with the United Nations Sustainable Development Goals (UN SDGs). As our communities grapple with climate change and biodiversity loss, forests emerge as pivotal solutions that intersect with multiple UN SDGs including, combating climate change and preserving biodiversity, fostering economic development, ensuring food security, promoting clean water access, and advancing social equity. Aligning the impacts of our forests with the UN SDGs is essential for communicating to stakeholders our dedication to sustainability, transparency, and the measurement of progress over time.

In our 2024 Annual Report, we have linked the outcomes of our rewilding projects with relevant UN SDG targets and indicators, as well as aligned them with corresponding Environment, Social, and Governance goals. This comprehensive approach ensures that our partners have readily accessible information for corporate sustainability reporting, simplifying the process and enhancing transparency.



Purpose & Positive Impact

The following UN SDGs are impacted by the Project Forest Winhemne School Food and Medicine Forest

Purpose



Positive Impact



Overview

| Forest Facts

About the forest you funded.

NAME

Project Forest Wihnemne School
Food and Medicine Forest

DATE PLANTED

Spring 2024

TOTAL SEEDLINGS PLANTED

850 Trees
150 Shrubs

SPECIES PLANTED

Balsam Poplar (90)
Willow (180)
Northline Saskatoon (90)
Western Chokecherry (60)
Lodgepole Pine (360)
White Spruce (180)
White Spruce 2m tall (40)

LOCATION

Paul First Nation
Treaty 6 Territory
[53°31'30.1"N 114°22'04.1"W](#)

SIZE

1 km

TOTAL SPECIES PLANTED

6

TOTAL CO2 REMOVED FROM THE AIR*

1,080 metric tonnes



* Metric tonnes of carbon dioxide (CO₂) projected to be removed from the air over 150 years.

Purpose

| UN SDG 15 - Life on Land

Goal: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

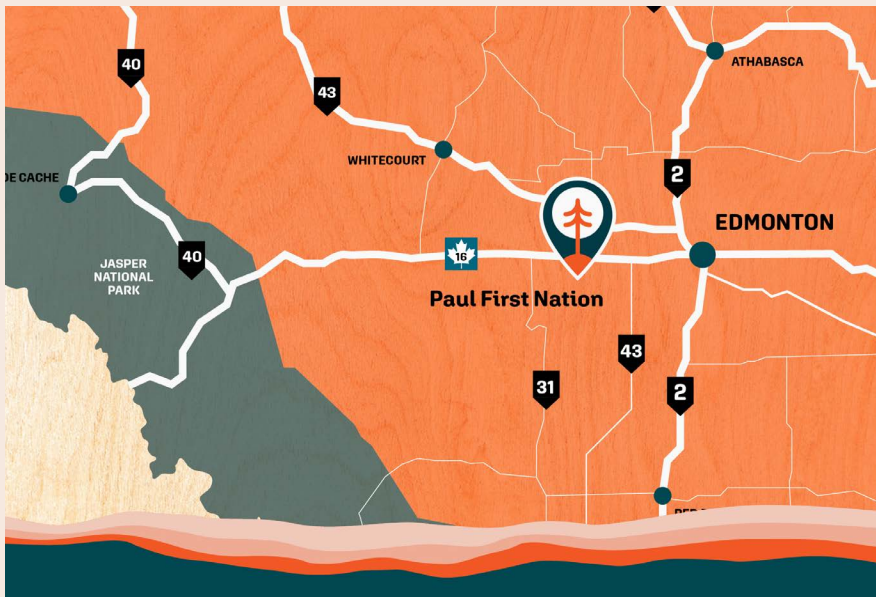
Matching ESG Goals:

- Providing clean air and water
- Improving biodiversity
- Re-establishing traditional landscapes



Project Forest is making a positive impact through restoring degraded land to increase forest cover, enhance biodiversity, and promote the sustainable use of terrestrial ecosystems.

Indicator 15.1.1: Forest area as a proportion of total land area



1,000
Total Trees & Shrubs Planted

Project Forest, in collaboration with Paul First Nation, launched the **Wihnemne School Medicine Forest**, a small-scale but highly impactful restoration and education initiative centered on land adjacent to the Paul’s Elementary Jr High School.

