# <u>Vibrant Grass Shader Setup</u> + <u>Main Tips</u>

# -Setup:

- -For the Built-In pipeline, the Shader Graph package must be installed.
- -There is a tutorial video that follows the setup on the <u>Asset Store Page</u>.
- 1/ Drag and Drop the "VibrantGrassShader" prefab (found in "\_1Main") into your scene
- **2**/ Follow the instructions that appear in the Scene View
- **3**/ Click the arrows to add Grass Fields (To delete one and its corresponding assets, click DeleteThisGrassField on its GrassFieldMaster script)
  - --> Change the value of "Grass Fields Per click" to create more than one field per click.
- --> You can click "Wrapping Automatically" to disable it and wrap manually. You'll be able to position the grass fields first, then wrap them when ready.
- **4**/ Save your project (ctrl+s)
- -If this is your first time, it is recommended to start with only a few grass fields to get familiar with the properties (especially what's in MainControls-Visuals), and then cover a wider area.
- -You can delete the whole hierarchy and its created assets by clicking MainControls-Other-Delete All.

#### -UI:

- -Click on a VibrantGrassShader to show its corresponding UI Buttons. You can only select one at a time.
- -The blue arrow is the direction of the wind, you can rotate its Y axis.

### -To Add Dynamic Lights and Interactions:

-Add the "DynamicLightAndInteract" script (found in the "\_1Main" Folder) to a gameobject. It works only in play-mode. More infos in the "Dynamic Lights and Interactions" category of the documentation.

### -BugFixes:

- -Please check the Documentation if there is a bug.
- -If you don't see any UI buttons in the Scene View, that's a bug, check the documentation.

If you like the asset, please **Write a Review** on the page, it helps a lot ♥!

# -Other Important Tips:

#### -Large Areas - Recommendation :

- -Keep each VibrantGrassShader instance under 400 grass fields (300x300meters), but you can stack them next to each other. This is better for performance and painting precision.
- -Enable MainControls-Secondary-DestroyInstMatsOnFieldDisable for areas over 300x300meters to reduce memory usage. This may cause stuttering in editor which won't happen in build.

#### -Memory Usage:

- -When completely done with a VibrantGrassShader at runtime, you should use the event
- "MainControls.DestroyInstancedMaterial\_Event" before disabling/deleting the VibrantGrassShader. You can always use "MainControls.InstanceMaterials Event" reset.

## -MainControls-Visuals-RootsHeightsPrecision:

- -You can overwrite this value on each GrassField.
- <u>-Low Value</u>: Recommended for tall grass. Takes less disk space and less RAM but the roots won't precisely fit the ground, which is noticeable only when the grass is very short.
- <u>-High Value</u>: Recommended for short grass, especially if the camera will come close to it to see the details.

#### -Edges:

-When possible, avoid wrapping the grass on edges (partially out of ground). A cut mesh will then be created to fit the ground, which is necessary to hide the excess grass. If the out of ground part is hidden by a mesh, then you should wrap the grass onto an added collider (a simple cube will do), then remove the collider when done.

#### -To make a Prefab of a VibrantGrassShader:

- -Go to Maincontrols-Prefab and click "CreatePrefabFromThisGameObject".
- -This is made to spawn the grass at runtime for performance reasons, but not to make prefab variants of an original prefab.
- -To delete an instantiated prefab in Edit Mode, make sure to keep the created assets (click "Delete GameObject Only"), unless you want to destroy the assets which will change the prefab permanently.
- -Please do not attempt to update the Prefab, instead create a new prefab using the button mentioned above.
- -The prefab will automatically unpack itself if used in Edit Mode.
- -Please do not attempt to make a prefab manually.

#### -Other Notes:

- -Do not try to enable or disable any scripts other than DynamicLightAndInteract.
- -Do not attempt duplicating the VibrantGrassShader gameobject or the grass fields.
- -Please modify a VibrantGrassShader only when it is enabled.
- -Do not modify the Surface Options of the Material.
- -Do not modify any variable or property that says in its name that it should not be changed (like "Data, Don't Touch")
- -Make sure to save your project (ctrl+s) after making modifications.
- -You can change the VibrantGrassShader's position and rotation anytime you want, use the
- "WrapMeshes" button under "Secondary" to re-wrap the meshes.
- -GrassFields may disappear in scene view when near the sides of the camera, it won't happen in play-mode.

#### **Values Notes:**

- <u>-Ground Layers</u>: They will be used to wrap the grass and to detect the height of the dynamic lights and interactions.
- -You can modify the Setup values later (for CreatedPathFiles, a UI in the scene view will ask to confirm or cancel).

More information here: https://assetstore.unity.com/packages/slug/239134