# **ULTIMATE Grass & Meadows Worldbuilder**



### **USER GUIDE**

Welcome! First, I want to say, this product is simpler than it may initially seem. Everything should make sense to you fairly readily if you use the "Content Library" pane, as I use the folders to help organize everything neatly.

### 1. LOCATION OF PRODUCT

#### YOUR LIBRARY > Environment > Landscapes > ULTIMATE Grass and Meadow

Again, I recommend using the "Content Library" tab instead of the "Smart Content" tab, since I organize everything by folder.

#### **CONTENT LIBRARY FOLDERS:**

>AniBlocks: \*\*sold separately\*\* This folder simply contains a pointer to the aniBlocks folder (YOUR LIBRARY > AniBlocks). Since the aniBlocks are sold separately, it will be empty with this product.

#### >Individual Parts:

**Grass Patches:** Subsets. Scatter the individual grass object using any scatter plugin.

**<u>Lights</u>**: (Subsets) Since these are subsets, you'll need to delete the current light set after loading a new one.

<u>Populated Terrains</u>: (Subsets) Same as above. Delete the current terrain (and scatter objects) when you load a new one. Populated terrains are like VUE terrains. They are fully populated with all grass objects. Simply hide the objects you do not wish to see.

**Skydomes**: (Render Settings) 16K HDRI skydomes, non-geometrical, uses only the environmental settings built in to Iray.

### >Materials:

>Pre-Built Scenes: These are full scenes, complete with skydome (Render Settings), Outer and Inner Terrains, and light set. I recommend starting with this, as it is the easiest way to get going. Then you can make changes to the scene as you see fit, i.e., changing the lighting, changing terrain, etc.

### 2. USING THE PRE-BUILT SCENES

As I mentioned above, I recommend starting with the pre-built scenes and tweaking from there as you go. Since the materials and lighting are appropriately matched, it will just be easier to get up and going with them.

#### **CAMERA GUIDES**

Each pre-built scene comes with sample cameras and a "camera guide," which helps show you the optimal camera angles for the current scene and lighting. Outside of this range, some tweaking may be required in order to achieve best results.



## 3. BUILDING YOUR OWN SCENE FROM PARTS

Alternatively, you can build your own scene from the "Individual Parts" folder. Each scene contains an inner terrain, outer terrain, skydome, and light set. The inner terrain is fully populated with all of the grass objects. The outer terrain contains 2D grass alpha card objects (also scattered). By default the "cut grass" is hidden, but the other objects are visible. Simply hide/unhide objects as you desire.

## 4. RE-SCATTERING THE GRASS ON THE TERRAINS

The plugin I used to scatter the grass patches on the terrains is Ultrascatter. If you have Ultrascatter, you can simply load it and re-scatter all the grass objects as you please (do this by twirling down the outer terrain object and highlight the Ultrascatter group you would like to rescatter. Then double-click the ultrascatter plugin to load its settings). All the settings I used to scatter the objects will be retained and displayed to you when you load Ultrascatter on one of my scattered objects.

I also include all the distribution and rotation maps I used, in the Runtime folder, here;

...\Runtime\Textures\The Philosopher\ULTIMATE Grass and Meadow

Rotation Map (outer terrain, grass cards)



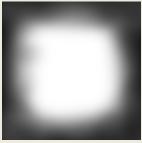
Distribution Map (outer terrain, grass cards)



Distribution Map (inner terrain, orchard plant)



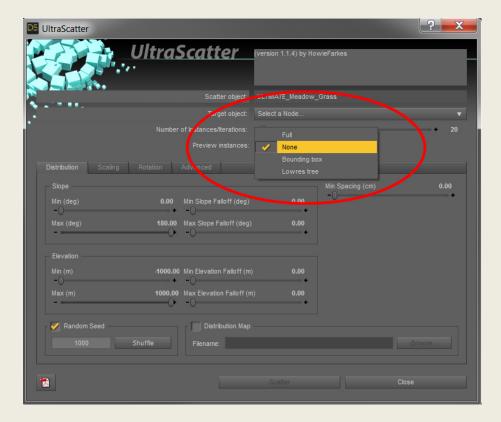
Distribution Map (inner terrain, cut grass)



These should help give you a sense of what you can do with Ultrascatter. Feel free to experiment on your own and come up with new and unique distribution maps!

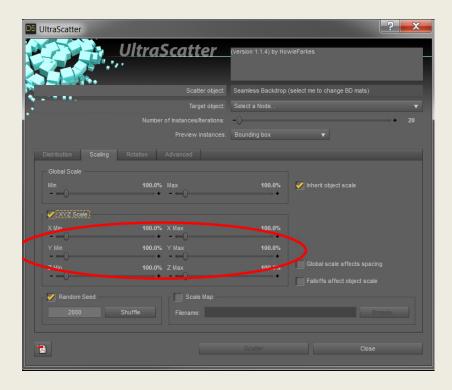
## 5. THE "SECRET" TO MAINTAINING VIEWPORT PERFORMANCE

(Note, I put "secret" in quotations because it's not really a secret. It's just not many know how to do it yet). As I noted above, Ultrascatter is the plugin I recommend to scatter objects. The reason for this is because it is able to hide the instanced objects in the viewport. This is the key to preventing your viewport from slowing down with so many millions of polygons in your scene. Some instancing plugins are not able to hide the instances in the viewport, some can show a bounding box. This will not work well with a large scene, since even the bounding boxes will slow down the viewport if enough instances are present (which in this case there are---hundreds of thousands of instances and over 500 million polygons). Thus, the most important setting in Ultrascatter is under the "Preview Instances" menu. You must be sure to choose the "None" option. Do not choose the "Bounding Box" option, since this will cause a slow-down in your viewport (and definitely do not choose the "Full" or "Low Res Tree" option). Only the None option will provide the best performance even on slower computers. I recommend a 980 or above but older GPUs may work fine as well.



## 6. ADJUSTING THE HEIGHT OF THE GRASS

In addition to changing the distribution of the grass on your terrains, you can also use Ultrascatter to randomly adjust the X,Y,Z scale of the grass (Y scale in this case). Thus you can make a terrain with scattered patches of differing heights/lengths. Note, however, you will have to re-scatter the grass in order to do this.



The terrains come with multiple morphs that can be adjusted individually, thus allowing you to mix and match morphs to create unique terrains to re-scatter the grass onto (note, you will have to re-scatter the grass objects onto your new custom terrain).



### CHANGING TERRAINS

Delete current terrain and scatter objects. Load new terrain from terrains folder in Content Library.

### SCATTERING PATCHES ON YOUR OWN TERRAIN USING ULTRASCATTER

You can use my settings as a guide to scatter the patches on your own unique/custom terrain. But as I noted above, just be sure to select the "None" option in the Preview Instances drop-down menu.

### **CHANGING LIGHTS**

Delete current lights from scene. Load new lights from lights folder in Content Library.

## **ANIMATING THE GRASS**

As I noted above, the aniBlocks to animate the grass are sold separately. If you purchased them, you will be able to animate the grass objects by simply dragging the aniBlocks onto the grass object (in the Animate 2 timeline). Note, Animate Lite does not work with objects. You must have Animate 2 in order to animate objects. The aniBlocks are located in;

#### YOUR LIBRARY > aniBlocks > ULTIMATE Grass and Meadow

Be sure to add the objects to the Animtate2 timeline first! Then you can drag the aniBlocks onto the object.

Well, that's it! Hope you enjoyed this quick little guide!

If you have any questions about this product, feel free to contact me personally at ThePhilosopher.PA@gmail.com



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