The project focused on the establishment of a shelterbelt between the school property and nearby train tracks. Culturally significant food and medicinal shrubs were planted on school grounds as well as a combination of landscape-sized trees and seedlings.

Purpose

| UN SDG 15 - Life on Land



Indicator 15.1.2: Proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas, by ecosystem type

Project Forest partners with Indigenous communities to plant trees, shrubs, food and medicinal plants that contribute to increasing the overall forested areas in those communities.

In addition to the food and medicine plants, Project Forest created a shelterbelt in the schoolyard to provide a buffer from the adjacent rail tracks. For the first time, Project Forest planted landscape-sized trees to create an immediate and effective visual barrier for the students and staff at Wihnemne School.

This project directly enhances biodiversity, restores native species, and improves ecosystem services through shelterbelt creation and establishment. It contributes to the rehabilitation of degraded school lands with culturally significant species.

Project Goals:

Railway Shelterbelt

Purpose: To create a visual and sound buffer between the schoolyard and adjacent railway tracks, enhancing safety and tranquility for students and staff.

- 40 caliper-sized white spruce trees planted for immediate impact.
- 450 white spruce, balsam poplar, and willow seedlings were planted to ensure long-term forest succession and density.
- Mulch was deployed to help with moisture retention, weed suppression, temperature regulation, and nutrient enrichment.

Schoolyard Shading

Purpose: Provide immediate summer shade for children during recess and outdoor learning activities.

- 8 landscape-sized white spruce trees were planted within the yard.
- Focused on creating comfort and enhancing the usability of outdoor space during warmer months.

Food & Medicine Shrubs

Purpose: Provide the students with an opportunity foster, maintain and learn from culturally significant species.

- As requested by the Nation, - planted species include Northline Saskatoon and Western chokecherry, known for their traditional uses in Indigenous diets and medicine.
- Teachers and Elders will use the forest as a living classroom to teach plant identification, harvesting practices, and cultural stories.

1

km of Land Planted

Caliper Sized Tree: Also called a landscape-sized tree, is a tree large enough to be sold, planted, or specified by caliper (stem diameter), rather than height or container size.

