The files are Trees, floor tiles, Brick patterns, a sample of hieroglyphics, and a nice image map of a two lane highway.

### INTRODUCTION TO TREE FILES

The tree files included here were created with combinations of terrains and symetrical lattices. They're all rather large files, but a user can open the Bryce file and edit them as you wish, including selecting on parts and going into the terrain editor to reduce the grid size and polygon count.

Generally, the terrains used as leaves should be positioned on an angle, so you don't see a flat bottom and the sun strikes it in a nice highlighting way. If you rotate the tree, you may need to go in and change the angles of some of the foliage terrains, or change positions to better align with the branches (since the alignment is based on a certain view, the one you get when you open the scene).

For each tree, there is an image included here showing how I used that tree in a scene. The trees are described as follows:

WHM Tree #1 - A windswept tree, for possible use in a Monteray Bay/Carmel sort of scene, or an African savannah kind of scene, or as a Bonsai in a windswept formation. 3 mb file size. It is used in the scene labeled WHM Image 1 (Bonsai 1).

WHM Tree #2 - This one is a bonsai tree shaped in a semi-cascade style, where it's apex (the top cluster of leaves) is directly below the trunk and mid-way in the height of the bowl (as I used it). 3.6 mb file size. It was created for the scene WHM Image 2 (Bonsai 2).

WHM Tree #3 - A sparce upright tree. 2.89 mb file size. It is shown, along with Tree #1, in the scene WHM Image 3 (Cliff Trees).

WHM Tree #4 - A huge, broad shade tree, the kind you'd see in a small town city park. 7.2 mb file size, 108 objects, 3.4 million polygons. This tree is illustrated in WHM Image 4 (Old Courtyard Tree).

WHM Tree #5 - A towering redwood. Great for a redwood forest scene. 5 mb file size. A group of five is shown in the scene WHM Image 5 (Redwood)

WHM Tree #6 - A trio of Birch trees. Generally for these, I use multiple groups of the three, and set large masses of leaves amid the trunks rather that assign leaves to each tree, as all the others are. 2.15 mb file size. A collection of these trees are used in WHM Image 6 (titled Emeisham 12).

# INTRODUCTION TO FLOOR TILES AND BRICK

These files are specifically set up to create architectural textures, brickwork, floor tiles, mosaics, etc. You can freely modify them with your own choices of texture for the various parts. Please note these files are specifically set up so when you render the image, that image will tile seamlessly when used as an image map on another material. If you do not understand the relationship between OBJECT SIZE, POSITION, and VIEW, it is suggested you do not alter any of these elements. If you want to take the file apart, do so as a SAVE AS and good luck!

ADDITIONAL NOTE: There is a change in the orthogonal view process in the Bryce 3.1 upgrade (as compared to the version these files were originally created in) which affects the brick and tile files here-in. It does not affect how they are set up to render, but does affect what you see in the wireframe working window. So if you are running the upgrade, please read this.

When the files were created, the orthogonal view and the render camera were pretty closely alligned, so what you saw in the wireframe was pretty close to what you got in the render. But when they are imported into newer versions of Bryce, the orthogonal view has been modified. But in doing so, the field of view allignment between the ortho view and the render is now different. Specifically, the ortho view shows more than the render view. The result of this is that when you look at these files from TOP VIEW (or Side View, as the case may be), the

wireframe ortho view will seem as if it had zoomed in closer, and you won't see everything that will be in the render view. DO NOT ZOOM OUT IN THE ORTHO VIEW. It will probably ruin the allignment of the objects to the render camera.

To have a good working view of the objects, in case you want to change textures or whatever, go to CAMERA view and swing the camera up or around so it looks down from the same view as the ortho view being used to render. For example, if the TOP VIEW is being used to render, swing the camera up to look straight down on the objects. Then you can select on objects to make any material assignments in the camera view, and go to TOP VIEW to render.

You should only need to do this if you want to adjust the color of specific tiles, for a mosaic look. If you want all the tiles or brick to have one material assignment, you probably don't need to set up the camera view. Just be aware that the wireframe working window may seem zoomed in relative to the render you get in that view.

End of Note on Adjustments for Version 3.1.

### **FLOOR TILES**

WHM Tile 1 and 1A are identical in structure and different in material. In these files, the tiles are terrains and the tile grout is a cube. These objects do not need to be grouped to render. To change the grout texture, select CUBES. To change tile textures, select TERRAINS. You may select on individual terrain squares to edit any one of them in the terrain editor if you like. You may also assign them various materials (like mosaic tiling) instead of all the same material. You may raise or lower the grout line relative to the tiles by selecting CUBE and using the Vertical (Y Axis) reposition tool.

