Documentation & Quick Start

Thank you!

Thank you for choosing this pack! We hope you create something really special with it.

Please consider rating the package through your download list or leave a review at the store page once you're familiar with it.
Feel free to give us feedback via E-Mail info@tidalflask.com or our social media!
Your feedback helps us focus on the right updates for the future which will be free for existing users!

*Enjoy, your **Tidal Flask** team!*

Content

Quick Start

Importing to Built-in RP project

After importing the Standard version into your project 2021.3.20 & above, which doesn't use any of the Scriptable render pipeline packages (URP/HDRP), it should just work[tm.]
If you see any warnings in the Console window, try the Clear button and/or relaunch Unity. If the warnings don't disappear consult the FAQ or drop us an e-mail.
If you see any pink assets inside the Project window or in the scenes, simply select said asset -> right click -> Reimport and it should fix it. If you still encounter pink shaders, please make sure you have the correct pack version installed and that you are using a Unity version that is compatible with the pack.

Make sure you have Post Processing installed from Unity's Package Manager. If you install it after you imported the pack, reload the demoscene to get rid of possible errors.

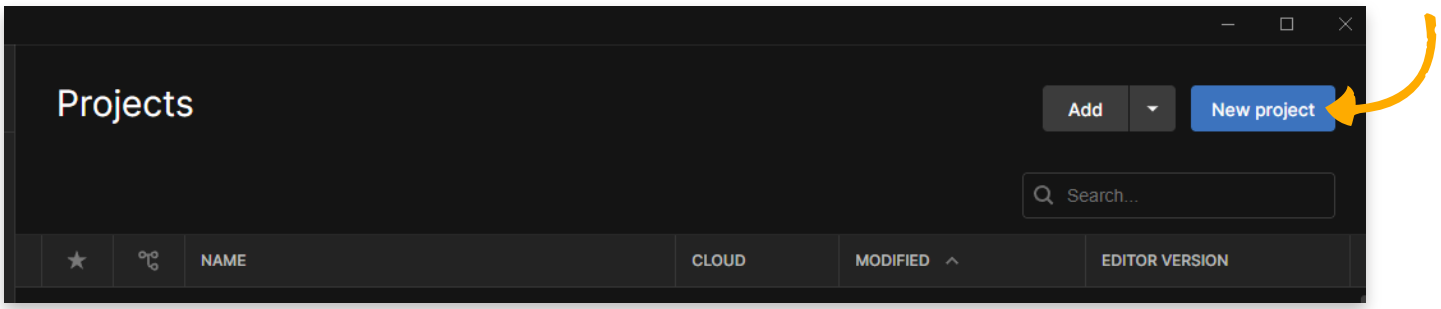
Importing to URP project

Here you will find detailed steps on how to import the package. Please note that this package only works out of the box with Unity 2021.3.20 and above.

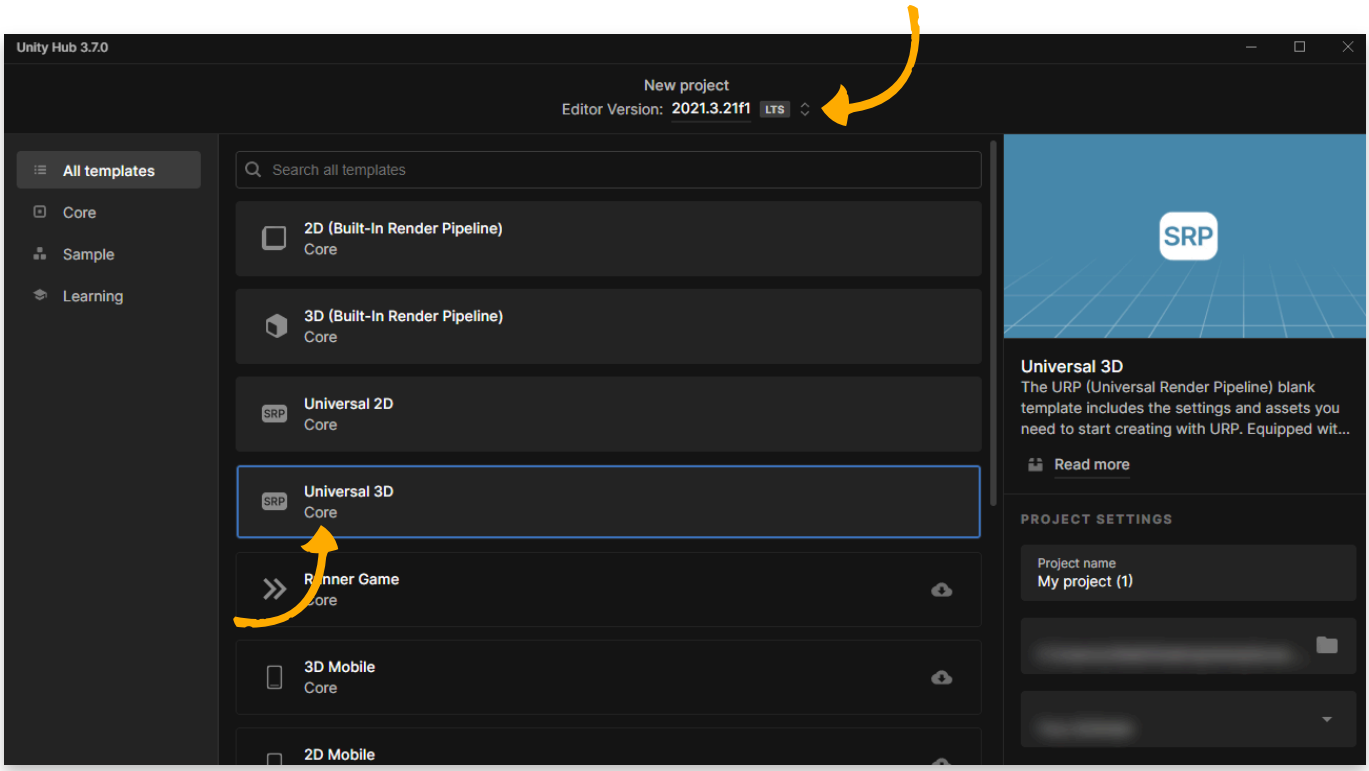
IMPORTANT: In case you are using the new URP shaders with a Unity version older than 2021.3.20 please be aware that this might result in shadow cascade errors in the scene. To solve the problem you should set the Cascades option in your render pipeline asset to "No Cascades".

How to set up your project for URP (option 1)

We recommend to create a clean project and install the URP via the Package Manager or via Templates and import our package to this project.
To do so follow the steps below:



Step 1: Click “NEW” to create a new project (for URP pick Unity 2021.3.20 or above).



Step 2: In the “Templates” select “Universal 3D”, this way everything you need for this package will be preinstalled.