6

Different Species of Trees & Shrubs

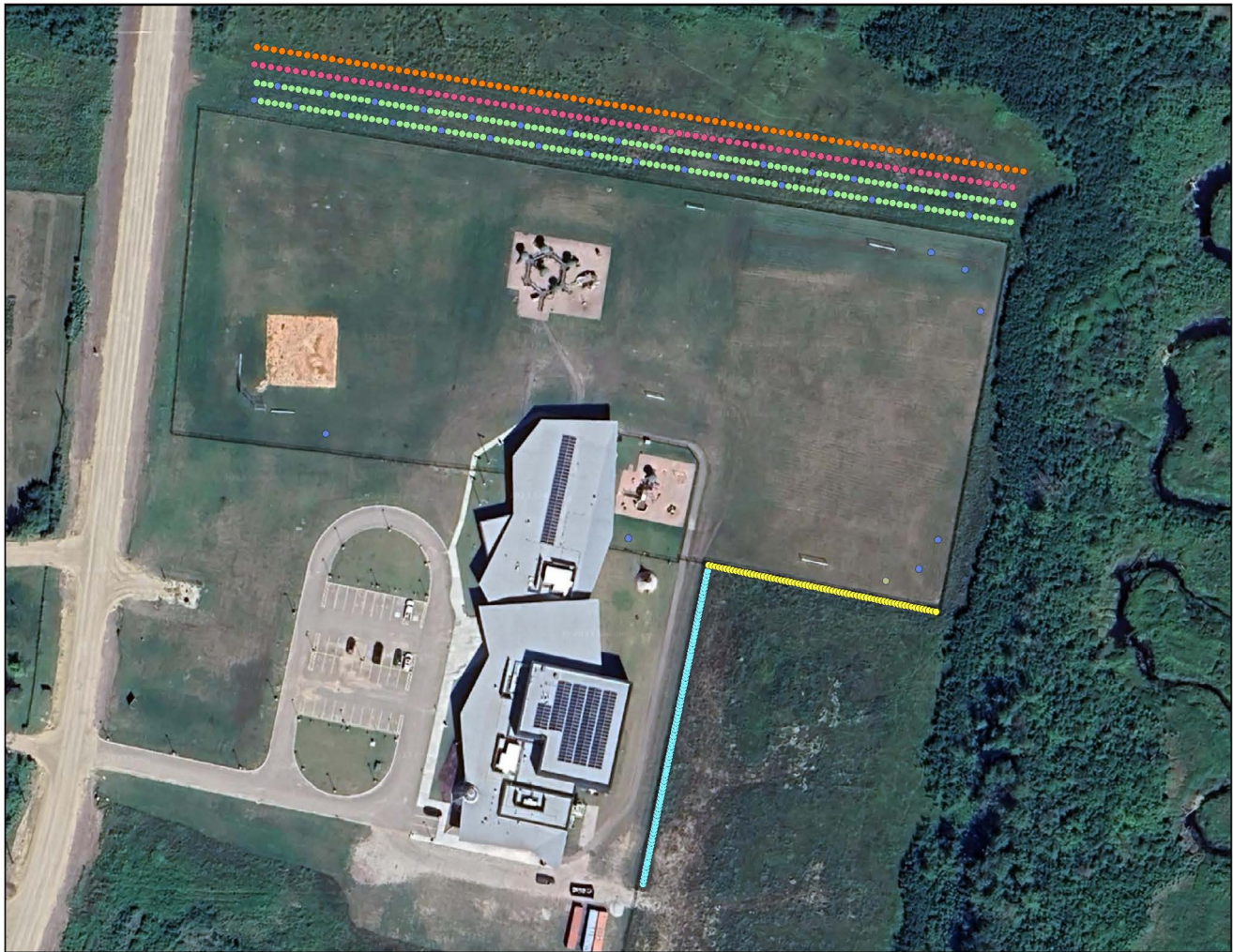
Purpose

| UN SDG 15 - Life on Land



Indicator 15.2.1: Progress towards sustainable forest management

Figure 1: Wihnemne School Food and Medicine Forest Planting Site



**Paul First Nation School's
Food & Medicine Forest
Native Species
Prescription Option**

Project Partners:
Project Forest
Paul First Nation

Legend:

- Railway Shelterbelt Conifers
 - White Spruce Seedlings
 - White Spruce Caliper Trees
- Railway Shelterbelt Deciduous
 - Balsam Poplar Seedlings
- School yard
 - White Spruce Caliper Trees
- Cultural Berry Bushes
 - Saskatoon Seedlings
 - Choke Cherry Seedlings

Date Created: 2023-11-13
Project CRS: EPSG:3400
Source: Google Satellite
Created By: Tree Time Services Inc.
Scale:1:1,000

0 20 40 60 m

Purpose

| UN SDG 15 - Life on Land



Indicator 15.2.1: Progress towards sustainable forest management

The Project Forest Rewilding Plans, Monitoring Protocols, and Remediation Actions are designed to ensure the health and success of our projects. Project Forest developed a Rewilding Plan to ensure the long-term success of the seedlings while meeting both ecological and cultural goals for the school and the Nation.

To create a Rewilding Plan, a site visit was conducted to survey the area where we identified and developed mitigation strategies for any site limiting factors. In collaboration with Paul First Nation, a species list was finalized to achieve immediate visual screening from the nearby CN rail tracks and to incorporate traditional food-bearing and medicinal plants throughout the school grounds. Forty landscape-sized trees were planted to create an effective buffer for students and staff from day one.

The Rewilding Plan protocols included:

- Detailed planting maps tailored to the site layout and surrounding ecosystem.
- Site preparation prescriptions to create optimal growing conditions.
- Mitigation strategies to address environmental challenges.
- Vegetation management and monitoring plans to ensure long-term project health and survival.

