

Documentation & Quick Start



Thank you!

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Enjoy, your **Tidal Flask** team!







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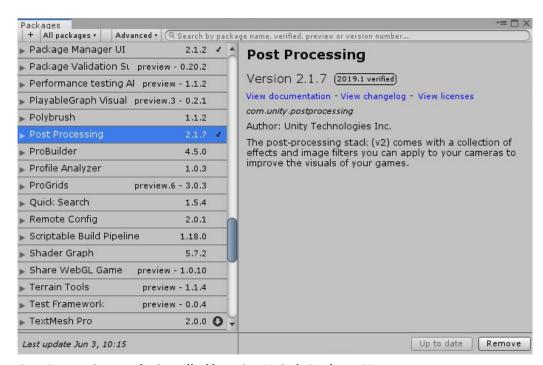


Quick Start

Importing to Built-in RP project

After importing the Standard version into your project which doesn't use any of the Scriptable render pipeline packages like Lightweight Render Pipeline (LWRP), Universal Render Pipeline (URP) or Highdefinition Render Pipeline (HDRP) it should just worktm

Please 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.



Post Processing can be installed by using Unity's Package Manager.





Lightweight Render Pipeline (LWRP) and Universal Render Pipeline (URP)

Additionally to the built-in RP version, this pack also includes versions which work with the Lightweight Render Pipeline and the Universal Render Pipeline. If you want to find out exactly what it can and can't do please visit this page:

https://docs.unity3d.com/Manual/render-pipelines.html

Since Unity 2019.3 the LWRP is renamed to Universal Render Pipeline (URP). Make sure you are importing the URP version of our package if you are using Unity 2019.3.0 and above.

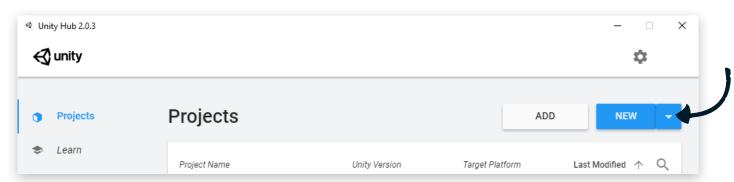
Importing

You will find detailed steps on how to import the package below. Please note that this package only works with Unity 2019.1.0 and above. If you want to use URP you will need Unity 2019.3 or above.

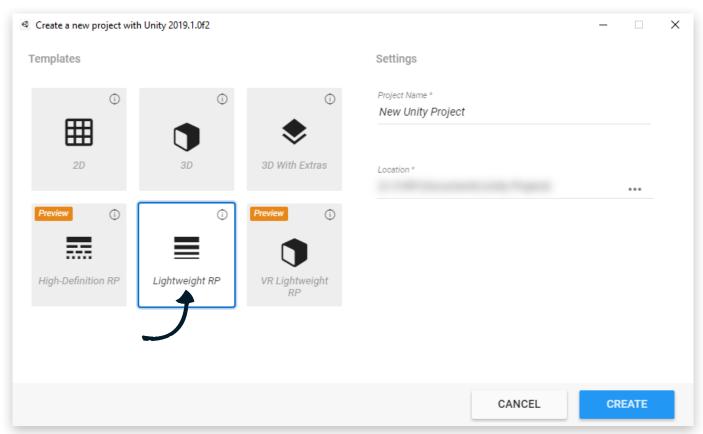


How to set up your project for LWRP (option 1)

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

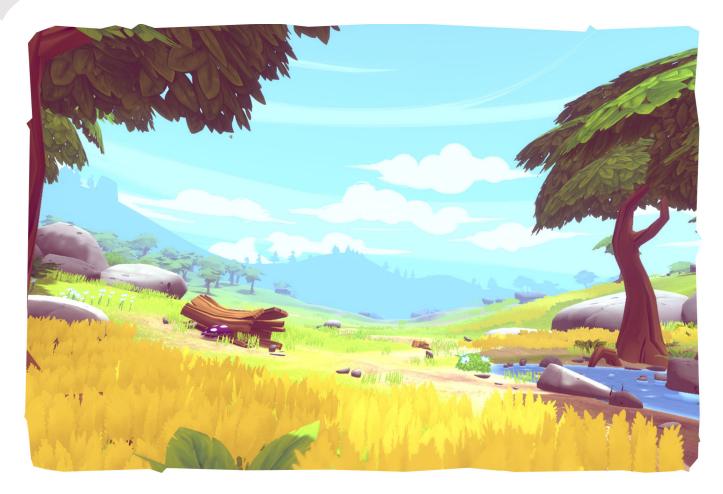


Step 1: Click "NEW" to create a new project (for LWRP pick Unity 2019.1.0 or above).



