PBR Rocks - Nature Pack - Unity

by ANGRY MESH

Description

PBR Rocks is a rocks package that you can use for desktop and also for mobile. The package contains additional shader options, that allow you to customize the look of the rocks and to create unique rocks.

There are 3 variants of rocks. With moss, sand and snow. Each rock uses the same basic texture for all 3 variants. The difference is that they are blended with different textures and have different properties on materials, depending on the environment.

Features

- **NEW!** Added HDRP&URP templates version 17.0.3 for Unity 6
- Using the **AG Global System** you can control the snow/sand/moss amount both locally for each material and also globally on the whole scene.
- Albedo/NM/AO/Smoothness/Mask and Height maps for all ground textures.
- **Amplify Shader Functions** included.
- Support SM2 on low versions of the shaders (except DirectX9).
- High and mobile version.
- Only one atlas for the base texture in the mobile version.
- LODs for all rocks meshes.
- High-resolution textures (4k).
- Support VR
- Additional shaders with projection on the y-axis.
- High and low versions for the shaders (PBR/Blinn-Phong).

Compatibility

- **Winter Environment - Nature Pack** - Uses common shaders and scripts.
- **The Vegetation Engine** - Conversion Presets
- **Amplify Shader Editor** - Full shader editing support.

RP Compatibility

- Standard Render Pipeline 2021.3+
- HD Render Pipeline (HDRP) 12.1.14+
- Universal Render Pipeline (URP) 12.1.14+

Content

- HDRP and URP templates.
- 3 Demo scenes for Unity Standard.
- 3 Demo scenes for the URP Template.
- 3 Demo scenes for the HDRP Template.
- 24 Unique rock meshes for high version.
- 24 Unique rock meshes for mobile version.
- 72 Rocks prefabs for high version (Moss/Sand/Snow).
- 72 Rocks prefabs for mobile version (Moss/Sand/Snow).
- 11 Nature prefabs (Grass/Plants/Roots).
- 3 Particle prefabs (Dust/Snow/Snow Storm).
- 9 Ground textures (4K/4x4m).
- 3 Post-Processing Profiles (Standard/URP/HDRP/LWRP).
- 2 Detail textures (2K).
- 6 Detail meshes for high and mobile versions.
- 3 Unity procedural skybox presets.
- 2 Rocks Shaders for Mobile (Lambert/Blinn-Phong).

Content Nature Pack - Common folder

- 2 prefabs for the AG Global system.
- 6 versions of shaders with top layer for Snow/Sand and Moss (Tree Bark/Tree Leaf/Tree Cross/Grass/Props/Detail Props).
- 6 versions of shaders without top layer (Tree Bark/Tree Leaf/Tree Cross/Grass/Props/Detail Props).
- 5 Scripts for global settings.
- 8 Shader functions.
- 3 Noise Textures that can be used for Global Tint Color.

01 | HOW TO USE

UNITY STANDARD

Import Steps

1. Make sure that the Color Space is passed on Linear. To do this, set Color Space to Linear in the Player Settings window (menu: Edit > Project Settings > Player).
2. Import the PBR Rocks package.