Through careful planning and collaboration, this project delivered a resilient landscape that supports student safety, cultural connection, and ecological restoration for years to come.

Monitoring Protocols

During the design and budgeting phase, Project Forest applies a 25% mortality assumption to all projects, consistent with its internal monitoring protocols. By budgeting for this mortality rate, Project Forest ensures sufficient planting density and resource allocation to achieve a minimum 80% survival rate.

This strategy supports long-term objectives of establishing healthy, self-sustaining rewilded ecosystems. Each site is surveyed annually, the results of the survival surveys are used to determine if a fill plant is required.

A site survey was done in the fall of 2024.

Sustainable Forest Management

is a way of using and caring for forests to maintain their environmental, social, cultural and economic values and benefits over time (NRCAN, 2024).

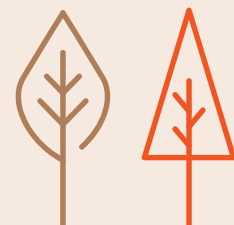




Table 1: 2024 Fall Survey Results

Species	Number Planted	Plants Alive	Observed % Alive
Willow	180	Unknown	---
Balsam Poplar	90	50	56%
White Spruce	180	166	92%
Caliper Sw	40	38	95%
Chokecherry	60	20	33%
Saskatoon	90	1	1%

The Challenge:

In support of UN Sustainable Development Goal 15: Life on Land, Project Forest conducted a stocking survey at Paul’s Elementary Jr High School during Fall 2024, assessing species performance across the shelterbelt and cultural planting areas. The objective was to assess reforestation success and biodiversity.

The Reality:

Survey results revealed a wide variance in species survival. While white spruce (92%) and caliper spruce (95%) performed strongly, survival rates were lower for balsam poplar (56%) and significantly poor for chokecherry (33%) and Saskatoon (1%). The survey crew was not able to quantify the willow survival rate.

The Context:

The site will be assessed again during the fall of 2025. Should the results remain consistent, a fill plant will be scheduled for the spring of 2026.

The Nation will be consulted to discuss the deployment of any species species selected for a fill plant.

15-25

Height in cm of Willow Seedlings after 1 year

| UN SDG 15 - Life on Land



The Obstacle:

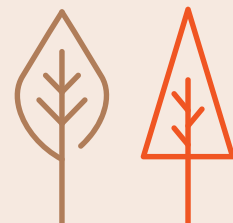
Key regeneration barriers included:

At the shelterbelt location there is inadequate herbaceous competition suppression due to the mulch's inability to prevent competition ingress.

Observations from the 2024 fall survey may have underestimated the number of live stems, particularly for willow and smaller shrub species. This was due to the leaf off dormant state of the deciduous plants and poor weather conditions that limited visibility and reduced assessment accuracy. A follow-up survey will be completed in 2025 to confirm current stocking levels before any 2026 fill planting is scheduled.

Horse scat was observed around the culturally significant species. We believe that horse activity and browsing pressure of the culturally significant species resulted in a mortality event.

We are currently working with Paul First Nation to adjust the species mix and plan for a potential 2026 fill plant. Additionally, we are considering using tree guards to reduce the browsing risk from horses and other ungulates.



Purpose

| UN SDG 13 - Climate Action

Goal: Take urgent action to combat climate change and its impacts.

Matching ESG Goals:

- Reducing GHG emissions
- Experiencing nature in an educational and interactive way



The trees we plant at Paul’s Elementary Jr.High School can have a significant impact on mitigating climate change.

Indicator 13.2.2: Total greenhouse gas emissions per year

Forests act as carbon sinks, absorbing carbon dioxide (CO2) from the atmosphere through photosynthesis and storing it in their biomass and soil. By planting forests, we increase the amount of CO2 sequestered, thereby reducing the concentration of greenhouse gases (GHGs) in the atmosphere. This helps mitigate climate change by reducing the amount of CO2 that contributes to global warming (NRCAN, 2022).

The amount of CO2 projected to be removed from the atmosphere over the lifetime of the Project Forest Wihnemne School Food and Medicine Forest is 1,080 metric tonnes.

