

# Newsletter



## ATLAS

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[www.atlastech.co.nz](http://www.atlastech.co.nz)

August 2006

### *Providing integrated forest management and modelling software for the forestry industry*

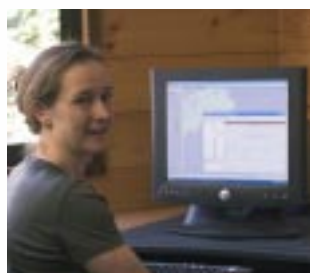
#### **A word from our Manager...**

It has been some time since the last newsletter and there have been a number of changes both to ATLAS staff and our products. I have recently joined the team, and we have also hired a replacement for Briana in the software support role, starting early September.

With a background in forestry, I find it great to be able to work with a team focused on developing products that make life easier for those working in a production environment. I know that times are tough out there in many areas of the industry, and anything that can be done to enable work to progress more efficiently and effectively is welcomed. Our many clients gain value from our products for both managing their estates and delivering good information on which to base long and short term decisions.

I am hoping to meet many of you in the next few months, through client visits and attending upcoming training and user group sessions. The intention is also to improve communication by issuing this newsletter more frequently in the new format. We are constantly improving and upgrading our products, as well as developing new products, so we are keen to keep you informed through the newsletter and our website.

**Sarah Heine**



#### **ATLAS becomes Microsoft Partner**

On the 30th of June, ATLAS Technology officially became a Microsoft Certified Partner by qualifying with an ISV/Software Solutions competency. This certification recognises ATLAS Technology's proven expertise in developing and marketing packaged software applications based on Microsoft technologies.

As well as giving us access to the latest Microsoft development tools and techniques, this partnership enables us to have direct access to Microsoft support professionals for help in resolving specific problems encountered while using Microsoft software. All this adds up to ATLAS Technology being better able to deliver and support state-of-the-art forestry-related software to you, our valued customers.

**Microsoft**  
**CERTIFIED**  
Partner

#### **Also in this issue:**

- Yield Table Manager Released
- What's new with GeoMaster
- Forecaster Update

# Yield Table Manager Released

Preparing forest yield information is an important part of forest valuation and strategic planning. However the management of this information is often not integrated with the use of yield predictions for harvest planning at a tactical and operational level. ATLAS Yield Table Manager is intended to bridge these gaps by providing the yield information and tools needed by strategic planners and valuers, harvesting and tactical planners, operational harvest schedulers, and forestry and business analysts and management.

The advantages of a single information system include:

- Single point of entry
- Consistency across the organisation
- Ready access to common data.

This system leads to efficiencies in data management and more internal cohesion as the organisation communicates on the basis of a common understanding.

The design includes the ability to adjust yields while retaining the original value so that predicted values can be fine-tuned as more reliable information becomes available. Also included is an audit trail capability, to ensure modifications can be documented and tracked.

Built on Microsoft SQL Server (or MSDE), ATLAS Yield Table Manager is designed to provide data dynamically to other ATLAS systems such as GeoMaster and ATLAS Harvest Manager.

## Features

Yields can be imported directly from an ATLAS Cruiser result set or from CSV file (as produced by Forecaster, MARVL V3, STANDPAK, or a spreadsheet).

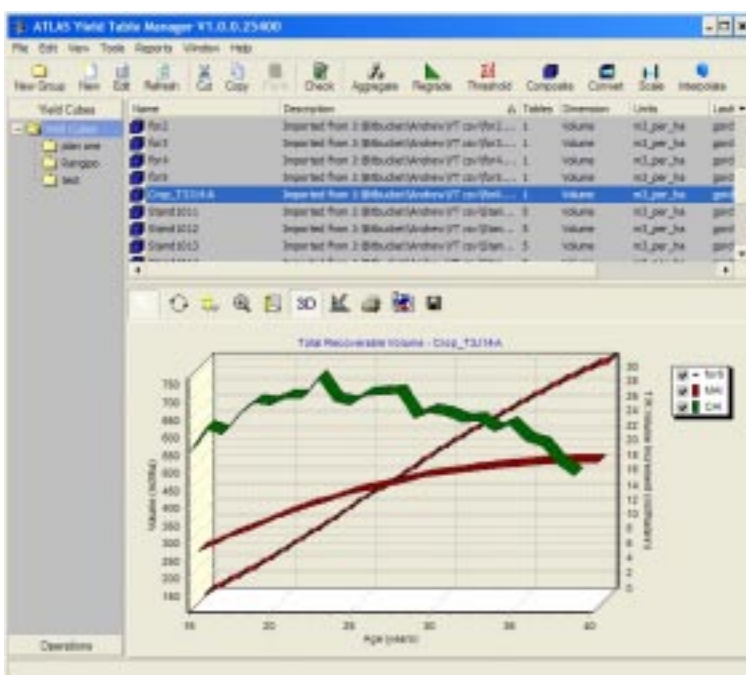


Yield tables are part of a yield cube, that is, a series of yield tables by cutting strategy. These are organised in a tree-structured hierarchy of user-created and named folders. If necessary, individual folders can be made read-only. A simple reporting feature allows the yield tables to be written to a grid which supports dynamic grouping, sorting etc.