Post Processing

1. To get the same camera effects presented in our screenshots, you will need to install Post Processing in your project. Open the **Package Manager** and install Post Processing.
2. Open one of the 3 demo scenes, create an empty object and add the Post Process Volume component. (The demo scenes can be found in ANGRY MESH > Nature Pack - PBR Rocks > Scenes).
3. In the Nature Pack - PBR Rocks > Post-Processing folder, you can find the profiles used in screenshots. Add the afferent scene profile that you opened, with drag and drop over the component Post Process Volume > Profile.
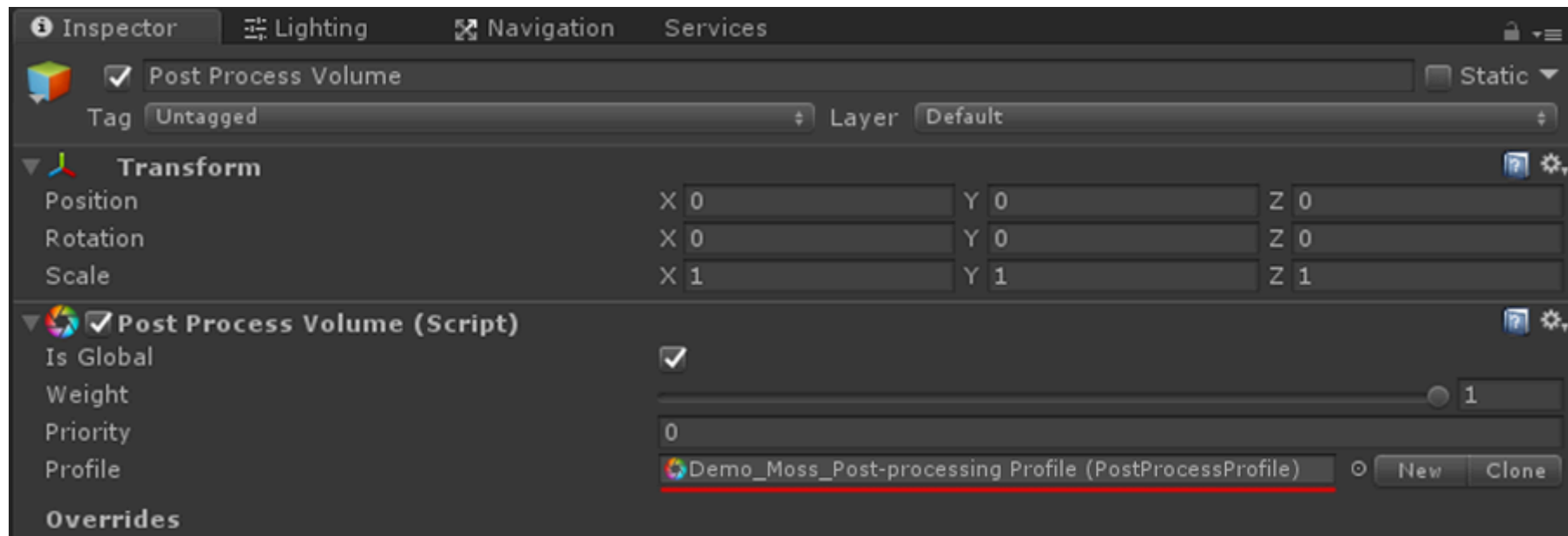
4. Add to the Main Camera the component Post Processing Layer. Make sure that you have the same settings as the below image.
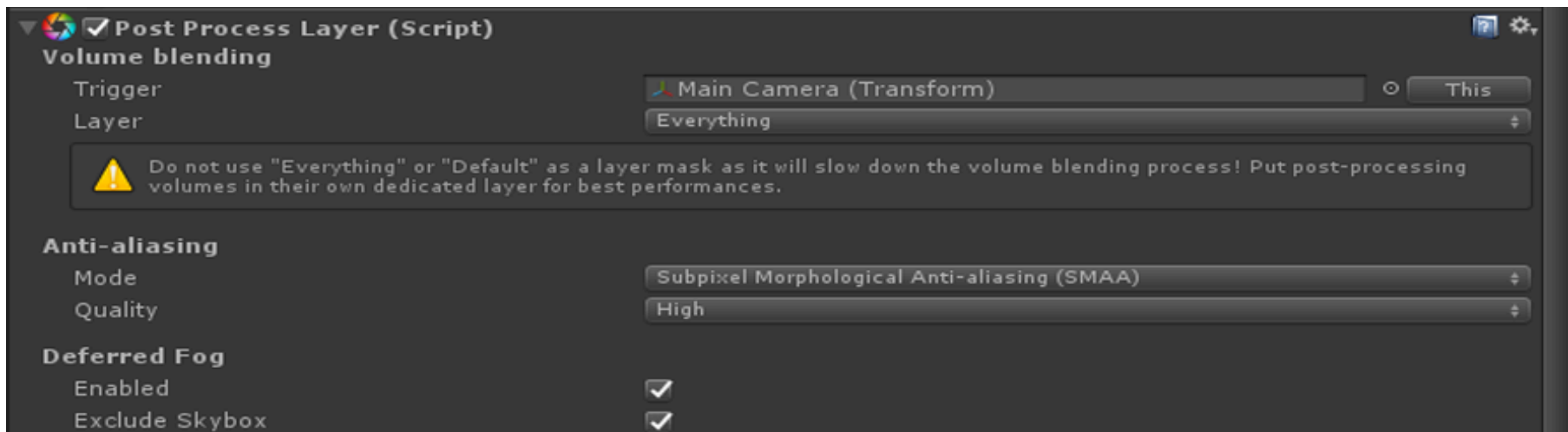
Notes

- Demo_Moss scene uses profile Post-Processing_Moss.
- Demo_Sand scene uses profile Post-Processing_Sand.
- Demo_Snow scene uses profile Post-Processing_Snow.