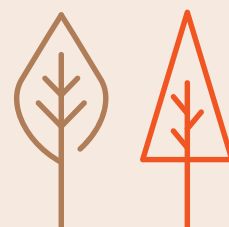
Project Forest uses the [Carbon Budget Model of the Canadian Forest Sector \(CBM-CFS3\)](#) modelling framework developed by Natural Resources Canada to assess the impacts of our forests on carbon. This is the national standard for reporting on forest carbon.

1,080

Metric tonnes of CO2 project to be removed from the air.

Carbon Budget Model of the Canadian Forest Sector

is an aspatial, stand- and landscape-level modelling framework used for international reporting of the forest carbon balance of Canada’s managed forest (NRCAN, 2024).



Purpose

| UN SDG 13 - Climate Action



Target 13.3: Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning

Project Forest provides our partners and the wider community with the opportunity to participate in educational activities through our Community and Corporate Outreach Program. Experiencing nature in an educational and interactive way enriches knowledge, fosters a connection with the environment, promotes well-being, and encourages responsible environmental behaviour. These are some of the engagement activities we conducted in 2024:

Tree Planting Events

- On June 24th, 2024 Project Forest hosted a groundbreaking celebration and tree planting event on the Paul's Elementary Jr. High School grounds
- In-person, hands-on volunteering opportunities for Silver, Gold and Platinum financial partners
- Educational talks around seedling physiology, forest succession, tree planting technique, tree planting survey methodology, seed collection, plant identification, and traditional plant uses

Indigenous Engagement

- Opportunity to learn from Indigenous Knowledge Keepers and Elders in various capacities from presentations, interviews and talks, to one-on-one exchanges at our Corporate Planting Events and Annual Partner Celebration
- We planted trees on site at Paul's Elementary Jr High School during a community tree planting day, while teaching the students about the different trees and shrubs

Podcast, radio, tv and webinar interview

- Overview of the rewilding process for general audiences
- Discussions of more in-depth topics such as working with Indigenous communities, operating a non-profit, and sustainable forest practices

Lunch and Learns, Keynote Presentations and Panel Discussions

- Overview of the rewilding process, our projects, and stories of community impact
- Stakeholder project impacts and opportunity to engage with the Project Forest team

Annual Partner Celebration

- Presentations featuring a wide range of speakers from the Project Forest community
- Focus on Indigenous reconciliation through rewilding, sustainable business practices, and community investment

Seedling and Seed Kit giveaway events throughout the year

- Opportunity to interact with the Project Forest team
- Celebrate the impact your organization is making
- Engage with the Project Forest community



Students learning about plants and trees at Wihnemne School Food and Medicine Forest

4

Project Funding Partners

Purpose

| UN SDG 11 - Sustainable Cities and Communities

Goal: Make cities and human settlements inclusive, safe, resilient and sustainable



Matching ESG Goals:

- Generating social & economic growth
- Advancing health & wellbeing
- Developing deeply ingrained Indigenous relationships

Restoring degraded land can have a positive impact on communities through creating safe, resilient, and sustainable natural spaces.

Target 11.4: Strengthen efforts to protect and safeguard the world's cultural and natural heritage



Paul's Elelementary Jr. High School Shelterbelt

Nature holds immense cultural and spiritual significance for many Indigenous Peoples. The Wihnemne School Food and Medicine Forest incorporated traditional food bearing, medicinal and culturally significant plants into the learning area.

Purpose

| UN SDG 11 - Sustainable Cities and Communities



“We value our partnerships with companies who share our appreciation for nature, its beauty, and everything it has to teach us.

Reclaiming the land around the school grounds gives the children even more learning opportunities which is priceless. As the trees grow the children will also grow in so many ways.”

Faron Bull, Paul First Nation Councilman



Dechant Construction Site preparation at Paul's Elementary Jr. High School

Indicator 11.a.1: Number of countries that have national urban policies or regional development plans that (a) respond to population dynamics; (b) ensure balanced territorial development; and (c) increase local fiscal space

The trees we plant provide areas for recreation and traditional land use within the community. Our funding partners finance the rewilding costs including seedlings, planting, and labour, allowing communities to allocate more funds to services and infrastructure.

