

## Providing integrated forest management and modelling software

June 2011

It is hard to believe we are over halfway through the year. All too soon we get those sharp reminders that winter is upon us. The ATLAS team is very busy completing projects by 30 June and continuing to support our software product clients.

Changes continue to our growing team. Recently, you may have seen ATLAS advertising for a new Software Support Forester, which was Praneita's position. Praneita has taken the Test Analyst role, as Sabita left us in February. We are in final interviews for the support role and expect to appoint someone by the time this newsletter is in your hands. Praneita has started her new testing role with formally testing the latest GeoMaster release.

Vanessa Duffy joined the ATLAS team in early March to fill the Office Manager's role vacated by Bronwyn. You may have already come across Vanessa in your dealings with ATLAS. Vanessa brings a lot of energy and enthusiasm to learn and improve the way we do things. Vanessa came to us after owning and managing a very successful café and restaurant in the Bay of Plenty.

Praneita and I staffed the ATLAS stand at the ANZIF conference in Auckland in May. It was good opportunity to catch up with some of our clients and learn about forestry in the smaller pacific nations.

Looking ahead, we will have a stand at the Forest Industries Expo in Rotorua in September and of course at ForestTech in December in both Rotorua and Aubury. We are planning another Forestry GIS conference in March 2012.

I hope you enjoy the newsletter and find some useful tips to enhance your experience of using ATLAS software.

**Bob Forgan**

**ATLAS Manager**  
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## In this issue...

.....  
GeoMaster Update

.....  
Support Processes

.....  
New Staff

.....  
YTM Update

.....  
Praneita's Postings

.....  
Forecaster Update



# Forecaster Update

Version 1.9 of FFR Forecaster has been available since early April, and many of you have already been using it. This version introduced two major features which have long been requested by users - support for modelling Douglas fir, and optimal value bucking.

While Forecaster was always designed as a species-independent framework (i.e. it could be used to simulate growth of any forestry species, provided relevant models were implemented), to date its use has been focussed almost 100% on *Pinus radiata* (the only exception being our friends at Forest Products Commission in Western Australia using it successfully to model *Pinus pinaster*).

In conjunction with FFR's Diversified Species theme, we undertook to extend Forecaster in this area of demand. As a result, the 500 Index growth model is now available (listed as "DFNat500Index"), along with the 2002 Douglas fir wood density model developed by Scion's Mark Kimberley and implemented in the Douglas fir Calculator spreadsheet.

This development provides equivalent functionality to the Douglas fir Calculator (with the added Forecaster goodies such as detailed simulation of log-making). However, users should be aware that although the same version of the 500 Index growth model is implemented in both systems, outputs will be vary slightly due to differences between the two frameworks. A detailed description of these differences, is available on

the ATLAS website (under **Support | Forecaster Support | Forecaster** White Papers and User Group Meetings).

The other major new feature extends the bucking (log-making) engine to allow optimal value bucking in addition to priority bucking. While priority bucking is perhaps closer to the reality of log-making on the skid (where crews work to a prioritised cut plan), optimal value bucking seeks to maximise the value of each individual stem, and is more aligned with standard practice relating to analysis of pre-harvest inventory. Selection between the two options can be made on the cutting strategy form.

In other Forecaster news, I travelled to Christchurch in April to run a Forecaster training course for forestry science students at the University of Canterbury's School of Forestry. The entire 3<sup>rd</sup> and 4<sup>th</sup> year classes attended this tailored course which provided a basic grounding in both the theory behind Forecaster and an extensive hands-on element. Overall the session went very well (despite the fact that nothing pushes software to its limits like 40 curious students!), and students were appreciative of learning the system. The 4<sup>th</sup> year students were particularly keen to make a move away from the ancient DOS-based StandPak, having encountered this during their 3<sup>rd</sup> year!

Those in the industry will no doubt share our enthusiasm at the prospect of graduating foresters entering the industry with previous experience of Forecaster.

Jeremy Snook

# GeoMaster Update

The GeoMaster project is ticking along well at this time. After a lull in new developments last year, while we focussed on upgrading the development environment and coming to grips with ArcGIS v10, this year has seen the new development pace pick up again.