Important

- **You must keep one of the AG Global Settings or AG Global Snow (Limited) prefabs in each scene. When you create a new scene, make sure that you have an AG Global prefab in your scene.** The AG Global prefabs can be found in ANGRY MESH > Nature Pack - Common > AG Global Settings.
- Use only one AG Global prefab in your scene. Multiple AG Global prefabs are not supported.
- AG Global system works only with Nature Packs by ANGRY MESH.

HDRP TEMPLATE

For the HDRP template, you need Unity version 2021.3.35f1 or newer.

Import Steps

1. Create an empty project using the HDRP Template.
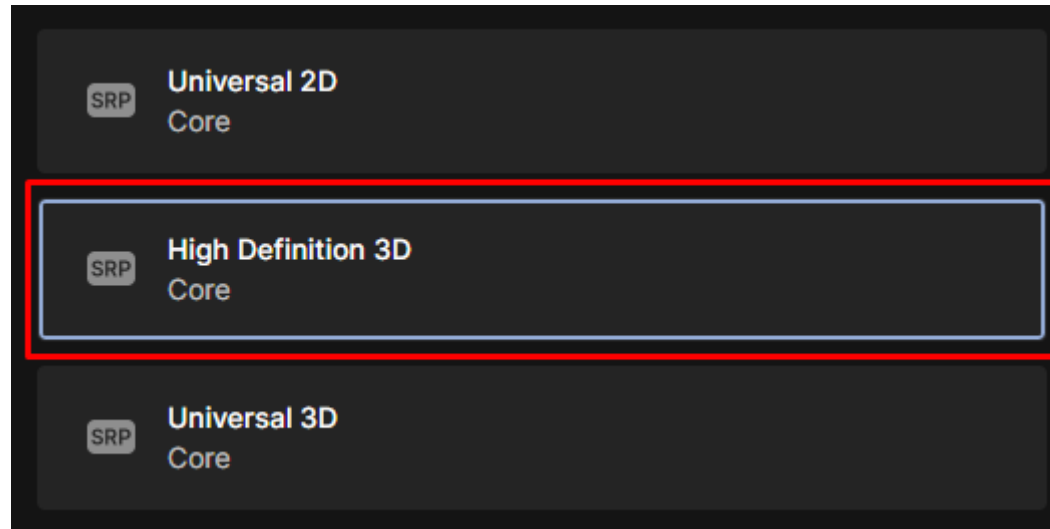
2. Import the PBR Rocks package into the project.

3. Import the HDRP template from:
ANGRY MESH > Nature Pack - PBR Rocks > SRP.
   - For Unity 6000.0.23 or newer (HDRP 17.0.3 or above) → Use HDRP template 17.0.3.unitypackage
   - For Unity 2022.3.18 (HDRP 14.0.10 or above) → Use HDRP template 14.1.10.unitypackage
   - For Unity 2021.3.35 (HDRP 12.1.14 or above) → Use HDRP template 12.1.14.unitypackage

Diffusion Profile - New Scene

Starting with the HDRP version 12.1.14 we added Diffusion Profile support for all cutout shaders. Diffusion Profile gives you more control over translucency on trees and grass. You can find the profiles already created in ANGRY MESH > Nature Pack - Common > Diffusion Profiles. Please follow the next steps when you create a new scene:

1. Create an empty object and add a Volume component.
2. Create a new Profile and add Diffusion Profile Override.
3. Add the "AG_Grass_Diffusion_Profiles" and "AG_Trees_Diffusion_Profiles" profiles in the **Diffusion Profile List**.