When operating on First Nation land, Project Forest will always grant the Nation's economic development corporations and First Nation owned businesses first right of refusal on the following project work opportunities:

- Mechanical site preparation
- Seed collection
- Vegetation management
- Survival assessment survey and data collection
- Cover crop deployment
- Construction work

The IRC (Indian Resource Council), works with Project Forest to promote First Nation and local participation on different site activities as noted above.

Local fiscal space

is defined as the sum of financial resources available to a government for the improved delivery of basic services without any prejudice to the sustainability of a government's financial position (Heller, 2005).

Positive Impact

| UN SDG 3 - Good Health and Well-Being

Goal: Ensure healthy lives and promote well-being for all, at all ages.



Planting trees can have several positive impacts on ensuring healthy lives and promoting well-being for all ages.

Target 3.9: By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination

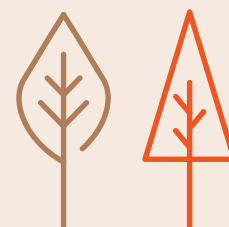
Trees act as natural air filters by absorbing pollutants and particulate matter from the atmosphere. Trees remove harmful gases by absorbing them through their leaf stomata, filtering these chemicals from the air. Particulate matter is intercepted by the tree's surfaces. When it rains, the particles are washed off and carried to the ground. Planting forests can help improve air quality, by reducing the exposure of communities to harmful pollutants. (Nowak et al., 2014)

In addition to improving air quality, this project provides opportunities for people to connect with nature, enjoy recreational activities, and experience the positive physical and mental health effects of spending time outdoors. They also provide various ecosystem services that indirectly contribute to our health and well-being.

Some of the important ecological services provided by shelterbelts include:

- cleaning water through water filtration
- cleaning air through oxygen production and absorption of pollutants
- enhancing soils and restoration of nutrients through the inclusion of food bearing plants and shrubs
- absorbing CO₂ from the atmosphere
- expanding biodiversity due to increased biomass of leaf litter

These services all indirectly impact human health and well-being.



Positive Impact

| UN SDG 2 - Zero Hunger

Goal: End hunger, achieve food security and improved nutrition and promote sustainable agriculture.



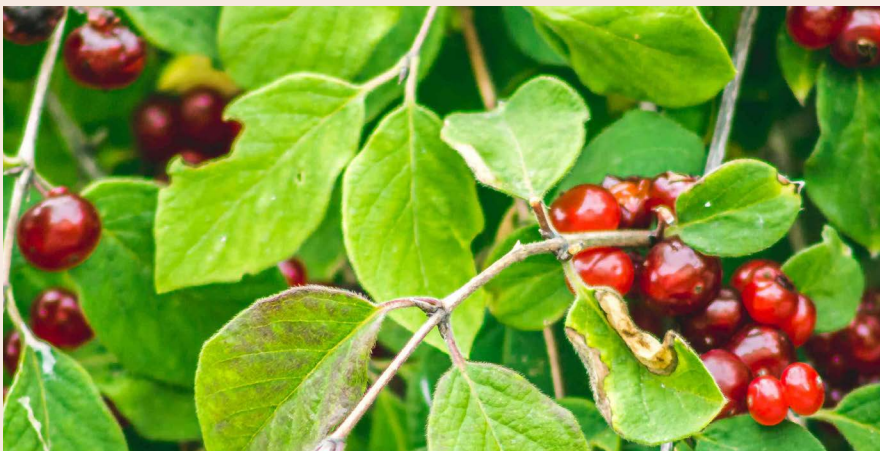
This project can have indirect but important impacts on addressing hunger, achieving food security, improving nutrition, and promoting sustainable agriculture.

Target 2.1: By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round.

Indigenous food and medicine forests incorporate a wide variety of plant species, including vascular plants, shrubs, fungus, bushes, and trees. This diverse range of edible and medicinal plants provides a broad selection of food and healing sources for the community year round.