Step 2: In the "Templates" select "Lightweight RP", this way everything you need for this package will be preinstalled.





Step 3: Download the "FANTASTIC - Nature Pack" from the Asset Store and install the LWRP version.

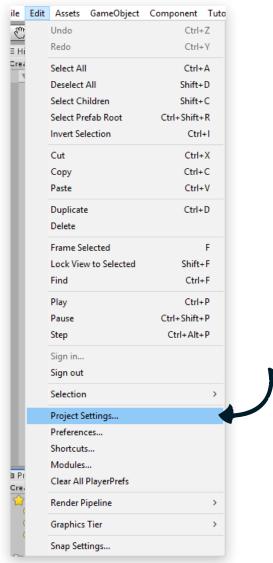
At this point you already can go to \Fantastic Nature Pack\scenes and select any of the scenes.

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 Mail.

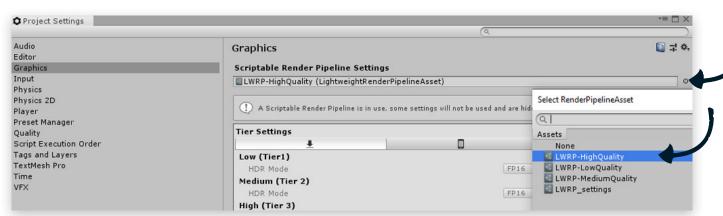
Note: If the error message "a tree couldn't be loaded because a prefab is missing" pops up in the console tab, simply press "Clear" in the "Console" tab and it won't appear again. This is a known Unity bug (importing a package that has terrain and trees in it) and has nothing to do with the package.

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.





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

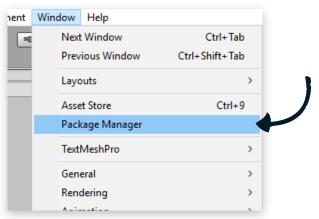


Step 5: For the Scriptable Render Pipeline Settings select "LWRP_HighQuality".

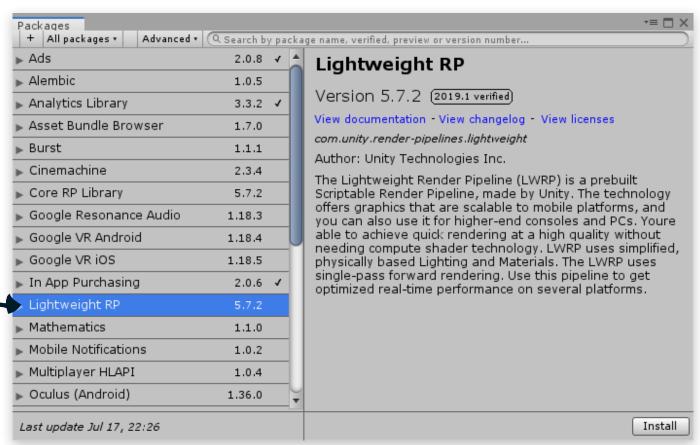


How to set up your project for LWRP (option 2)

If you imported the "FANTASTIC - Nature Pack" before you installed the LWRP please follow the steps below:

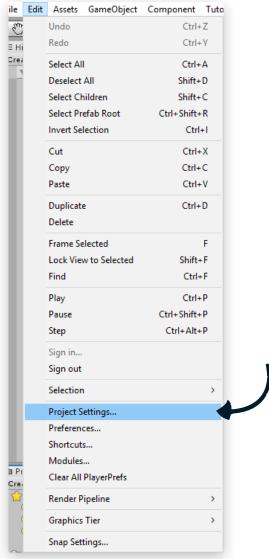


Step 1: go the Window > Package Manager.

