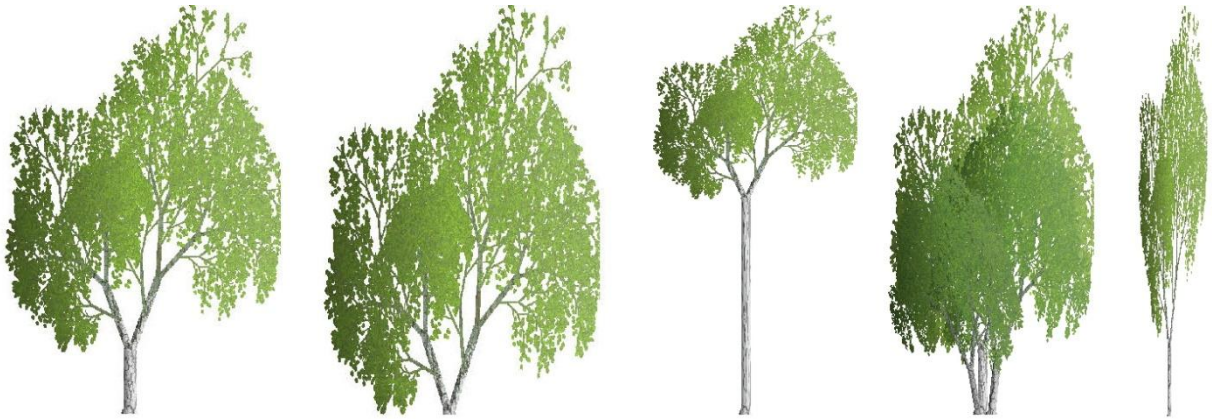
Principal new features in Prospect 3

Woodland character

The most significant new feature in version 3 is the introduction of the idea of "woodland character". Character is used both to modify the appearance of individual trees and of subcompartments. The default images used for a tree species may be modified to suit the context:



default tree *bush* *elevated canopy height* *multi-stem* *sapling*

Here the default image of a Birch tree is manipulated for different circumstances.

For each "tree character" you can define the appearance for the mature tree, the appearance of a young sapling, and the age at which the tree can be considered mature. For intervening ages the image automatically transitions between the sapling

and the mature image. In this example ten years has been defined as the age of maturity:

Within a subcompartment, each component can be assigned its own tree character. In addition, characteristics can be specified for the subcompartment as a whole. For woodland which is in the foreground (less than 1km from the observer) you can specify undergrowth with a density from 0 to 100%