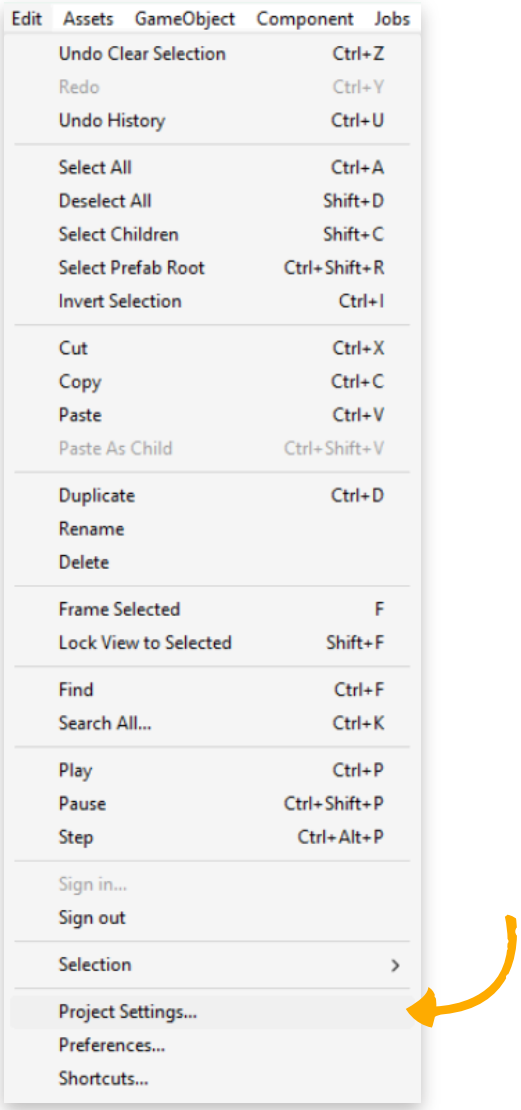
Step 3: Download the pack from the Asset Store and install the URP version.
At this point you already can go to the scenes folder and select any of the scenes.

If you see any errors in the “Console”, try the “Clear” button. If the errors don’t disappear consult the FAQ or drop us an e-mail.

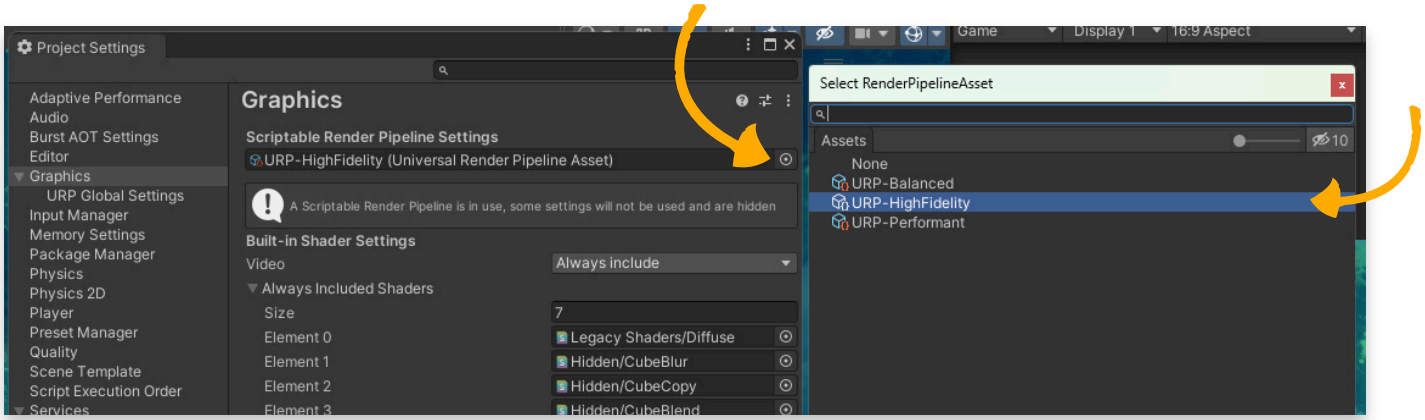
Note: If the error message *“a tree couldn’t be loaded because a prefab is missing”* pops up in the console tab, simply press “Clear” in the “Console” tab and it won’t appear again. This is a known Unity bug (importing a package that has terrain and trees in it) and has nothing to do with the package.

If you see any pink assets inside the Project window or inside the “Terrain”-object in any of the scenes, simply select the said Prefabs (inside the prefabs folder) or the Meshes (inside the 3d folder) > right click > Reimport and it should fix it.

If you still encounter pink shaders, please make sure you have the correct pack version installed, depending on the render pipeline you are using.



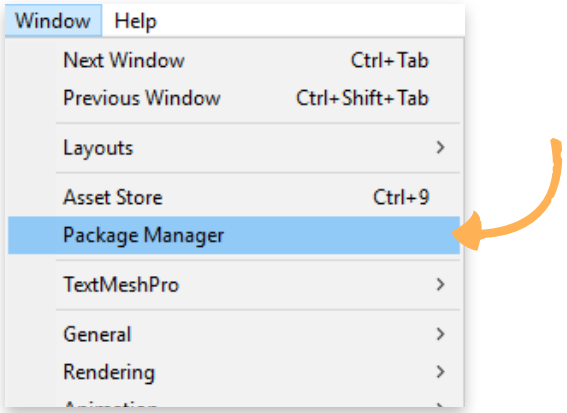
Step 4: After the project is loaded, go to Edit > Project Settings...