WHM Tile 1 and WHM Tile 1A are the actual construction files.

WHM Tile 1-1A Sample shows the rendered images mapped onto flat primitives as a texture.

WHM Floor Tile 2 is a Mosaic set-up. It contains about 144 cubes which can be assigned various colors in any pattern you like. A sample pattern is included and you can see it used in a scene (WHM Image 7 -LH 4-12). Do Not Change object size, object position, or view (zoom in or out). Changing any of these may mis-allign the view and the tile pattern will not tile seamlessly if rendered and used. To change colors, just Shift Click on as many small cubes as you want, but be certain to finally switch off the big grout cube which fills in the spaces between all the other ones. It's now colored black, but it's color can be changed as you like.

If you want to change specific selected tiles to a new pattern, see the note above about alligning the camera view to be the same as the ortho view, and do your individual cube selections in the camera view.

# THE BRICK FILES

WHM Brick 1 - This is a basic brick file created by a cube for all the bricks, and a series of cylinders (assigned negative) that create the grout lines. To change the material settings, first ungroup the objects. Select CUBE to change the Bricks. Select CYLINDERS (all of them) to change the grout.

Re-group cylinders and cube to render.

WHM Brick 1A - This is structurally the same as #1, but with a different material assignment to the cube (the bricks).

WHM Brick 1B - This is another variation with different materials applied to the bricks.

WHM Brick 1C - Another variation of material assignments.

WHM Brick 1D - This one is structurally different! The cylinders creating the grout lines are fatter here than in the other brick files. So if you like a fatter grout line, use this file. Material changes are same as described above.

WHM Brick Samples - This file shows Three variations of brick, all rendered as image maps on cylinders. They are Brick 1 (Left), Brick 1A (middle) and Brick 1b (Right).

WHM Brick 1C & D Samples - This file shows brick patterns 1C and 1D mapped onto a cube flat surface. Note 1D (at left) has the fatter grout line.

WHM Brick 2 - This is an irregular stone pattern. The grout lines are cylinders, and the brick is one cube. The file showing it's use is labeled WHM Tile 2 Sample - What is unusual about this image is that it shows how, by simply reversing a texture with the scaling tool, you can make a grout line look indented or raised. The top image shows the "raised" appearance, as if excess grout was squeezed out and left protruding. The lower image shows the more conventional style of scraping the grout away to leave an indented grout line. They are both the same image map. The grout being raised or indented is an optical illusion caused by the location of highlights and shadows on the grout line. By reversing the image, and thus reversing the highlights and shadows on the grout, you effectively create the illusion that the grout has been reversed from "out" to "in".

WHM HIEROGLYPHICS - This file was a sign for a larger scene of the LIGHTHOUSE OF ALEXANDRIA. It is included to show you how signs and other artwork can be created in Bryce and applied as image maps to objects in a larger scene. In these hieroglyphics, each character is a terrain element. You can go into the scene and click on any character, then go to the terrain editor to see it better. The scene this sign was used for is labeled WHM IMAGE 8 (LH 4-30)

#### THE HIGHWAY FILES

"WHM highway image" is an image map of a two lane highway, complete with yellow broken line, and a sandy shoulder. It was created to map onto a primitive surface to create an endless highway. You can map it on a stretched cube for a regular road. If you want the classic highway image that vanishes to a point in a vast landscape, map the image on a stretched pyramid laid flat on it's side, point away from camera (and use Parametric mapping). This creates a false perspective, allowing you to more easily create the vastness of the scene with smaller and closer terrains. As luck would have it, by mapping the image Parametrically onto the triangular face of the pyramid, the image tapers very nicely with the triangle. But you will have to go into the scaling tool and increase the scaling value on the Y axis (when the pyramid is originally created and it's point is still vertical). By increasing the "Y" scaling value, the image maps once across the pyramid side-to-side but many times from base to point.

To see exactly how it's done, look at the Bryce file for "WHM Desert Highway", which is the scene file that the image map was created for. In it, you can see the shape and position of the pyramid, and you can go into it's material editor to see the scaling values for the image map. Studying this file will help you understand false-perspective, a nice trick to more easily manage the illusion of a very small foreground and an enormously grand background. The finished image is in WHM Image 9 (Desert Highway). We did not enclose the Bryce file because it's over 30 megabytes, with most of the data caused by the 23 odd tumbleweeds (each of which is actually three Bryce bare trees from the library. Three trees clustered together, with varying sizes and rotations, creates the more dense plant).