Without Diffusion Profile ✗

With Diffusion Profile ✓

Notes

- You can change the Thickness value for the Diffusion Profile directly from the material.
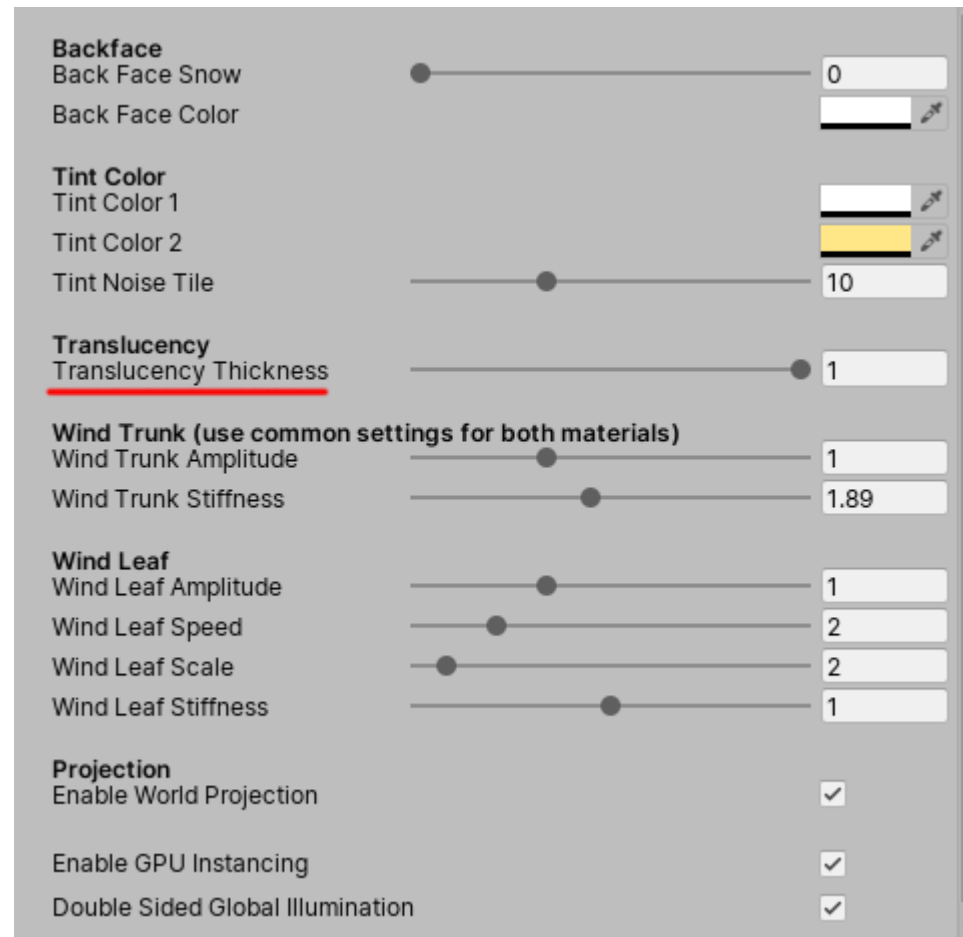
URP TEMPLATE

For the URP template, you need Unity 2021.3.35f1 or newer.