An editing capability is included which allows an adjustment to be made to a yield entry and to the (optional) distribution of logs by SED in any one yield cell. Links to yield tables make them available for access in the stand records, Harvest Manager and other planning systems.

Composite yield tables can be constructed as area-weighted averages. For example, a stumpage sale area may comprise parts of 3 stands, each of which has a stand yield table associated with it. This feature constructs a single, composite table to represent the yield from the sale area.

Log product aggregations (planning grades or key grades) and aggregation groups can be set up to build yield tables with aggregated grades from the underlying tables.



### ATLAS Yield Table Manager continued...

Threshold rules are used to re-direct small amounts of volume to other grades in order to ensure realistic predictions of log yield mix.

Thinning yields can be included, so that the total yield through a regime from a stand or crop-type can be predicted. To allow for all the combinations that can arise from multiple production thinnings at variable ages, yield cubes can be linked together for efficient storage and retrieval.

Conversion factors are maintained so that yield values can be converted from m<sup>3</sup>/ha to other units such as tonnes/ha, JAS/ha and carbon/ha. The system can perform conversions from a reference table that can take account of species,

manufacturing method, type of log, region/forest/block, and month.

Given a sparse yield table or a table with gaps at certain ages, yield values can be interpolated between known ages or interpolated from zero at a specified start age. Interpolation can be specified as intervals of 1, 2, 3, 6, 12, 24, or 60 months. Monthly growth adjustment tables are used to determine the interval between entries and the proportion of the interval the month relates to.

When only a generic yield table is available it may be necessary to re-grade (or down-grade) the yields to represent what may be realised. This is supported through regrade rules. It is also possible to scale the values of yield tables by a constant factor to adjust for bias in predicted yield.

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## What's new with GeoMaster

### A bountiful harvest ...

With the release of GeoMaster v1.7 we have further streamlined the links between the core landuse information in the Patch layer with ancillary data relating to harvest operations and planned stands. Our aim is to integrate this information into GeoMaster in such a way that the system can report on it without requiring patches to be fully up-to-date, thereby easing time pressures on GIS operators. We have also extended support for GeoMapper so that it can map new attributes and constructs such as planned stands.

### Looking forward ...

- o We will shortly be releasing a replacement GIS viewer tool (for ArcGIS v9) to be used in conjunction with Cruiser and SilviQC.
- o We will be integrating GeoMaster/Harvest Manager with Yield Table Manager so that product yields can be recalculated and reported more dynamically.
- o There will be a GeoMaster User Meeting held in Rotorua during October 10<sup>th</sup> – 11<sup>th</sup> during which related products (Harvest Manager, Roding Manager etc) will also be covered. We plan to include some site visits to add interest and variety.



## Forecaster v1.2

Forecaster version 1.2 has now been released. This version includes the following major enhancements:

- Stem selection rules have been replaced by the ability to order stems when performing pruning and thinning events.
- The scenarios generated when a simulation is run can be saved to a database. This means that they can be used at any time to generate reports or for scenario comparison.
- Messages generated during a simulation are now displayed at the end of the simulation.
- The generic branch model now responds to spacing and stem dominance.

### Forecaster Training

The Forecaster training course is a combination of theory and practice. It covers silvicultural scheduling, yield table generation and regime evaluation. The course also covers many of the models used within Forecaster, and highlights the key differences from STANDPAK.

Two successful training courses have been held to date.

The next course has been scheduled for the 4<sup>th</sup> of October 2006. If you wish to attend please e-mail your details to [software.support@atlastech.co.nz](mailto:software.support@atlastech.co.nz).

*"I think it provided an excellent introduction to the software and was a stimulating day, well run with good theory and practical sessions.*

*"The tutorial was good too and I would really recommend completing this first. It means you can find your way around the program easily and make the most of all the information provided in the workshop.*

*"I have used STANDPAK a reasonable amount of times and it's good to progress onto Forecaster. My initial impression is that Forecaster is more flexible in terms of what you can input and achieve with a much wider range reporting options and data presentation."*

*Mark Cleland - Lecturer in forest management, Waiariki Institute of Technology*

## To learn more about ATLAS products

[www.atlastech.co.nz](http://www.atlastech.co.nz)

Our products apply to key areas of the forestry value chain, enhancing the management information available to provide value-added decision support.

- Forest and Land Information (ATLAS GeoMaster®)
- Forest Resource Assessment (ATLAS Cruiser®)
- Forest Management DSS (ATLAS Forecaster®)
- Quality Assurance (ATLAS SilviQC)
- Forest Estate Planning (FOLPI),
- Data Collection (ATLAS FieldMan)
- Harvest Planning (ATLAS Harvest Manager)
- Harvest Scheduling and Log Allocation (ATLAS Market Supply/ATLAS Yield Table Manager).
- Document Management (ATLAS Document Manager)
- Map Production (ATLAS GeoMapper)

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*ATLAS Technology is a group within the Crown Research Institute, Scion.*