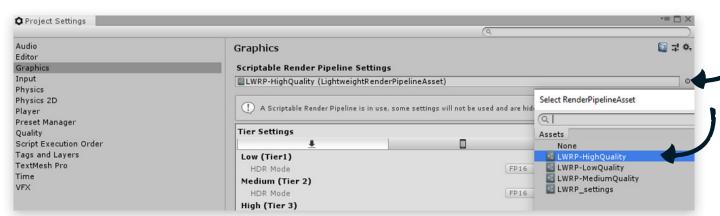


Step 2: Select "Lightweight RP" asset and click "Install".





Step 3: After the package is loaded, go to Edit > Project Settings...



Step 4: For the Scriptable Render Pipeline Settings select "LWRP_HighQuality".





It is possible that if you open any of the scenes, that some assets still appear pink. If that is the case do the following:

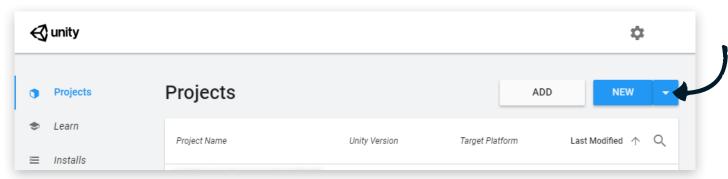
- In the "Hierarchy" tab select "Terrain"
- In the "Paint Details" tab double click on any asset
- Click on the circle next to the asset which was added in the "Detail" panel
- Re-add the same asset and the scene should look normal again



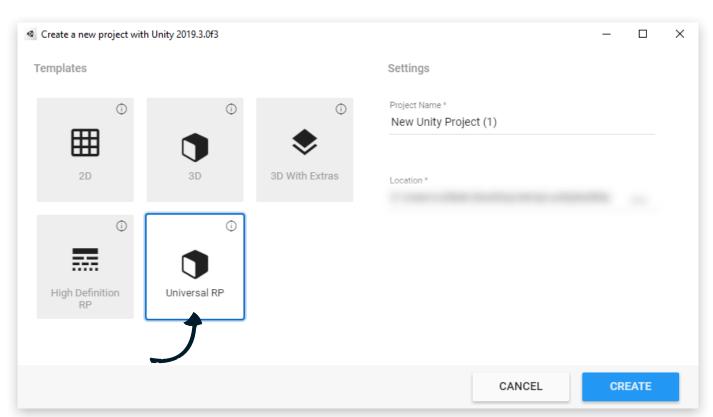


How to set up your project for URP (option 1)

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:

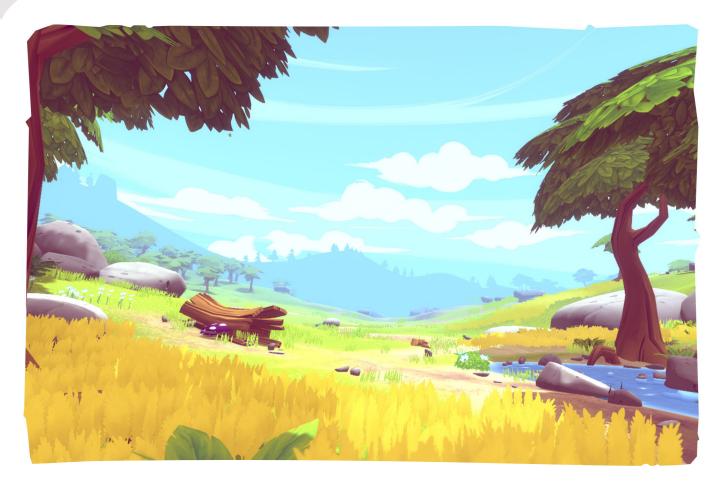


Step 1: Click "NEW" to create a new project (for URP pick Unity 2019.3 or above).



Step 2: In the "Templates" select "Universal RP", this way everything you need for this package will be preinstalled.





Step 3: Download the "FANTASTIC - Nature Pack" from the Asset Store and install the URP version.