Import Steps
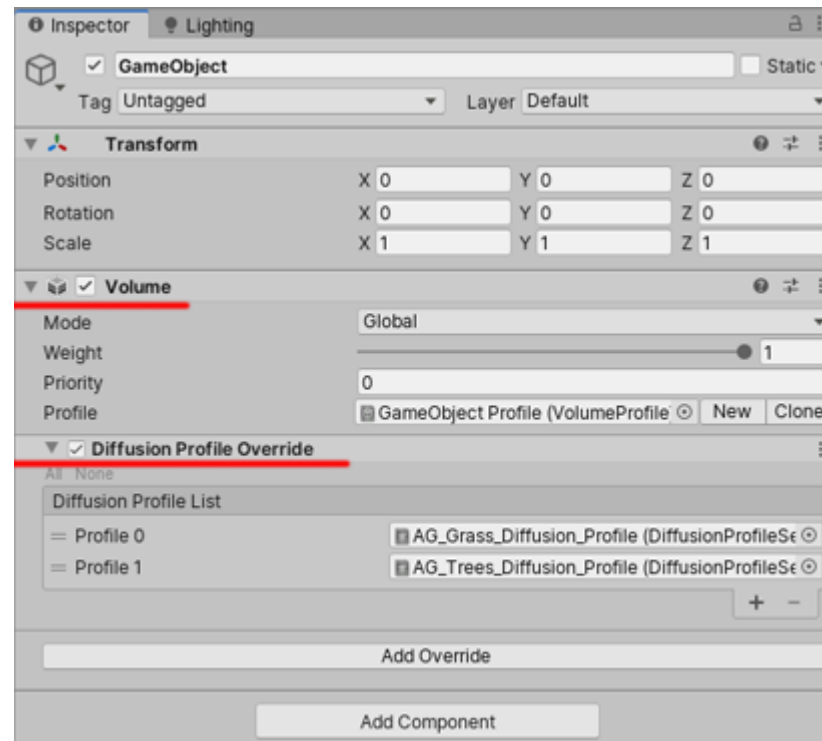
1. Create an empty project using the URP template.
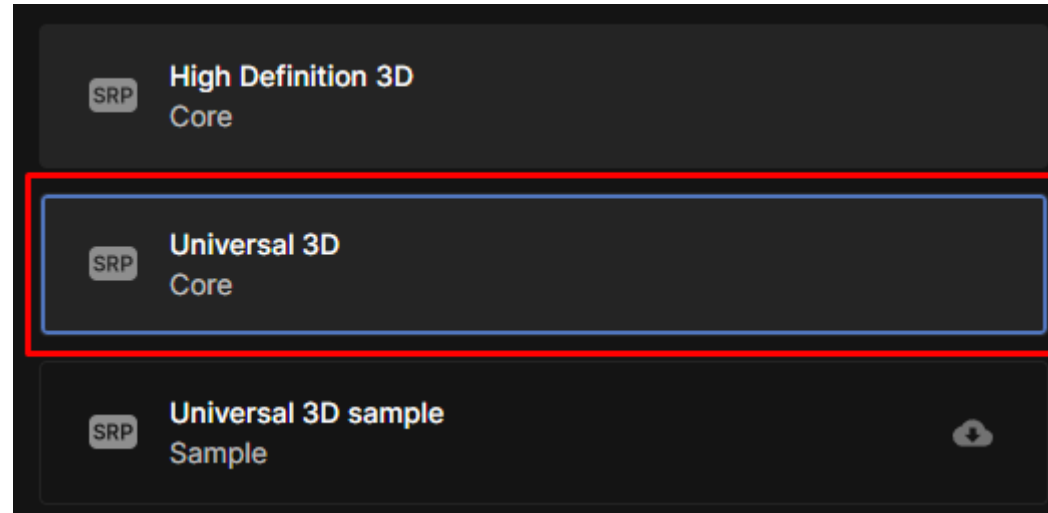
2. Import the Rocks package into the project.

3. Import the URP template from:
   ANGRY MESH > Nature Pack - PBR Rocks > SRP.
   - For Unity 6000.2.0 or newer (URP 17.2.0 or above) → Use URP template 17.2.0.unitypackage
   - For Unity 6000.0.23 (URP 17.0.3 or above) → Use URP template 17.0.3.unitypackage
   - For Unity 2022.3.18 (URP 14.0.10 or above) → Use URP template 14.1.10.unitypackage
   - For Unity 2021.3.35 (URP 12.1.14 or above) → Use URP template 12.1.14.unitypackage

Notes

- Make sure to use an URP profile at Project Settings > Graphics > Scriptable Render Pipeline Settings.

02 | AG GLOBAL SYSTEMS

The update contains two versions of the AG Global system. AG Global Snow (Limited) and AG Global Settings.
AG Global Snow (Limited) is a limited version that offers only some of the features available in AG Global Settings.
- Use AG Global Snow if you own only the PBR Rocks package.
- Use AG Global Settings if you have any other Nature packages, such as **Winter Environment**.

More about the AG Global system you can see in **this video**.

Advanced GPU Wind System
Give you the control of global wind settings such as direction, amplitude, speed, scale, and mesh stiffness. You can control the wind settings both globally on the whole scene and locally for each material. This allows you to adjust differently the rigidity of the objects and the influence of the wind on them. This fact can be very useful for trees and bushes.