By growing food and medicinal plants, Indigenous communities can reduce their reliance on external sources and commercial markets. This enhances the community's self-sufficiency and food sovereignty.

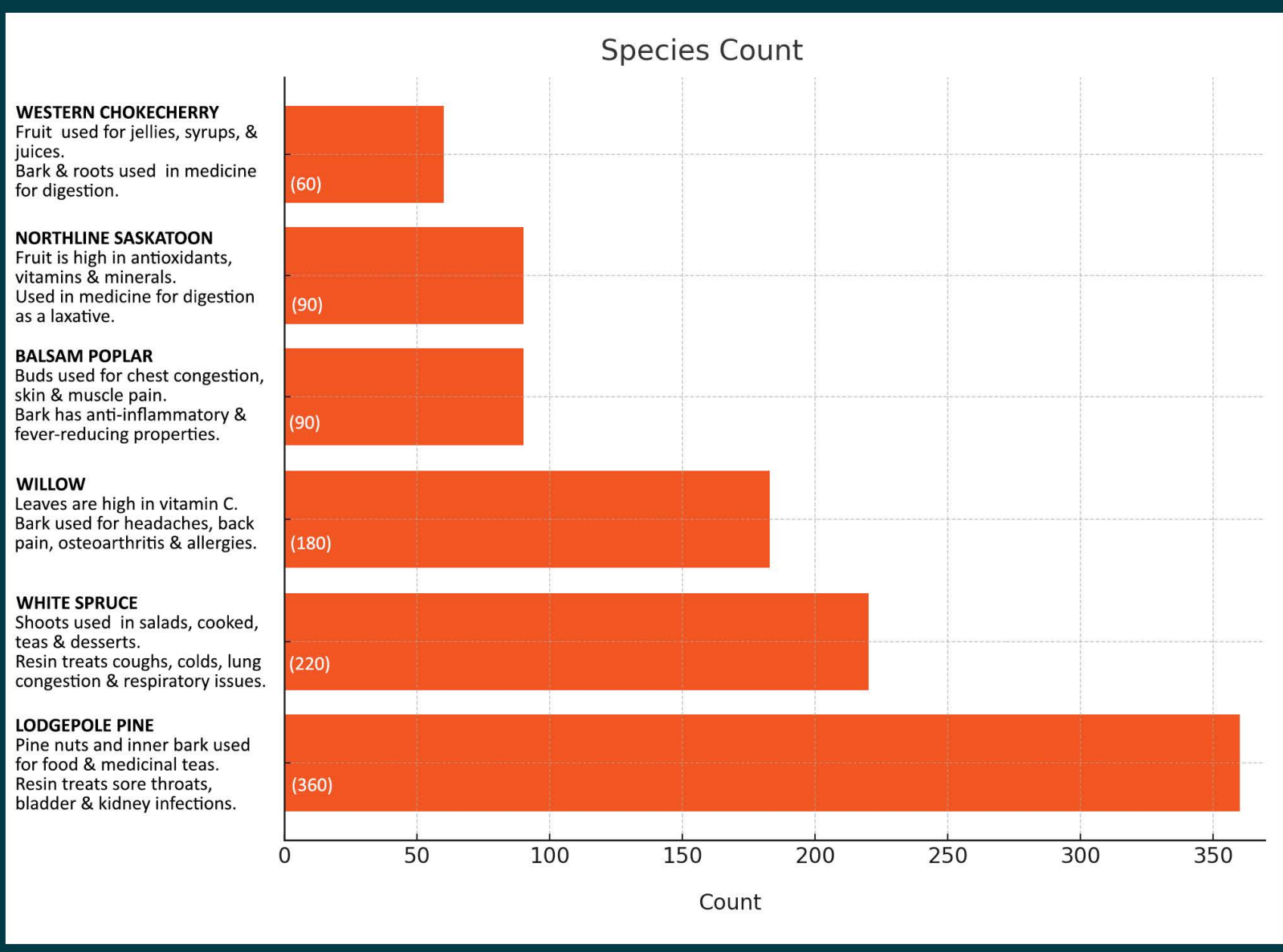
Western Chokecherry



In 2024, Project Forest Wihnemne School Food and Medicine Forest planted 1,000 food, medicinal, and culturally significant plants across the Wihnemne School project site. A total of 6 different species were planted (Figure 2).