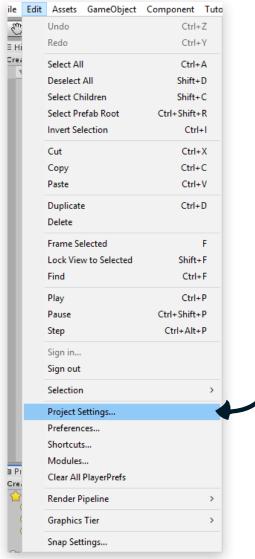
At this point you already can go to \Fantastic Nature Pack\scenes and select any of the scenes.

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 Mail.

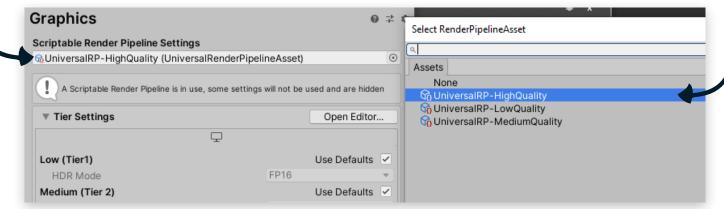
Note: If the error message "a tree couldn't be loaded because a prefab is missing" pops up in the console tab, simply press "Clear" in the "Console" tab and it won't appear again. This is a known Unity bug (importing a package that has terrain and trees in it) and has nothing to do with the package.

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.





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

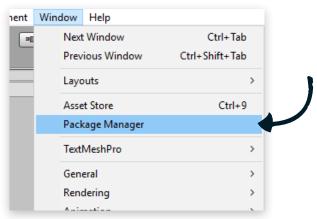


Step 5: For the Scriptable Render Pipeline Settings select "UniversalRP_HighQuality". These are the presets Unity preinstalled with the Template. Since the Universal RP is a renamed LWRP from Unity side, imported LWRP settings technically would also work.

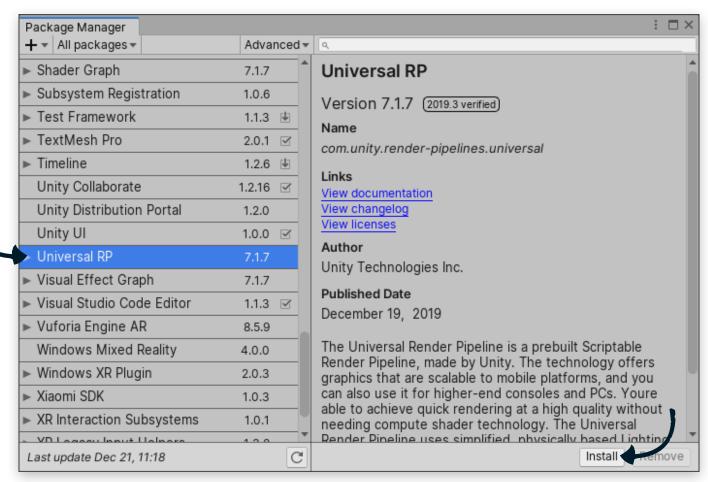


How to set up your project for URP (option 2)

If you imported the "FANTASTIC - Nature Pack" before you installed the URP please follow the steps below:

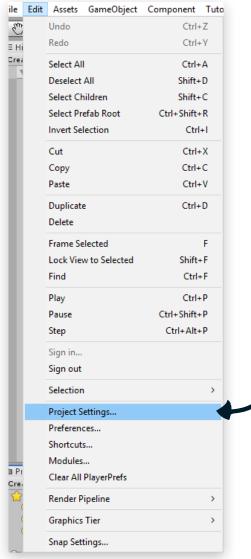


Step 1: go the Window > Package Manager.

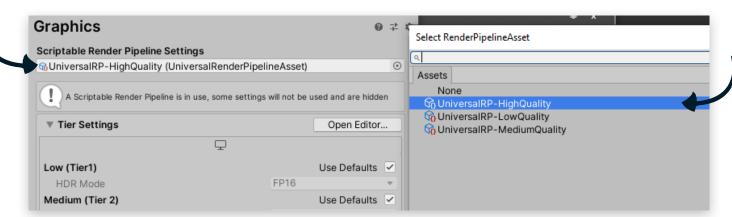


Step 2: Select "Universal RP" asset and click "Install".





Step 3: After the project is loaded, go to Edit > Project Settings...



