

An excerpt from

TWO BILLION TREES and COUNTING – *The Legacy of Edmund Zavitz*

John Bacher, Author

Climate change makes Zavitz's ideas even more pressing today than they were in his lifetime. p. 17

To reinvigorate reforestation, the Ontario Seed Tree Plant was established in Angus, Ontario, in Simcoe County. It still exists today. At Angus, seeds were extracted from cones and planted in nursery conditions to become seedlings for sale or shipping. Homegrown stock was produced to avoid further disasters stemming from importation from the United States, namely the issue of White Pine seedlings grown in American nurseries from stock contaminated with blister rust, which had come from Germany. Much of the early work of the station was to encourage selective breeding from trees that had shown resistance to this disease. The Ontario Seed Tree Plant also sought to conserve genetic material from the various climate zones of Ontario, since seedlings from seeds collected in their distinctive regions grow faster and survive longer in their native climate zones. Zavitz and Drury understood that the difficult task of extracting pine seed from cones required specialized equipment and a network of suppliers, such as farmers harvesting cones from their own forests. Although St. Williams had a seed tree plant, which would continue to operate into the 1950s, it was inadequate for the massive scale of the reforestation program was being planned.

The seed tree plant was established in 1922 on a desolate sand wasteland near Angus. Like the tree nurseries elsewhere, it developed into an impressive demonstration forest of some 777 hectares and eliminated the sand waste. Its buildings, surplus aircraft hangers from the end of the First World War, had been transferred from Camp Borden. Initially, the plant had the capacity to handle twenty bushels of Red Pine and seventy-five bushels of White Spruce per eight hour day. Two men at the plant did all of the work, including, as Zavitz noted in his 1922 report, "firing, turning, and filling the drums and cleaning the seed." In its first year, the plant gathered 444 bushels of Red Pine, 175 of Jack Pine (obtained from a northern bagging operation), thirteen bushels of Red Oak acorns, and smaller amount of Black Locust, Black Cherry, Sweet Chestnut, Black Walnut, and soft maple seeds.

... The White Pine Blister Rust erupted during the First World War, but it took some time before the seriousness of the situation was understood. In order to best continue the reforestation projects already planned, however, Zavitz selected Red Pine as the most appropriate, since it could survive in the hot and dry conditions of the arid sand wastelands. He found that "our native pine ... grow well on poor soil, has few enemies, and is valuable for timber purposes." He viewed the lands around Angus as the perfect place for collecting Red Pine cones, believing that it was "doubtful whether a more suitable area than this for collecting red pine seeds exists in the province."

Following the establishment of the tree seed tree plant at Angus, Drury and Zavitz met there on a weekly basis for about a year and a half to plan the next stages of reforestation in Ontario.... High on their priority list was the establishment of more reforestation stations. The one they had already selected in Midhurst in 1905 The other station was to take on Zavitz's long-term mission of reforesting the Oak Ridges Moraine.

Edmund Zavitz (1875–1968) rescued Ontario from the ravages of increasingly more powerful floods, erosion, and deadly fires. Wastelands were taking over many hectares of once-flourishing farmlands and towns. Sites like the Oak Ridges Moraine were well on their way to becoming a dust bowl and all because of extensive deforestation.

Zavitz held the positions of chief forester of Ontario, deputy minister of forests, and director of reforestation. His first pilot reforestation project was in 1905, and since then Zavitz has educated the public and politicians about the need to protect Ontario forests. By the mid-1940s, conservation authorities, provincial nurseries, forestry stations, and bylaws protecting trees were in place. Land was being restored.

Just a month before his death, the one billionth tree was planted by Premier John Robarts. Some two billion more would follow. As a result of Zavitz's work, the Niagara Escarpment, once a wasteland, is now a UNESCO World Biosphere. Recognition of the ongoing need to plant trees to protect our future continues as the legacy of Edmund Zavitz.

Dundurn Press

Publisher of TWO BILLION TREES and COUNTING – The Legacy of Edmund Zavitz