

Turning Trash into Buried Treasure

A farm uses a unique heat recovery process to produce biochar more efficiently

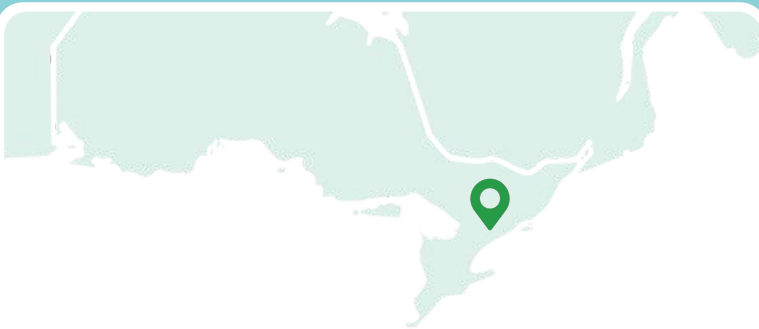


The Project

In 2024, Woodleigh Farms Ltd. launched a new initiative called "Catching Carbon" to tackle the challenge of forest and farm waste. The goal is to turn unusable organic materials—like leftover wood and crop waste—into biochar, a natural product that improves soil health and stores carbon in the ground.

With support from a Climate Action Microgrant, Woodleigh Farms installed an innovative drying system to capture leftover heat from one batch of biochar production and use it to dry the next batch of raw materials, improving efficiency and reducing energy use.

Woodleigh is collaborating with experts from the University of Guelph and the University of Waterloo to guide the early research phase of the project (years 1–2). After that, the company plans to bring the products to market. All findings will be shared with other farmers and organizations, helping to advance sustainable agriculture across the industry.



 Cavan, ON

 Agriculture, forestry, fishing and hunting



Funding for the 2024 Climate Action Microgrant was generously provided by TD

The Benefits



Waste Diversion / Reduction



Carbon Sequestration

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The Results

This project is a first for both the agricultural sector and for Woodleigh. By working with research partners, this initiative aims to demonstrate and validate the extent biochar can sequester climate and/or help improve soil health in a temperate climate like Ontario.

Over the 10-year life of the project, Woodleigh expects to sequester 13,500 tonnes of CO₂e, assuming an estimated 2.7 tonnes of CO₂e is sequestered by each tonne of biochar.



Norm Lamothe
Director

“We decided to take on this project to demonstrate that it is possible to balance financial sustainability (profitability) with ecological sustainability. We strive to find a balance while we look to improve the overall health of our agricultural soils so that they may continue to support generations to come. It is important to have a long-term vision when faced with the challenges of climate change, and building resilient soils is one way to help ensure our long-term sustainability.”



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