Step 4: For the Scriptable Render Pipeline Settings select "UniversalRP_HighQuality". These are the presets Unity preinstalled with the Template. Since the Universal RP is a renamed LWRP from Unity side, imported LWRP settings technically would also work.





How to set up Post Processing for URP

Note: These steps are only needed in case you have imported the LWRP verions into an URP project.

The Post Processing has changed since Unity 2019.3.0 and is now included in URP. To make Post Processing work with URP you will have to do the following steps:

Step 1: Inside "Window" > "Package Manager", make sure that the "Post Processing Package" is NOT installed.

Step 2: Open the Demoscene from the package.

Step 3: In the Hierarchy Tab of the scene delete the "Post Processing Volume" object.

Step 4: Select the camera. In the Inspector Tab remove the "Missing Script" component. (this is the post processing layer from LWRP)

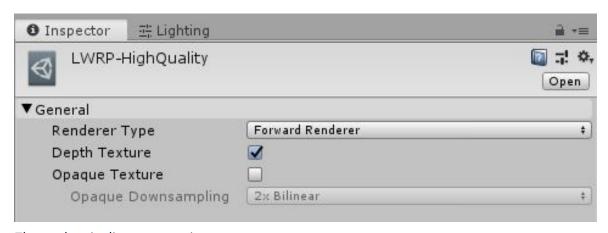
Step 5: In the Hierarchy Tab of the scene create a new "Global Volume". (right click > Volume > Global Volume)

Step 6: Select the "Global Volume". In the Inspector Tab of the "Volume" component click "New" at the Profile. Then click on the newly created profile to reveal it inside your project.

Step 7: After selecting the new profile, click on "Add Override" in the Inspector Tab, select "Post-processing" and select your desired effect.

Step 8: Additionally you will have to activate Post-processing here: in your Camera Inspector Tab go to "Rendering" and enable Post-processing there.

Note: Make sure to enable "Depth Texture" in the render pipeline settings to avoid errors in the water shader.



The render pipeline asset settings.

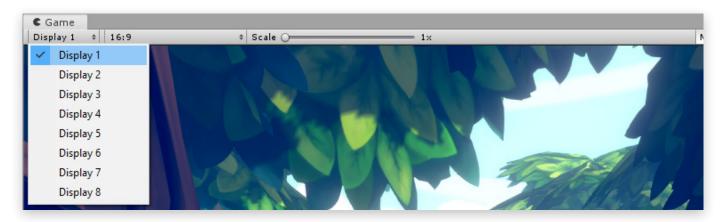


Demo scenes

Demoscene_fantastic_nature_day: daylight scene with different sceneries Demoscene _fantastic_nature_night: night scene with the same sceneries like the daylight scene

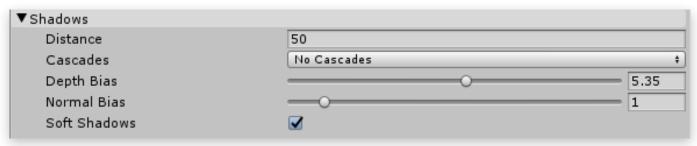
Demoscene _fantastic_nature_assets: in this scene you will find all the assets within the package

All the sceneries you see in the trailer were recorded directly out of these 2 scenes. Simply select the different displays from the dropdown to see where the cameras were placed:



Settings for LWRP/URP

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



Example settings for shadows

Post Processing

Inside ...\Fantastic Nature Pack\settings you will find 3 post processing files for day, night and the assets scenes.