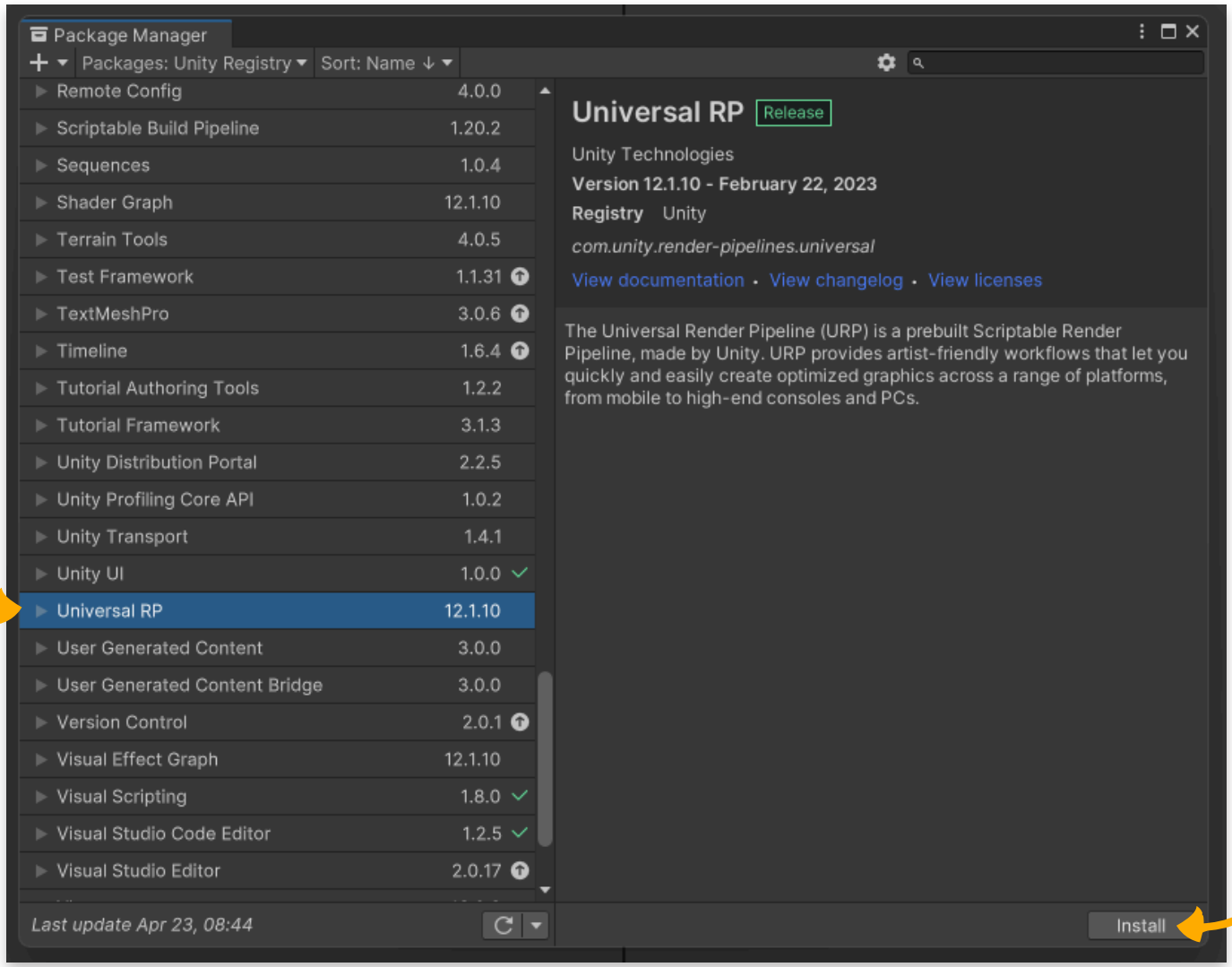
Step 5: For the Scriptable Render Pipeline Settings select “URP-HighFidelity”. These are the presets Unity preinstalled with the Template.

How to set up your project for URP (option 2)

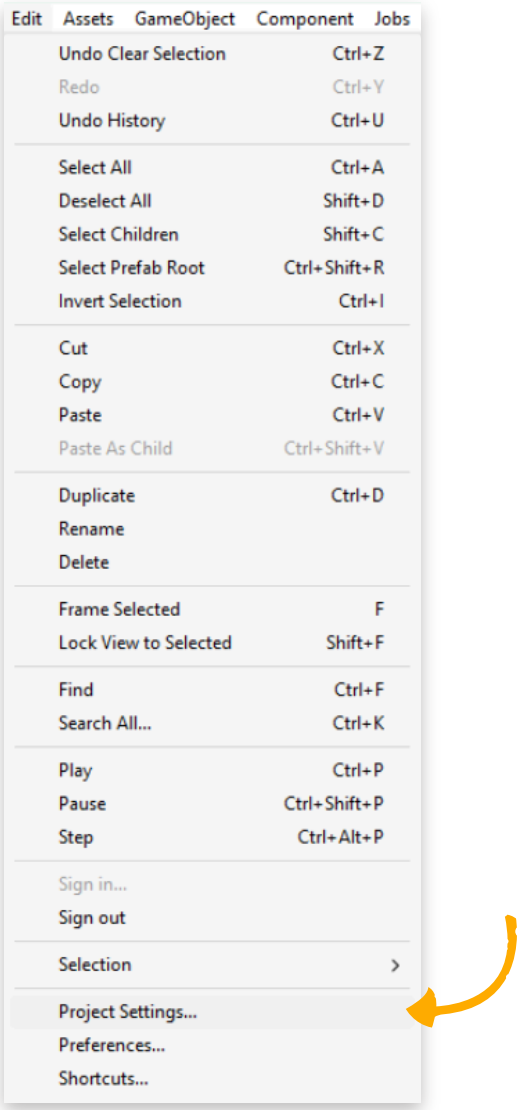
If you imported the the pack before you installed the URP please follow the steps below:



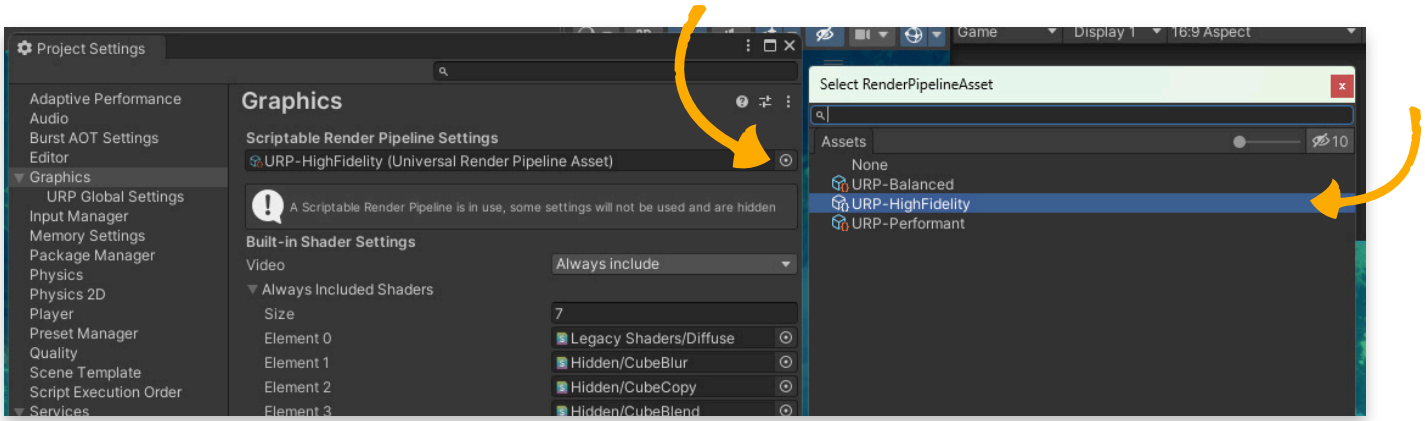
Step 1: go the Window > Package Manager.



Step 2: Select “Universal RP” asset and click “Install”.



Step 4: After the project is loaded, go to Edit > Project Settings...