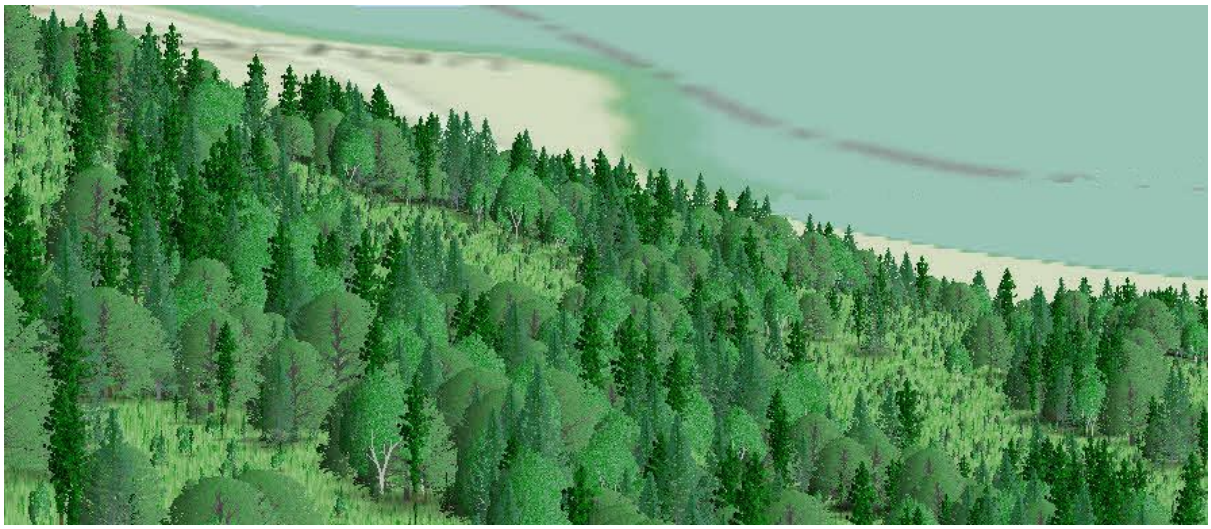
70% undergrowth

0% undergrowth

You can specify that a subcompartment has a percentage of open ground. The open ground has a "granularity" value, meaning that the open ground can be in the form of a few largish spaces, many small spaces, or something in between.

Mixed woodland with open ground

The open ground can be completely open or you can specify the height of the re-growth within the open ground. The re-growth height is supplied as a percentage of the height of the mature trees.



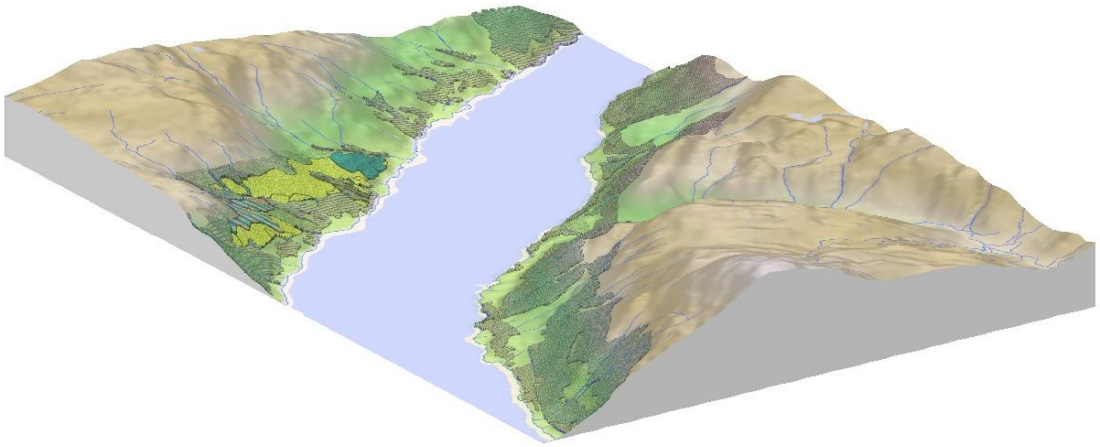
Mixed woodland with 15% re-growth in the open ground

Other new features

While there are numerous small differences the principal new features are:

Orthographic view

As well as viewing a project area on a map and as a panorama there is now the option of an orthographic view. The view can be tilted and turned simply by dragging with the mouse.



National Forest Inventory modification

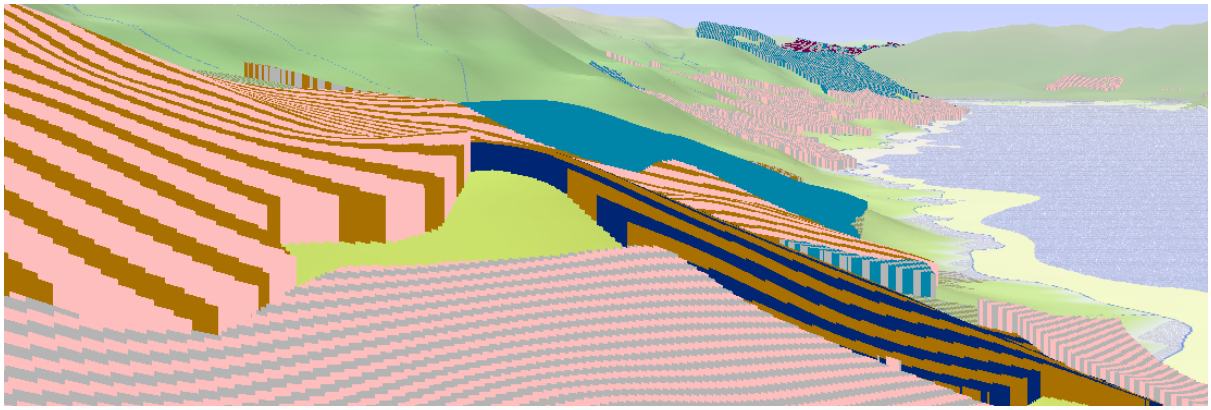
The National Forest Inventory gives useful context but sometimes it can be out of date or can obscure the desired view. With a temporal project displaying some future date the Inventory trees may be out of step with the trees in the project. For this reason Prospect 3 allows you to modify individual sub-compartments in the Inventory. You can change, the species and planting density or remove a subcompartment entirely. Any changes that you make to the Inventory only apply to the current project so as not to produce unexpected results in other projects also using the Inventory.