Demoscene day & night











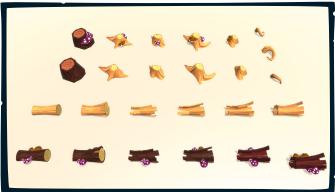




Demoscene assets

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













Assets

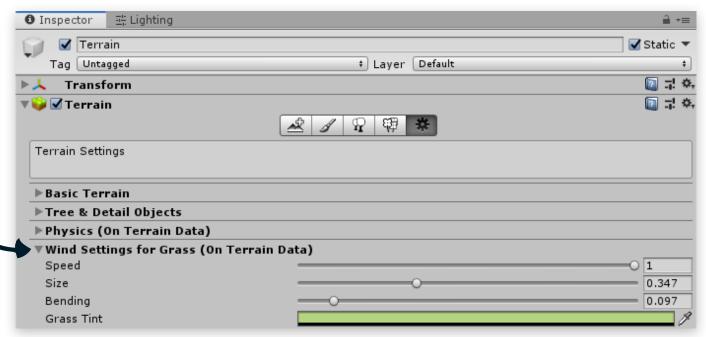
Meshes

Vertex maps

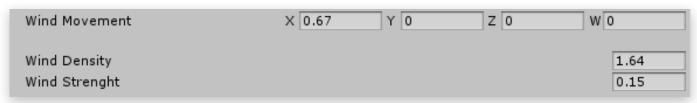
A specific set of meshes have vertex maps to be able to work with "Wind settings for Grass". If you are asking yourself why we added these assets to "Detail Objects" please read through Environment setup - Terrain Tool chapter.

The following set of assets have vertex maps:

SM_ENV_PLANT_bush_... SM_ENV_PLANT_flower_... SM_ENV_PLANT_leaf_...



Set the desired wind movement of the assets with vertex maps under "Wind settings for Grass"



For trees and grass the wind simulation is solved with the shader. For more information please see chapter "Shaders"



LODs

All the trees and stones have 3 LODs levels. These are already set up for you inside the corresponding prefabs. You will find all the prefabs in \prefabs folder.

Highest polycount for trees LOD0: 964 Lowest polycount for trees LOD2: 19

Highest polycount for stones LOD0: 872 Lowest polycount for stones LOD2: 18

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.

Tileable materials

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, metal, etc.)
- Terrain textures (gravel, grass, sand, etc.)
- Atlases (props, foliage)
- FX (fire, steam, water)

There are multiple reasons why we wanted the plants texture to be an atlas. Firstly for performance reasons and secondly, this way you can easily add seasonal changes by simply changing one single texture, or add other kind of flora and fauna to the same meshes without adjusting the mesh or the UVs.



Shaders

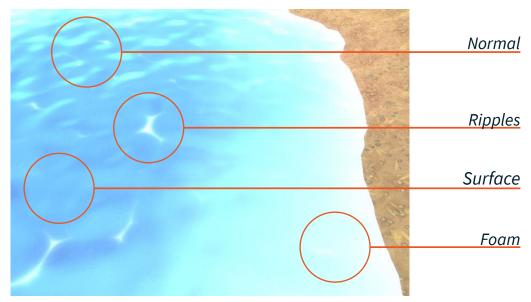
With package version 1.5 the wind and water shader have been improved. They were created using Amplify and hence can not be opened or adjusted using Unity's Shader Graph. Of course if you have Amplify installed, you can adjust the shader there. The older version of the wind and water shader for LWRP/URP can still be found in the / shaders/legacy folder.

Rest of the shaders are all standard LWRP/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 color and opacity of the surface
- 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



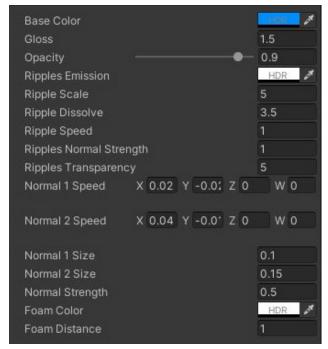
The four main parts of the water shader: Normal, Foam, Ripples and Surface.

- 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:

- Base Color: base color of the water
- Gloss: defines surface gloss amount
- Opacity: defines surface opacity
- Ripples Emission: Emission intensity of the ripples
- Ripple Scale: defines the scale of the ripples
- Ripple Dissolve: contrast of the noise which is used for the ripples
- Ripple Speed: defines the movement speed of the ripples
- Ripples Normal Strength: Defines height of the ripples
- Ripples Transparency: Defines how transparent the ripples are
- Normal 1 Speed: speed of the waves
- Normal 2 Speed: speed of the waves
- Normal Strength: defines height of the waves
- Foam Color: color of the foam where the meshes intersect with the water
- Foam Distance: size of the foam



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_standard_advanced: doublesided shader, which is primarily used for the grass. It has a variety of options to customize the shader.
- S_foliage_wind_standard_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_standard_simple: A simple version of the advanced shader with reduced customization options. Primarily used to improve performance.
- S_foliage_wind_standard_simple_lit: A simple version of the advanced_lit shader with reduced customization options. Primarily used to improve performance.