Step 5: For the Scriptable Render Pipeline Settings select “URP-HighFidelity”. These are the presets Unity preinstalled with the Template.

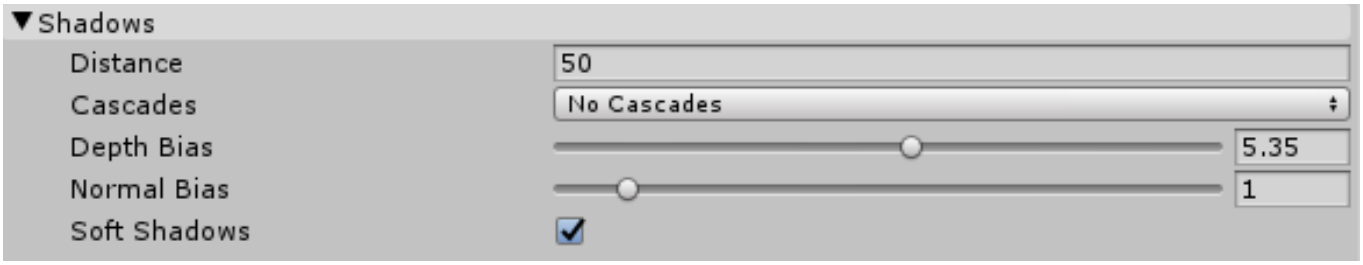
Demo scenes

demoscene_ancient_forest_level: scene with different sceneries
demoscene_ancient_forest_assets: in this scene you will find all the assets within the package

All the sceneries you see in the trailer were recorded directly out of the demo scene.

Quality settings for URP

To quickly adjust any quality settings for URP please find the UniversalRP-HighQuality asset inside the \Assets\Settings folder.



Example settings for shadows

Post Processing

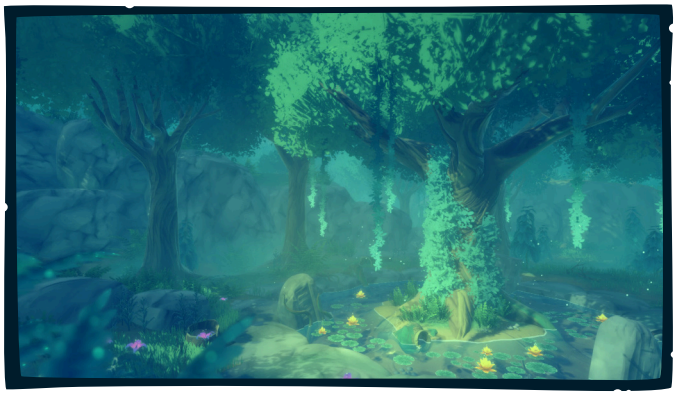
Inside the \Fantastic Ancient Forest\Settings folder you will find a post processing file for the demo scene (Global Volume Profile). There you can adjust the postprocessing to your liking.

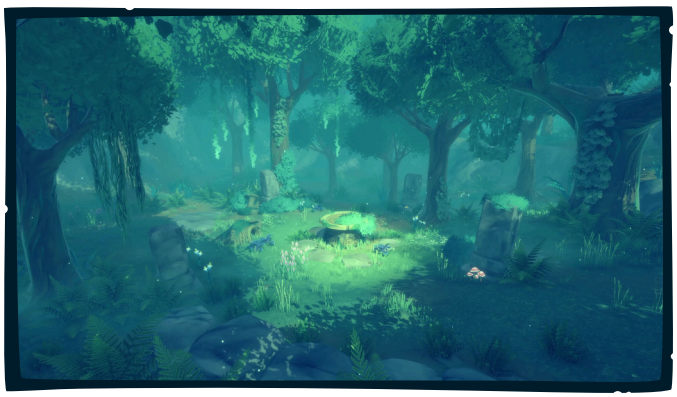
The Global Volume Profile is linked in the demo scene's Global Volume asset.

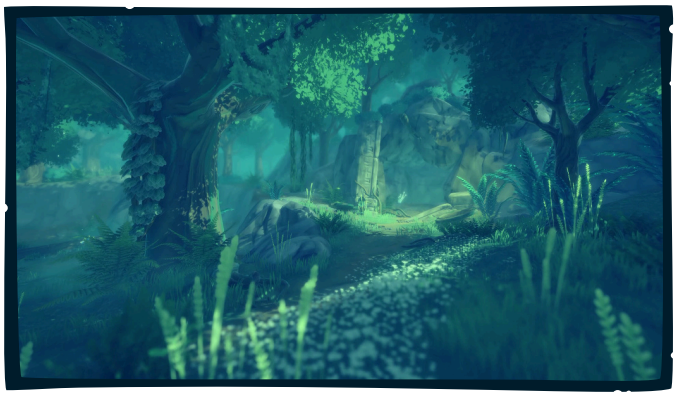
The post processing settings.

- Important note: the pack was created in unity 2021.3.20, some postprocessing effects and lights may appear differently in newer versions of Unity. Adjust postprocessing (especially bloom and exposure) and the light intesity of your lights in the scene.

Demoscene

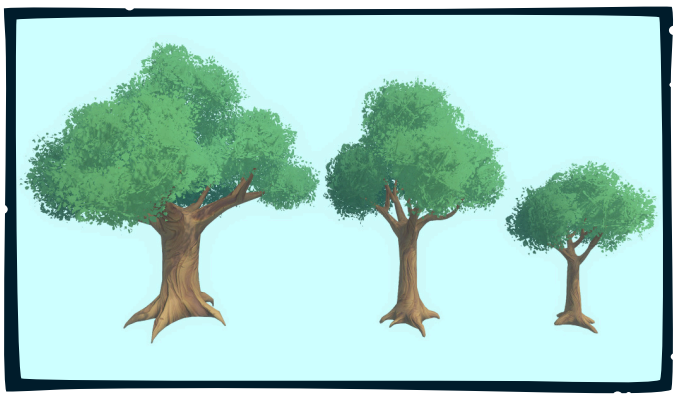






Demoscene assets

In this scene you will find all the assets within this package.



Assets

Meshes

Vertex maps

All foliage assets have custom vertex maps for wind movement.
Additionally the trunks of the tree assets have vertex maps to mask out the seams with a color (see more under Shaders).

LODs

All assets have 3 LODs levels. The exception is the Head asset, which has 4 LOD levels. These are already set up for you inside the corresponding prefabs. You will find all the prefabs in \prefabs folder.

Collision

The trees have a custom collision mesh called **treename*_COLLISION*.
The stones have their _LOD1 or _LOD2 set as their collision.
Since trunks, stumps and roots are rather low poly, they have a mesh collider referencing themselves.

Lightmaps

All assets have a custom lightmap UV in the second channel.

Textures & Materials

You can find all the textures in the \2d\textures folder. The materials are in the \materials folder.