GeoMaster v1.16 contains a number of enhancements that address features and issues discussed during user meetings (an overview of these was given in the previous newsletter). Other new features have been introduced in response to discussions with users, or potential users. For example, the ability to move harvest areas to another forest/block due to changes in land management, and better support for budgeting and operational planning. Current topics such as the ETS challenge us to

maintain GeoMaster's ability to meet the changing needs of industry, and as always we welcome suggestions as to how this can best be achieved.

After a review with key GeoMaster users, it has been decided that GeoMaster user meetings will be held on an annual basis, rather than the six-monthly cycle employed over the last eight or more years. Our aim will be to align these meetings with other industry events so that the most value can be gained from time spent travelling.

The next meeting will be held towards the end of the year - probably in conjunction with ForestTECH 2011. Along with the Rotorua meeting, we plan to host a meeting in Australia if there is sufficient interest.

Event Type	JobNumber	Planned StartDate	Start Date	Planned FinishDate	Finish Date	Crew	Event Class	Sub Class	Value	Planned Period	Planned Cost	Cost Type
Pruning	JN29376	1/3/2010	20/11/2008	20/11/2008			2nd pruning of 2 ...	To Height ...	5.6	F2009/10	475	\$/ha
Pruning	JN29339	1/10/2010		28/2/2010			2nd pruning of 2 ...	To Height ...	5.6	F2009/10	475	\$/ha
Pruning	JN63893	1/4/2010	1/2/2010	19/4/2010			2nd pruning of 2 ...	To Height ...	5.6	F2009/10	475	\$/ha
Pruning	JN74225	1/2/2010	1/2/2010				2nd pruning of 2 ...	To Height ...	5.6	F2009/10	475	\$/ha
Pruning	JN29538	1/8/2010					2nd pruning of 2 ...	To Height ...	5.6	F2010/11		\$/ha
Pruning	JN29529	1/8/2010					2nd pruning of 2 ...	To Height ...	5.6	F2010/11		\$/ha
Pruning	JN29403	1/9/2010					2nd pruning of 2 ...	To Height ...	5.6	F2010/11		\$/ha
Pruning	JN29394	1/10/2010					2nd pruning of 2 ...	To Height ...	5.6	F2010/11		\$/ha
Pruning	JN29412	1/10/2010					2nd pruning of 2 ...	To Height ...	5.6	F2010/11		\$/ha
Pruning	JN72534	1/10/2010					2nd pruning of 2 ...	To Height ...	5.6	F2010/11		\$/ha
Pruning	JN29206	1/10/2010					2nd pruning of 2 ...	To Height ...	5.6	F2010/11		\$/ha
Pruning	JN29307	1/10/2010					2nd pruning of 2 ...	To Height ...	5.6	F2010/11		\$/ha
Pruning	JN29277	1/12/2010					2nd pruning of 2 ...	To Height ...	5.6	F2010/11		\$/ha

Assigning financial year and expected costs to planned pruning operations



### Helpful tips:

#### GeoMaster:

Crops can be associated with a height/age table, allowing MTH projections from the measurement date to the current/future date. To do this, select the crop(s), **Edit | Edit selected | Crops** and select a height/age table from the picklist. The calculated MTH is displayed in several reports such as Height/Age report, Stockbook report etc, and is available for the query module as well.

#### Forecaster:

When specifying GF rating on the Crop entity, ensure that the value matches the GF rating specified on the Site entity. This is to enable the specified site and productivity indices to be used in the simulation. If the GF ratings do not match up, the indices are derived from the provided crop data.

If you've got a helpful tip that you'd like to share with the rest of the users, feel free to email them across to software.support@atlastech.co.nz. Contributors will be acknowledged, unless of course you'd prefer to remain anonymous!