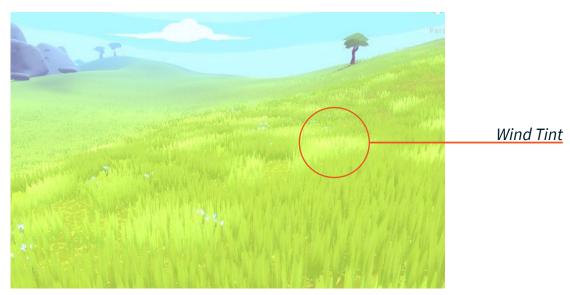
M_PLANT_atlas_anim_FNP and M_PLANT_grass_anim_FNP are both ment to be used for wind movement of the plants.



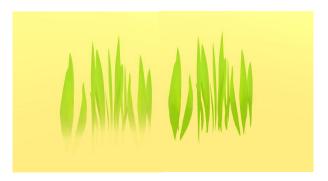


The advanced wind shader is defined by four main parts:

- Base Color/Texture: Defines texture and tint of the surface
- Wind Movemen: 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 the grass.
- Wind Tint: Creates hightlights on the grass
- Distance Fade: Defines a distant color fade relative to the camera position.



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

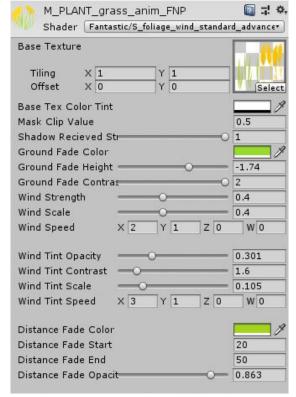


The grass mesh with and without a ground fade.



To customize the wind shader you have the following options:

- Base Texture: Slot for the foliage texture
- Base Tex Color Tint: Defines texture tint color
- Mask 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
- 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
- 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



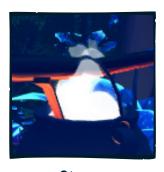
The customization options inside the wind material.



FX

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









Fire

Steam

Particles Glow

Leaves

Customizing Assets

We have added multiple prefab versions for trees to have 4 different variation in their materials. You can easily do that for other assets like roots, tree trunks and stumps.

As explained in the "Textures & Materials" chapter, you can work on one single texture to make adjustments or even seasonal changes.





Scene setup

Environment setup - Terrain Tool

It's important to note that trees and stones will not work on the terrain as "Detail Objects". This is because they have LODs, which is incompatible. Instead, add these assets as "Tree Objects".

Additionally any assets with emission and grass should be added as "Tree Objects", because the built-in grass shader would otherwise override the custom shaders.

This is not a limitation of the package, but rather a limitation of Unity. Here is a sheet to help you decide where to add the assets:

Detail Objects

Assets without emission Assets without LODs No prefabs

"Grass texture" single texture (no atlas) which will be displayed as such (can be a billboard)

"Detail Mesh" - vertex lit does not move with wind & has no transparency

Mushrooms without emission

"Detail Mesh" - grass assets with vertex map that should move with wind

- Bushes
- Leaves
- Flowers
- Fern

Tree Objects

Assets with emission Assets with LODs Prefabs Assets with custom shaders

- Trees
- Stones
- Grass





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.

What's the deal with Universal Render Pipeline (URP)?

With Unity 2019.3 the Lightweight Render Pipeline is renamed to Universal Render Pipeline. If you set up your project using LWRP you can change to URP and everything should work from the getgo - shaders, materials, lighting and the renderpipeline setting assets are compatible with URP.

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 imported the package but the assets using your custom Shader Graph shaders have errors and show up pink in the scene...

We are aware of an error which sais the following: Shader error in 'Shader Graphs/ "shader name": syntax error: unexpected integer constant at line...

Saidly we could not reproduce it but we very closly follow possible solutions for it. If you encounter this error please send us the following information:

- Operating system (also tell us if you are up to date with all the updates)
- Your Graphics card (also here please tell us if you are up to date with the drivers)
- Unity version
- Render pipeline type and version(for example LWRP 6.9.0)



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

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