Materials with tileable textures

To adjust the look of the terrain materials, please adjust the terrain layers directly in this folder:
\2d\textures\terrain_layers

There are different classes of materials and textures in this pack depending on its use:

- Tileable materials (wood)
- Tileable terrain textures (grass, ground, stone)
- Atlases (props, foliage)
- FX (fire, steam, water)

Shaders

The shaders were created using Amplify and hence can **not** be opened or adjusted using Unity's Shader Graph. Of course if you have Amplify installed, you can adjust the shader there.
They are URP or Built-in, depending on which render pipeline you are using.

Water shader

The water material is defined by four main parts:

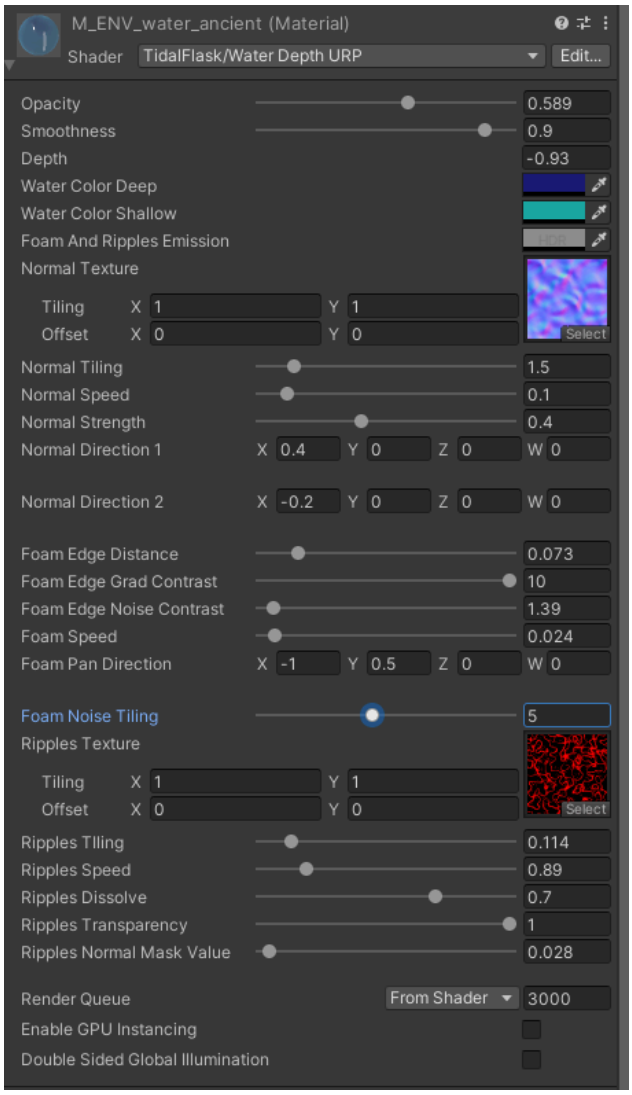
- **General Surface:** Defines colors, opacity and depth
- **Normal:** Defines the Normal of the water surface
- **Foam:** Creates a foam effect where meshes intersect with the water
- **Ripples:** Defines the ripple like highlights on the water surface

- Important note: the ripples texture was set to 128x128 px size to give a more graphical feel.
- Original texture size is 2048x2048 (T_FX_water_mask_ancient)

- Important note: If the water isn't displayed correctly, make sure you have enable "Depth Texture" in your Render Pipeline Asset and play around with the shadow cascades in case you are experiencing shadow issues with the water.
- If you are applying the water material to a new plane, make sure to turn off "Cast Shadows" in the inspector window of the plane.

To customize the water shader you have the following options:

- Opacity: Water opacity (affects ripples and foam as well)
- Smoothness: Smoothness of the water
- Depth: Depth of the water (affects Water Color Deep and Shallow)
- Water Color Deep: Deep color
- Water Color Shallow: Shallow color
- Foam And Ripples Emission: emission color, you can also tone down emission strength by bringing the color down towards darker values
- Normal Texture: normal texture
- Normal Tiling: normal texture tiling
- Normal Speed: normal offset speed
- Normal Strength: normal strength
- Normal Direction 1-2: direction for offset
- Foam Edge Distance: distance of the foam from shore to end of foam (visually dependant on Foam Edge Grad Constrast)
- Foam Edge Grad Contrast: contrast for foam edge
- Foam Edge Noise Contrast: contrast for noise overlay ontop of foam edge gradient
- Foam Speed: speed of Foam Edge Noise
- Foam Pan Direction: Foam Edge Noise offset direction
- Foam Noise Tiling: tiling of Foam Noise
- Ripples Texture: R channel of the ripples texture
- Ripples Tiling: Tiling of the ripples texture
- Ripples Speed: offset speed of the ripples texture
- Ripples Dissolve: “contrast” of the ripples texture (dependant on the resolution/contrast of the input texture)
- Ripples Transparency: ripples transparency (affects emission)
- Ripples Noise Mask Value: value how much of the Normal texture masks ripples (dependant on normal texture, tiling etc.)



The customization options inside the water material.

Foliage shader

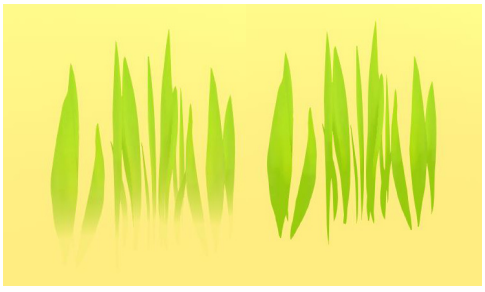
For the foliage wind movement we have included 4 shader variations in this pack:

- S_foliage_wind_URP_advanced: doublesided shader, which is primarily used for the grass. It has a variety of options to customize the shader.
- S_foliage_wind_URP_advanced_emission:
- S_foliage_wind_URP_advanced_lit: doublesided shader with the same customization option as the one above, but with front/back faces shaded influenced by light direction. It is primarily used for the tree leaves and bushes.
- S_foliage_wind_URP_advanced_lit_emission:

The advanced wind shader is defined by five main parts:

- **Base Color/Texture:** Defines texture and tint of the surface
- **Wind Movement:** Defines strength, scale and direction of the wind movement.
- **Ground Fade:** Defines a color fade starting at the bottom of the mesh, primarily used for grass
- **Wind Tint:** Creates hightlights on grass
- **Distance Fade:** Defines a distant color fade relative to camera position.

