

# Alta Forestry Solutions



## The Alta Edge

Let our team of experts provide you with the latest technologies and solutions for forest inventory management through digital photogrammetry and LiDAR interpretation

Leader in the field of photogrammetry and spatial analysis of forest characteristics, Groupe Alta has been an important partner of the Forest Industry for over 50 years.

Our unique geospatial technologies, solutions and services for aerial imagery acquisition, forest inventory management, cartography, monitoring and assessment, sustainability analysis and management plans, enable our clients to reach their operational objectives more effectively than ever.

Groupe Alta partners with different levels of public and private organizations, in order to continue to deliver accurate and high-precision geospatial data that is tailored to the Industry.

# Forestry

## Resource Management

- Intervention plans (PG, PQ, PA, RAIF\*)
- Silviculture prescriptions and analyses
- Ecosystem-based forest management plans (faunistic, recreational, tourism & multi-resources)
- External audits - (CSA, ISO, FSC)

## Forest Geomatics and Remote Sensing

- Data structure for PRAIF (Annual Forest Management Plans and Reports)
- Digital orthoimagery, digitalization and structuring
- Landscape analysis, modeling and land area visualization
- Custom programming – ArcGIS, DVP

## Cartography and Forest Inventory

- Forest inventory, intervention & follow-up plans
- Forest inventory in stereoscopic mode & LiDAR
- Photo interpretation
- Stereoscopic cartography

## Operational Planning

- Planning from digital stereo imagery (continuous monitoring of harvesting and silviculture operations)
- Photo interpretation for operations
- Analysis of profitability, forest harvesting and silviculture operations
- Supply management – volume, cost and quality

\*PG = General Plan, PQ = Five-year Plan, PA = Annual Plan, RAIF = Annual Forestry Management Report.



## Forest Inventory Established from Digital Stereo Sampling Plots

This project's objective was to create a forest inventory for Scierie Leduc; (Forest Management Unit - 031-53) using digital photogrammetry. The purpose of this inventory was to help in the preparation for their annual intervention plan. The project covered 2 090 hectares of forest where more than 500 sampling plots were measured.

### Client's Objectives:

- Gain a better knowledge of territory
- Establish silviculture prescriptions
- Reduce forest inventory costs

### Groupe Alta's Actions:

- Aerial imagery acquisition
- Production of stereoscopic models
- Creation of a sample design
- Count and determine the height of trees using digital photogrammetry
- Control and validate data in the field
- Compile and analyze data
- Establish silviculture prescriptions

### Results:

- Considerable reduction in operational costs
- Reliable silviculture prescriptions
- Professional and reliable results
- Quick extraction of sampling plot information