

# Wind Creator

by marchb152

Thanks for downloading this asset, it will allow you to bake wind to any mesh you want, and that mesh will react to Unity's Windzone. This documentation is a step-by-step tutorial, which covers all the basics you need to start adding wind to your beloved trees.



# I – Requirements

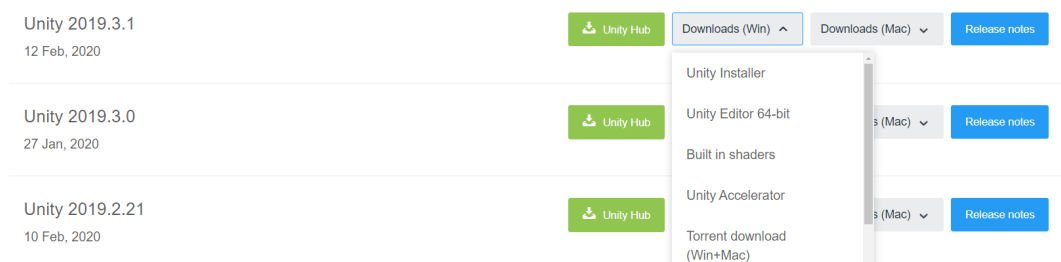
- Unity 2019.3 or newer is required, otherwise you'll get warnings and your meshes won't be fully baked
- The built-in render pipeline is the only one supported for free
  - For URP/HDRP, you'll need this paid asset: [“Lux URP Essentials” by forst](#)
- Your mesh **must** have the following:
  - The pivot point set to the middle bottom of the mesh (or the gradients won't be applied correctly and the wind may look weird)
  - Its scale needs to be set as one (1, 1, 1)
  - Its rotation needs to be set as zero (0, 0, 0) → If you experience problems with exporting from Blender, make sure to *“apply all the transforms”*, you can check out this free add-on too: [“Blender to Unity Exporter”, by EdyJ](#)
  - It should have one or two materials, with the Tree Creator shaders applied to them(or any compatible shader)

## II – How to download the Tree Creator shaders

The Tree Creator shaders are Hidden shaders, which means that you can't access them within the editor. However, Unity provides them freely for you to download and import into your projects, either for editing or for use.

Go to: <https://unity3d.com/get-unity/download/archive>

Find your Unity version and download the “Built in shaders” accordingly (for me, Unity 2019.3.1):



Inside the downloaded folder, navigate to “*\DefaultResourcesExtra\Nature\TreeCreator*”, I recommend using these shaders (but you're always free to import the whole folder into your project to try each of them).

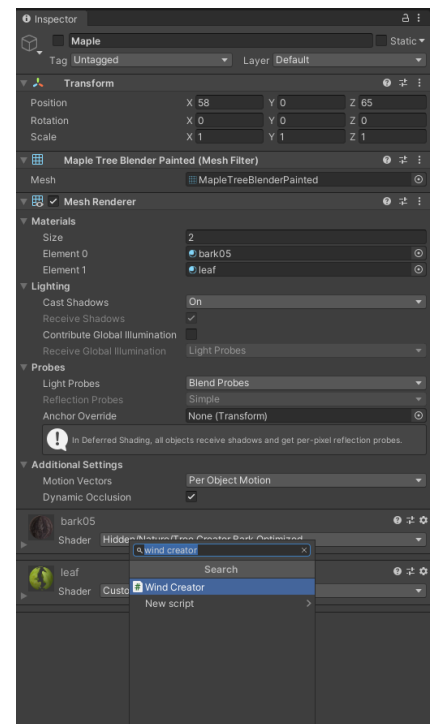
	TreeCreatorAlbedoRenderTex.shader	29/08/2021 14:06	Fichier SHADER	2 Ko
<input checked="" type="checkbox"/>	TreeCreatorBark.shader	29/08/2021 14:06	Fichier SHADER	2 Ko
<input checked="" type="checkbox"/>	TreeCreatorBarkOptimized.shader	29/08/2021 14:06	Fichier SHADER	2 Ko
	TreeCreatorBarkRenderTex.shader	29/08/2021 14:06	Fichier SHADER	4 Ko
<input checked="" type="checkbox"/>	TreeCreatorLeaves.shader	29/08/2021 14:06	Fichier SHADER	2 Ko
	TreeCreatorLeavesFast.shader	29/08/2021 14:06	Fichier SHADER	4 Ko
	TreeCreatorLeavesFastOptimized.shader	29/08/2021 14:06	Fichier SHADER	5 Ko
<input checked="" type="checkbox"/>	TreeCreatorLeavesOptimized.shader	29/08/2021 14:06	Fichier SHADER	4 Ko
	TreeCreatorLeavesRenderTex.shader	29/08/2021 14:06	Fichier SHADER	4 Ko
	TreeCreatorNormalRenderTex.shader	29/08/2021 14:06	Fichier SHADER	2 Ko