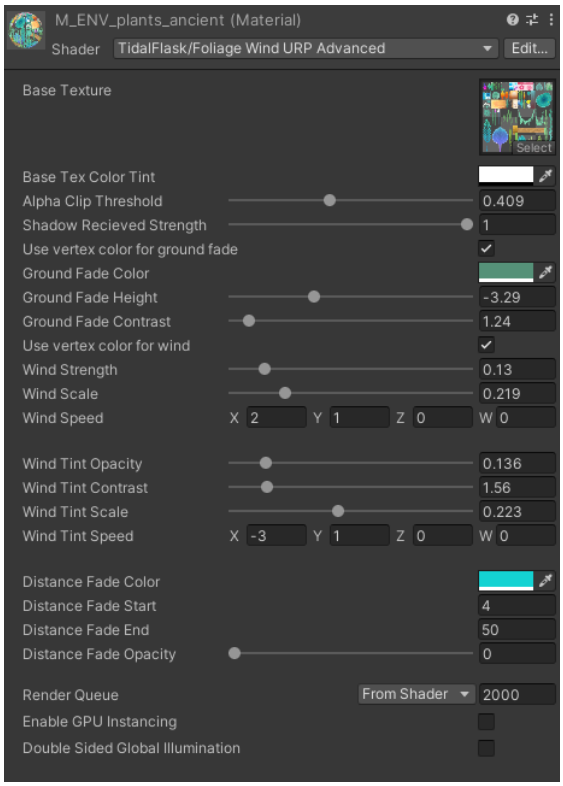
The Wind Tint creates a pattern of hightlights on the grass.



The grass mesh with and without a ground fade.

Foliage Wind Advanced and Advanced Lit:

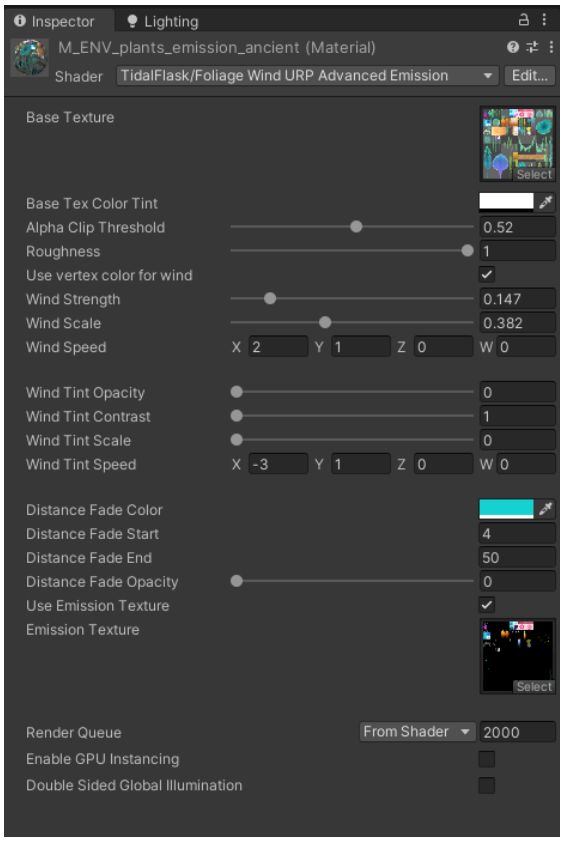
- Difference between advanced and advanced lit: Lit version has the front and backfaces differently shaded depending on your lights (mostly used for fern-like assets where you would want the backface shaded. The non-lit version has both sides lit the same (mostly used for grass)
- Base Texture: Slot for the foliage texture
- Base Tex Color Tint: Defines texture tint color
- Alpha Clip Value: Defines threshold when the pixel will be opaque or transparent
- Shadow Received Strength: Defines the intensity of the received shadow on the mesh (URP only)
- Ground Fade Color: Defines the color used for the ground fade
- Ground Fade Height: Defines the range of the ground fade
- Ground Fade Contrast: Defines ground fade contrast
- Use vertex color for wind: Enable this option, if you are using a mesh with a vertex map. Fallback is UV co-ordinates
- Wind Strength: Strength of the deformation
- Wind Scale: Defines the density of the noise applied to the mesh
- Wind Speed: Movement direction of the noise (only edit the x and y values, z and w components are not used)
- Wind Tint Opacity: Defines transparency of the tint
- Wind Tint Contrast: Defines contrast of the tint
- Wind Tint Scale: Size of the noise for the tint
- Wind Tint Speed: Movement direction & speed of the noise
- Distance Fade Color: Defines the color of the fade in the distance
- Distance Fade Start: Defines start of the fade relative to the camera view
- Distance Fade End: Defines the end of the fade
- Distance Fade Opacity: Defines transparency of the distance fade



The customization options inside the wind material.

Foliage Wind Advanced Emission and Advanced Lit Emission:

- Difference between advanced and advanced lit:
  Lit version has the front and backfaces differently shaded depending on your lights (mostly used for fern-like assets where you would want the backface shaded. The non-lit version has both sides lit the same (mostly used for grass)
- Base Texture: Slot for the foliage texture
- Base Tex Color Tint: Defines texture tint color
- Alpha Clip Value: Defines threshold when the pixel will be opaque or transparent
- Roughness: roughness value 0-1
- Use vertex color for wind: Enable this option, if you are using a mesh with a vertex map. Fallback is UV co-ordinates
- Wind Strength: Strength of the deformation
- Wind Scale: Defines the density of the noise applied to the mesh
- Wind Speed: Movement direction of the noise (only edit the x and y values, z and w components are not used)
- Wind Tint Opacity: Defines transparency of the tint color
- Wind Tint Contrast: Defines contrast of the tint color
- Wind Tint Scale: Size of the noise for the tint
- Wind Tint Speed: Movement direction & speed of the noise
- Distance Fade Color: Defines the color of the fade in the distance
- Distance Fade Start: Defines start of the fade relative to the camera view
- Distance Fade End: Defines the end of the fade
- Distance Fade Opacity: Defines transparency of the distance fade
- Use Emission Texture: toggle if you want to use the emission texture input
- Emission Texture: slot for the emission texture

