



ATLAS

Harvest Scheduler

Simulation Software for Harvest Planning
Scheduling Crew, Area and Log Production in the Short and Medium Term



Simulates forest harvesting

Calculates depletion of net stocked area

Summarises volume by log type from daily to annual

ATLAS Harvest Scheduler is a system for simulating forest harvesting. It predicts the production of volume by log type of each harvesting crew, and the reduction in the net stocked area of the harvest unit in which each crew is working. Predictions are made on a daily basis based on crew production rates and availability. Reports are generated at different time-scales from daily through to annual. Key reports show production through time by forest, crew and log type.

Harvesting Crews

A crew has a unique name and may represent an actual harvesting crew, or a token crew to trial a required increase in capacity. Each crew has a move-and-setup time, a specified number of days worked, a harvest list, and a production rate (crew and / or harvest unit specific). The harvest list is a sequenced list of harvest units that the crew will harvest in the specified order. Each harvest unit refers to a cutting pattern selected from the harvest unit's assigned yield cube and has an option to specify a finish date (or harvesting will continue until completion of the area).

Harvest Units

A harvest unit is any area of forest which will produce log volume and grade more-or-less uniformly across its extent. Hence one yield cube is sufficient to predict the yield. A harvest unit could be a setting (the ATLAS Harvest Manager system recognizes a hierarchy of Forest, Block, Harvest Area, Setting), or a stand

(ATLAS GeoMaster uses Forest, Compartment, Stand). A harvest unit must have a plant date so that yields can be indexed by age. Yield cubes are selected and referenced from ATLAS Yield Table Manager. The net stocked area at the start of the simulation must also be known.

Scenarios

A scenario is a self-contained set of planning data from which a simulation can be run to produce all the standard reports. Scenarios are used to try variants of the inputs (crews, production rates, harvest list etc), and to update the starting point for a simulation.

Reporting

All reports can be generated at different time scales: daily, weekly, monthly, quarterly, and annually. Production charts and reports show the log production by grade through time. Area charts and reports show the depletion of net stocked area from harvesting. Gant charts show the sequence of harvest units the crews work through by time. Production and area report data can be exported to Excel.

Integration

ATLAS Harvest Scheduler uses ATLAS Yield Table Manager to provide yield information. Harvest units can be sourced from GeoMaster stands or from Harvest Manager settings / harvest areas or manually entered.

ATLAS Harvest Scheduler at a Glance

Feature:	Benefit:
Scenario Management	Organize scenarios into folders. Try variants to test "what if". Manage access within the organization.
Variable timescale	Results available at daily, weekly, monthly, 3-monthly, quarterly, annually, and financial yearly intervals.
Production estimates	Estimates the log yield in tonnes by grade, crew and harvest unit for any timescale.
Prediction of area harvested	The depletion of net stocked area is predicted for any timescale.
Multi-user system	Built on SQL Server to provide a secure and reliable planning system for multiple users.
Cut plan selection	Allows for selection of a specific cut plan by a crew in a harvest unit.
Flexible production rates	Crew productivity can be specified at three levels.
Control over crew availability	A full calendar of work-days allows for detailed production estimates.
Powerful reporting	Standard PDF reports, interactive charts and data export to Excel for more detailed analysis.
Integration	Harvest unit information can be sourced from Geomaster and yield cube information referenced from Yield Table Manager.