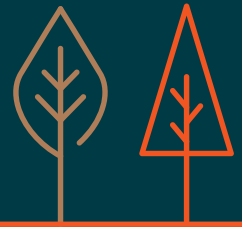


Figure 2: Food and Medicinal Species Planted in 2024



Partner

| Funding Partners



Project Forest Wihnemne School Food and Medicine Forest



Our work is not possible without you.

Thank you to our funding partners!

Diamond Willow

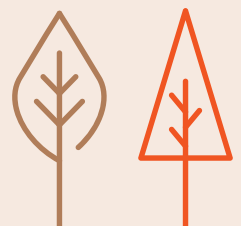


Platinum Forest



Gold Woodland

SECURE



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Appendix A - Site Survey

Wihnemne School Forest – 2024 Fall Walk Through

Shelterbelt Notes:

- The wood mulch rows are not obvious at a first glance. There are weeds and grass growing in the mulched areas. This made it difficult to find the seedlings with leaf off.
- The willow were really difficult to find, and as spacing was variable the next seedlings were difficult to find. However, the willow that were observed are doing well. The willows ranged from 15 to 25 cm.
- The Balsam Poplar row have willow intermixed in the row. The Balsam Poplar is not doing as well as expected. Out of the seedlings observed 50 seedlings are alive and 10 are dead. So about 30 seedlings were not observed during the assessment.
- The two lines of spruce, each line had one dead caliper trees, but the rest looked healthy. Each row had 83 spruce seedlings counted out of the planned 90 seedlings each.
-

Cultural Plants

- Chokecherry: about half of the seedlings were observed. They ranged in height from 22 – 43 cm. About a third of the row on the east side did not have any seedlings.
- Saskatoon: Only one alive saskatoon was observed, and one dead one. The saskatoon are very small and hard to observe in leaf off conditions.

Concerns:

- There is a lot of evidence of horses being present in the area
- The wood mulch is not as effective as anticipated

Results:

Species	Number Planted	Plants Alive	Observed % Alive
Willow	180	Unknown*	-
Balsam Poplar	90	50	56%
White Spruce	180	166	92%
Caliper Sw	40	38	95%
Chokecherry	60	20	33%
Saskatoon	90	1	1%



Figure 1. Willow in north shelterbelt row



Figure 2. Willow in north shelterbelt row



Figure 3. Pb in 2nd shelterbelt row



Figure 4. Pb plug is dry



Figure 5. Pb plug not disintegrated



Figure 6. Sw in 3rd row shelterbelt



Figure 7. Second dead caliper tree on east end

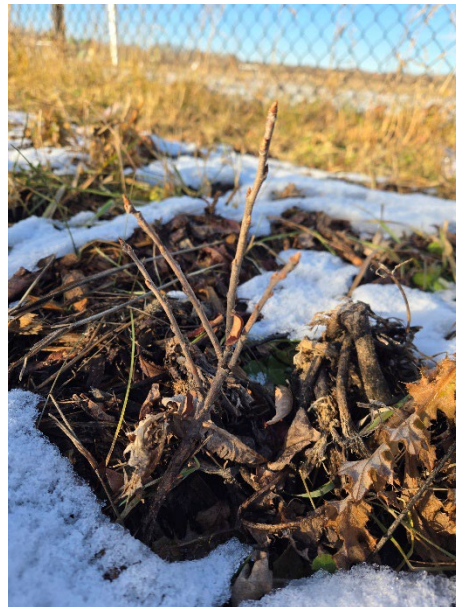


Figure 8. Chokecherry in cultural area



Figure 9. Browsed saskatoon



Figure 10. Browsed saskatoon



Figure 11. Concerns - horse manure (1 of 4 piles along shelterbelt)



Figure 12. Concerns - grass ingress and establishment in mulched area