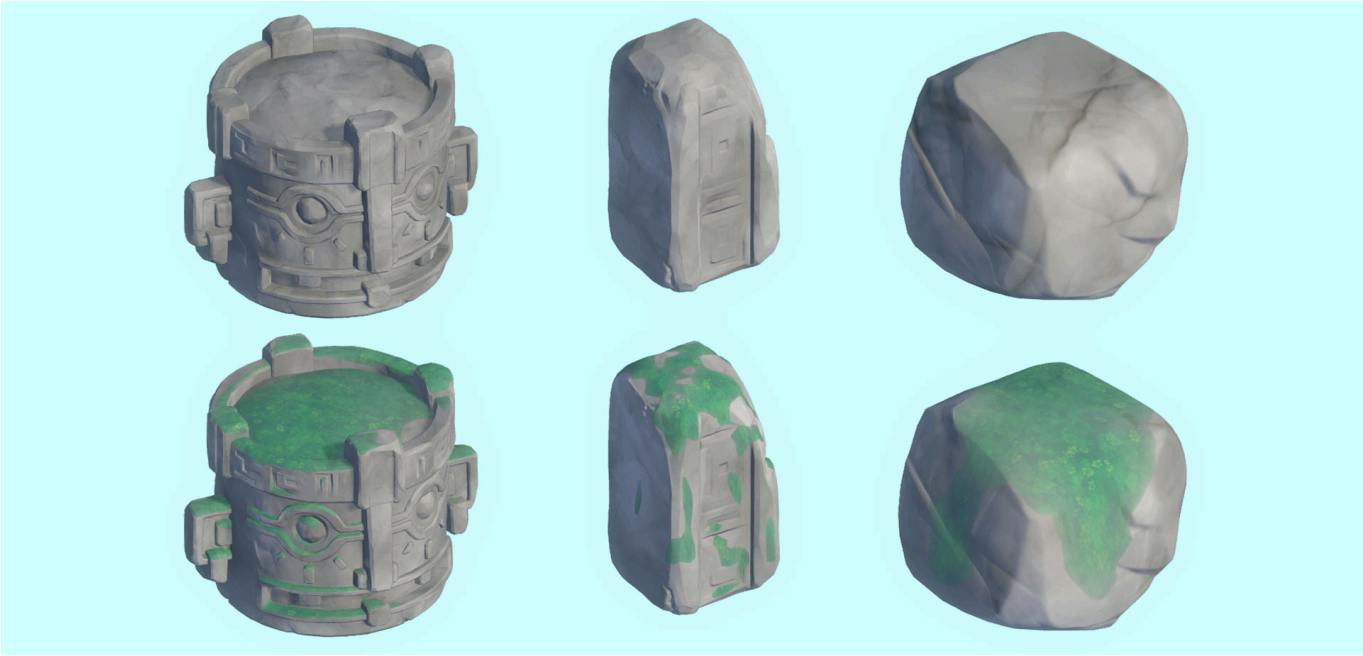


The customization options inside the wind material.

Top projection shader

The advanced wind shader is defined by five main parts:

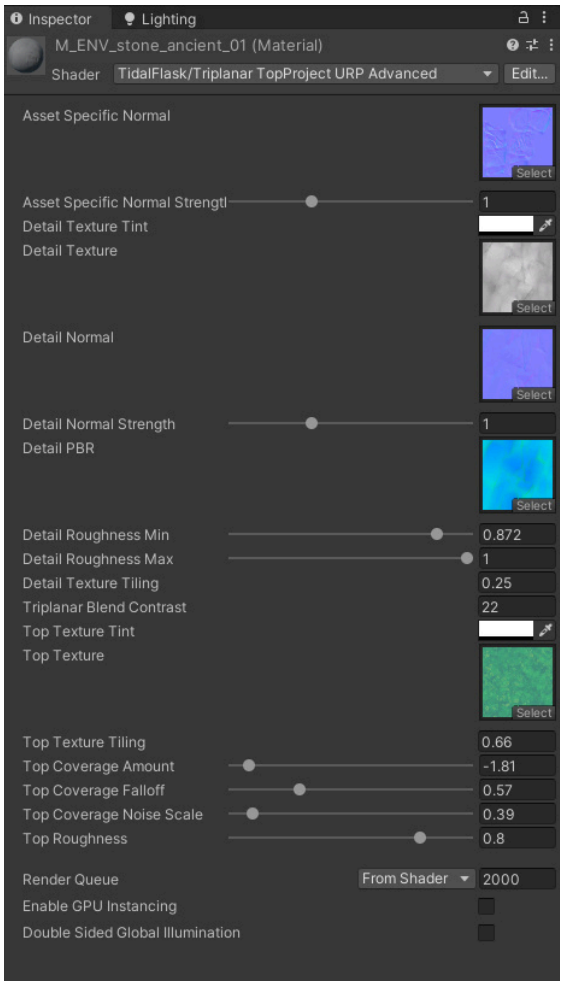
- **Asset Specific Normal:** asset specific normal which gets blended with detail normal
- **Detail textures (triplanar):** settings for triplanar detail textures
- **Top Texture (top projection):** settings for top rojection



Examples how the shader can be utilized.

Settings for Triplanar + Top Projection Advanced shader:

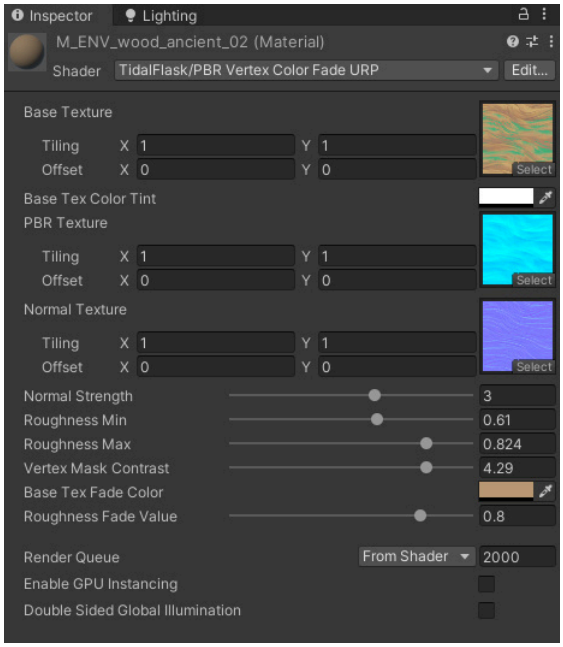
- Asset specific Normal: slot for asset specific normal map.
- Asset Specific Normal Strength: Strength of the normal texture input
- Detail Texture Tint: tint color for Detail Texture
- Detail Texture: slot for basecolor
- Detail Normal: slot for normal map
- Detail Normal Strength: strength of the normal map
- Detail PBR: PBR mask (R: metallic, G: roughness, B: AO)
- Detail Roughness Min: min values for roughness (based on PBR mask)
- Detail Roughness Max: max values for roughness (based on PBR mask)
- Detail Texture Tiling: tiling for all detail textures
- Triplanar Blend Contrast: contrast value for blending of the triplanar projection
- Top Texture Tint: tint color for top texture
- Top Texture: slot for basecolor
- Top Texture Tiling: tiling for top texture
- Top Coverage Amount: amount of top coverage
- Top Coverage Falloff: contrast for falloff of the coverage
- Top Coverage Noise Scale: noise tiling for coverage
- Top Roughness: roughness value for top projection



