



INFORMATION ON THE COMPLETED PROJECT CONTRIBUTION AGREEMENT

Assessing Forest Regeneration From Above-Ground

Ineffective methods for assessing forest regeneration can compromise ecosystem health, highlighting the urgent need for improved techniques that ensure accurate monitoring and management.

PROJECT TITLE

UAV Establishment Surveys for
Regenerating Forest Stands—Methodology
and Feasibility Study

ORGANIZATION

Wiikwemkoong Unceded Indian Reserve
[wiikwemkoong.ca/administration/
lands-and-natural-resources](http://wiikwemkoong.ca/administration/lands-and-natural-resources)

CONTACT

John Manitowabi
johnmanitowabi@wiikwemkoong.ca

START DATE

December 1st, 2023

END DATE

March 31st, 2025

This project marks a major improvement in how we assess forest regeneration by using unmanned aerial vehicles (UAVs) equipped with laser imaging, detection, and ranging (LiDAR) technologies, along with advanced 10-band multispectral imaging. By utilizing these technologies, the project aims to change traditional methods for evaluating both natural and planted forests, making the process simpler and more accurate.

UAV-based imaging offers a better alternative to older methods, which rely solely on ground assessments for checking forest regeneration. This new approach not only promises to be more efficient but also provides more accurate data collection, overcoming the limitations of conventional techniques. By delivering precise information more efficiently and cost-effectively, the project intends to help forest managers in Wiikwemkoong, and other areas make informed decisions about how to treat forest stands.

In the end, the goals of this project go beyond just technological advances; they also support forest health and sustainability through better management practices. By equipping forest managers with effective tools to assess forest regeneration, the project contributes to the long-term health and resilience of forest ecosystems in the region.