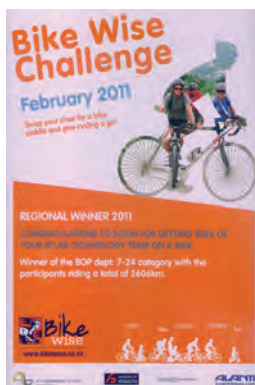
## Bikewise challenge

Wow ... another amazing February of biking. Every year in BikeWise month ATLAS puts some serious effort into banishing the post-Christmas stomach blowout.

This year we really out-did ourselves. As well as Luke's regular lunchtime rides we had Albert pushing along the kilometres and posting an impressive total of more than 400kms.

Along with the contributions from Bob and the rest of the team (including several novice cyclists - yay Praneita and Bryan!), we cycled a total of 2606 kms and became the top department within Scion on mileage and on participation.

With the team showing real teamwork this year we were rewarded by taking out the regional prize for the top Bay of Plenty department (7-24 category). Go team!!



## Praneita's Postings



GeoMaster is a complex beast that generates quite a few support issues. Often these are caused by data errors rather than application errors.

So let's talk about a few ways to keep your data/databases in top condition:

- Run the Compare Areas tool on a regular basis to verify that GIS and GeoMaster data are in sync. To run this tool from the GeoMaster toolbar in GIS, go to **Utilities | Compare Areas**. Once the comparison is complete, you have the option of updating areas in GeoMaster from GIS.
- Run the GeoMaster Diagnostics tool on a regular basis to keep data errors in check and identify potential problems. To run this tool from the GeoMaster menu, go to **Utilities | Diagnostics**. Once the check is complete, you have the option of either clearing, saving or printing the report for troubleshooting purposes.
- Compact your file or personal geodatabase on a regular basis, especially if you modify data frequently. Compacting gets rid of unused space, making data access more efficient and reducing the size of the database in the process. You can do this via ArcCatalog, right click on the database and click **Compact Database**.
- You can also occasionally run disk defragmentation after database compaction to maintain the overall performance of your machine (see your IT support or your operating system's online help for more information).
- Of course it goes without saying that regular backups of both the GIS and GeoMaster databases are essential.

Cheerio,  
Praneita

## Meet Vanessa

Vanessa Duffy is ATLAS's new office manager. Rotorua born and bred, she comes to us via the restaurant industry and offers good skills in turning up the heat to ensure great service!



# Cable harvest planning tool

In conjunction with Geographic Business Solutions (GBS) and Eagle Technology, we recently ran a workshop in Napier with industry stakeholders to understand how the forest industry plan their cable harvest operations and determine requirements for a modern harvest planning tool.

Out of the workshop we were able to understand the harvest planner's basic process in determining the best site to locate the hauler pad(s) to minimise the harvesting costs. This information gave us ideas about how to develop a solution and the likely costs involved.

We intend to develop the tool as an add-in to ESRI's ArcGIS software, which provides a modern platform capable of taking advantage of both traditional approaches and also cutting-edge technology (e.g. LiDAR-derived digital terrain models).

Our goal is to demonstrate the new tool at the ForestTech conferences in early December, subject to securing development funding. Several interested forestry management companies have already indicated that they are keen to contribute funding and be involved in the initial development of this tool.

If you are interested in finding out more then please contact Bob Forgan (bob.forgan@atlastech.co.nz).

Watch this space!



## New look website

You may have noticed some changes to our company website at [www.atlastech.co.nz](http://www.atlastech.co.nz). We have created a more visually appealing website that paves the way for new and improved content and information for you - our clients.

Over the next few months we will be updating all the information and introducing new features which will help you stay up to date with what is happening at ATLAS.

We would love to hear your feedback, so please send us your thoughts/comments to [software.support@atlastech.co.nz](mailto:software.support@atlastech.co.nz). Enjoy the new site!

## To learn more about ATLAS products visit [www.atlastech.co.nz](http://www.atlastech.co.nz)

Forestry information management and decision making support tools, to maximise the value of your business:

- 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 Harvest Scheduler/ATLAS Market Supply)
- Inventory design (ATLAS Assessment Planner)
- Map production (ATLAS GeoMapper)
- Yield Table Management and Manipulation (ATLAS Yield Table Manager)



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