The customization options inside the triplanar topproject shader

Vertex Color Fade Shader

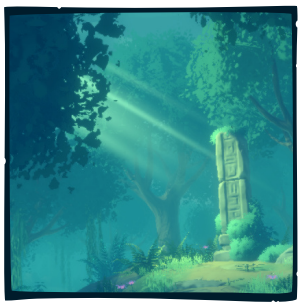
- Base Texture: slot for base texture
- Base Texture Color Tint: tint color for base texture
- PBR Texture: PBR mask (R: metallic, G: roughness, B: AO)
- Normal Texture: slot for normal texture
- Normal Strength: Strength of the normal texture input
- Roughness Min: min values for roughness (based on PBR mask)
- Roughness Max: max values for roughness (based on PBR mask)
- Vertex Mask Contrast: contrast of the vertex mask of the mesh
- Base Tex Fade Color: color for the fade (dependant on vertex mask)
- Roughness Fade Value: 0-1 roughness value for the roughness fade (dependant on vertex mask)



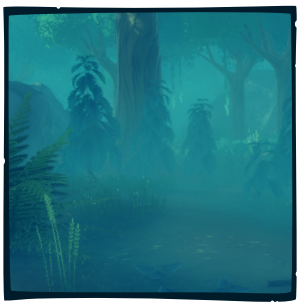
The customization options inside the triplanar topproject shader

FX

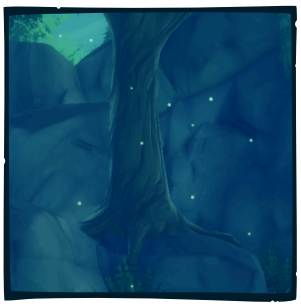
Inside the \prefabs\FX folder you will find some particle effects to decorate your scenes. We added the following effects:



Godray



Fog



Particles Glow

Customizing Assets

Tileable Textures

The tileable textures can be used interchangeably, be that for stones/columns/head statue, tree trunk for the trees or for terrain. You can also use grass texture for top projection instead of moss.

Custom shaders with tint options

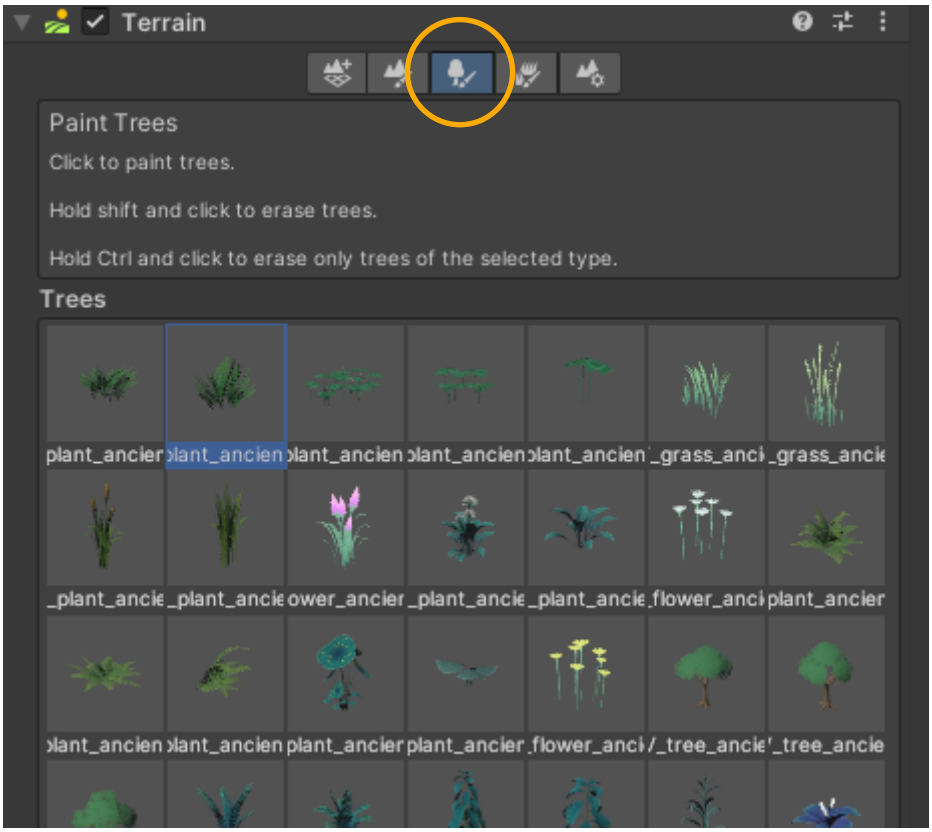
Every custom shader has additional tint color as an optional customization element. You want pink stones? - You can!

Scene setup

Environment setup - Terrain Tool

All assets are compatible with Unity's Terrain Tool.

Select your Terrain and in the Inspector tab, simply add the prefab as a "Tree" in the section "Paint Trees". You then can paint the selected prefab on your Terrain.



With the "Paint Trees" option you can add various foliage assets and paint them on your terrain.

Support

FAQ

Will there be updates to the package?

Yes. We plan to update all our packages as soon as there is a relevant update or if the community asks for adjustments.

Can you give support to users if something doesn't work?

Yes, but first please read through this document and if you still need help with something related to this package, feel free to contact us.

A list of errors shows up in a shader.

Try reimporting the shader (in project tab > right-click on the shader > Reimport).
We are aware of some shader warnings showing up, which don't seem to actually break the shader. So simply clearing the warning in the console tab should fix the problem.

I opened the project for the first time and everything is pink. When I select a material, the shader says "Hidden/InternalErrorShader"

This is the case when your project doesn't use the same render pipeline as the pack version you installed. Starting on page 4 you will find all the steps needed to properly set up your project.

I opened the project for the first time and in the Console I get the error "A tree couldn't be loaded because the prefab is missing"

This is a known Unity bug (importing a package that has terrain and trees in it) and has nothing to do with the package. Simply press "Clear" in the "Console" tab and it won't appear again.

I imported the package but some assets still appear pink in the scene...

Make sure you installed the correct render pipeline version of our pack. After opening a scene it's still possible, that some assets are pink. If that is the case, do the following:

- In the Hierarchy window select "Terrain"
- In the "Paint Details" tab double click on any asset
- Click on the circle next to the asset which was added in the "Detail" panel
- Re-add the same asset and the scene should look normal again

I imported the package but some assets still appear pink in the Project window...

If you see any pink assets inside the Project window or inside the "Terrain"-object in any of the scenes simply select the said Prefabs (inside the prefabs folder) or the Meshes (inside the 3d folder) > right click > Reimport and it should fix it.

I'm using Unity version older than 2021.3.20 and the scene assets have shadow errors and/or pink materials and/or the terrain isn't showing.

The new URP shaders are created in Unity 2021.3.20 and are not backwards compatible. The errors is created by the shadow cascades settings in the render pipeline asset. You can set the Cascades option in your render pipeline asset to "No Cascades".

Contact & Support

Visit our page for updates and more packages in the future:
https://tidalflask.com/

Contact us if you didn't find an answer to your questions:
info@tidalflask.com

Social Media

https://www.facebook.com/tidalflask

https://twitter.com/TidalFlask

https://www.instagram.com/tidalflask/