Open Street Map, Ordnance Survey Open Map, and WMS/WMST

The base map which can be draped over the 3D surface can now make use of web-based mapping data, such as Open Street Map and Ordnance Survey Open Map, and sites that make use of a Web Map Service (WMS) or a Web Map Tile Service (WMTS). These can include providers of Aerial photography.

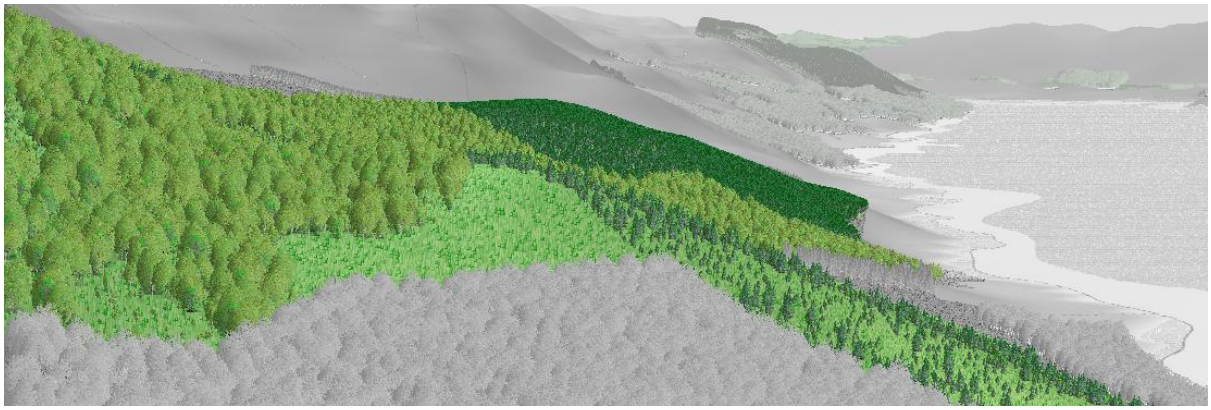
Block drapes for non-natural themes

When not creating a naturalistic image with individual trees, the subcompartments are portrayed as solid blocks draped over the surface.



Grey background

In both the panorama and orthographic views you can opt to show the background in grey. This makes it easier to distinguish the woodland which is part of the project from the context.



Technical differences

Single database projects

In Prospect 2 a project could be made up of several files, and always at least two. In Prospect 3 the project is contained in a single database file (SQLite). This makes it easier to transfer projects between computers.

Supplementary altitude data

In version 2 you can add higher resolution terrain data to a project. In version 3 the GB terrain data is stored in a database (SQLite). When higher resolution data (e.g. 5m grid) is added it is added to the database and so will automatically be available for use in any subsequent project. Prospect will automatically use the highest resolution data available in its database.

Using "program data"

Data which is shared by all users, such as terrain data and other base map data, is stored in a sub-directory of the Windows Program Data directory:

"C:\ProgramData\Map Maker\common data\"

All temporary and configuration data unique to an individual user is stored in another sub-directory of the Windows Program Data directory:

"C:\ProgramData\Map Maker\<user name>\Prospect 3\"

Works alongside version 2

Prospect 3 is completely separate from Prospect 2. This means that Prospect 2 can continue to be used alongside Prospect 3 on the same machine. This makes it easier to support older projects. The only data which the two versions share is the licence data. An existing Prospect 2 licence file will also activate the licence for Prospect 3.