I always use the “Optimized” shaders because I don't have all the required textures, you can use the non-optimized ones if you want higher quality by adding all the textures.

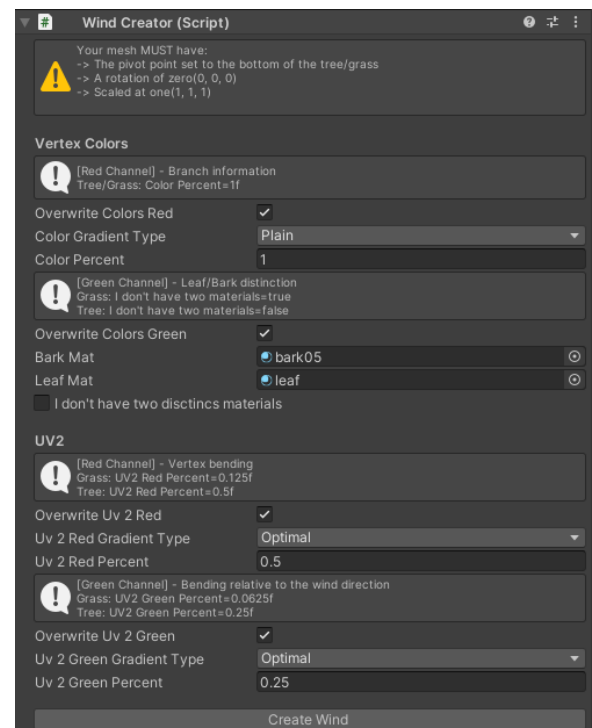
Import these shaders in your project, drag and drop them onto your material to use them, since they're still Hidden, you won't be able to find them in the list until you edit them.

### III – How to bake wind for a tree

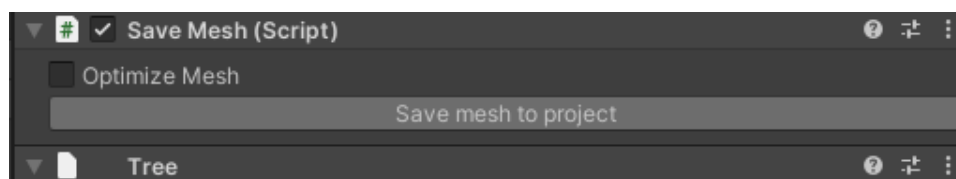
Firstly, you need to add the script component to your tree's GameObject:



Then, select these default values:



Click on “Create Wind”, you’ll have to wait 1 to 2 minutes depending on your computer power. Hit Play to see how the wind looks like, if you are satisfied, click on the created mesh and select “Save Mesh”:



Now you can create a prefab, with your newly baked mesh, and you’ll have wind in your game!

## IV – How to bake wind for grass

Do the same as for the tree! Here's the best default variables for the grass:

I'm using the Tree Creator Leaves shader on the grass here.



## V – Final thoughts & acknowledgments

It has been now 2 years since I started experimenting with wind in Unity, what a long time! I learned a lot along the way, I hope you did too. I've done my best to share my knowledge with others, and statistics shows that I'm not the only guy on earth trying to add wind in this engine! [This thread](#) has, at the time of writing, over 3 600 views! That means a lot to me guys, thanks for taking interest in stuff I wrote.

English isn't even my mother tongue, and this whole writing/checking process has made me progress a bunch in this language. Thanks also to [@catopia](#), who joined [my Discord server](#) to share what he/she learned to help me progress in this complex task.

You are all awesome people and you can accomplish wonderful things, keep up the good work.

Learn, progress, share.

- Marc // πNutStudio // marchb152