You can modify the direction of the wind by rotating the AG Global prefab.
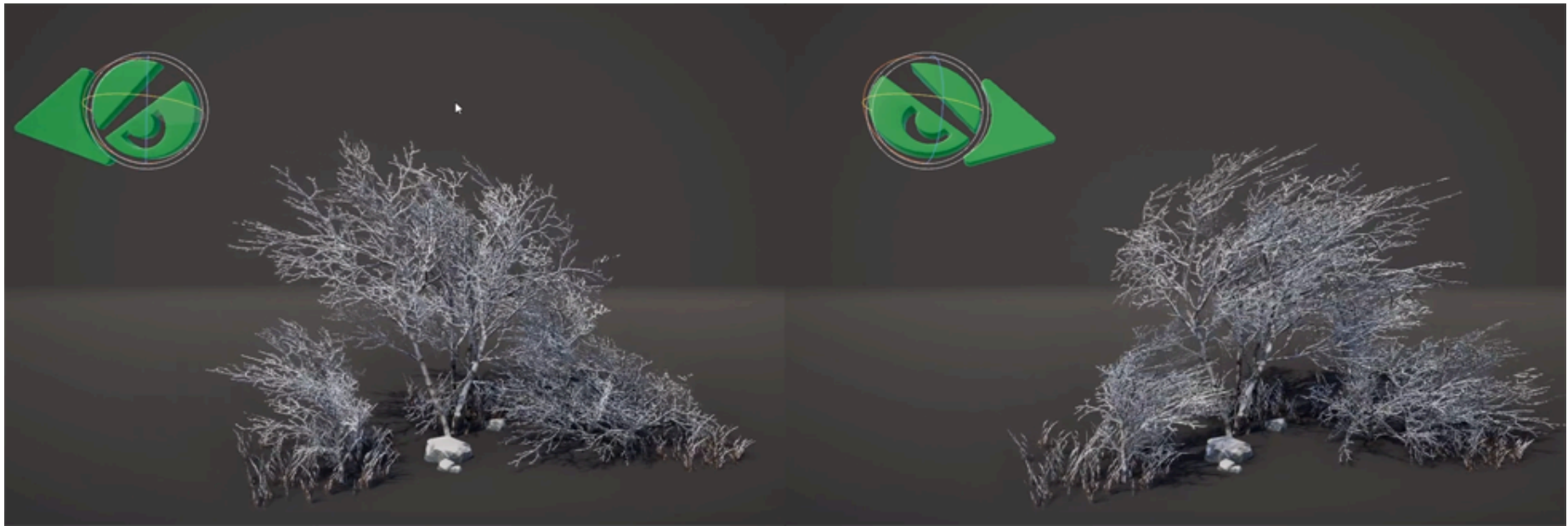
Global Snow/Moss/Sand

Using the AG Global system you can globally adjust the snow amount on trees, grass and props. You can control snow/sand/moss amounts individually for each scene without changing the base mesh material.

Global Snow for Props		
Snow Props Intensity		0
Snow Props Offset		0.5
Snow Props Contrast		1

Global Snow for Props		
Snow Props Intensity		1
Snow Props Offset		0.5
Snow Props Contrast		1

Global Snow for Props		
Snow Props Intensity		1
Snow Props Offset		1
Snow Props Contrast		1

Global Tint Color

You can add Tint Color on the vegetation shaders. The color must be added locally on the vegetation material. Tint Color is applied based on the Noise Texture from the AG Global system. Also, you can adjust the tiling and contrast for the noise texture.
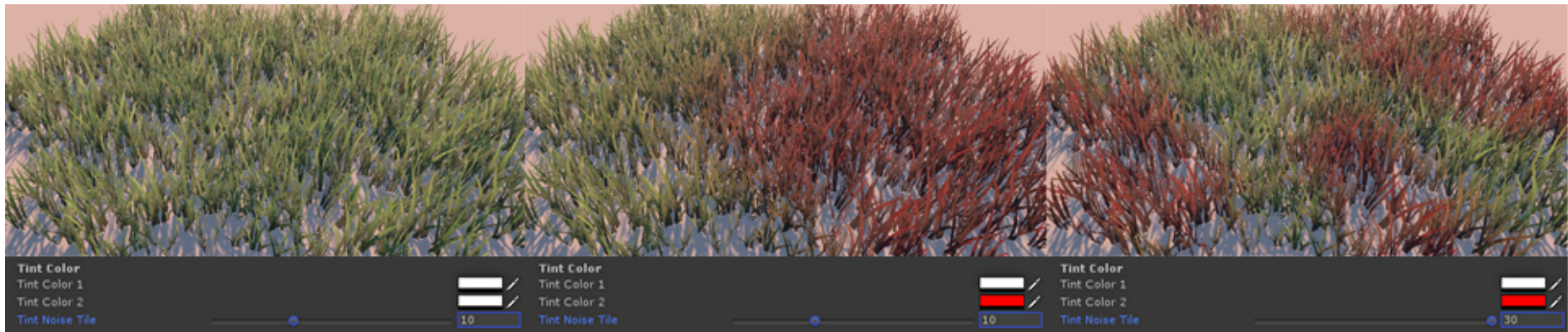
Tree Settings

In tree settings, you can find the global parameters for AO/Translucency Intensity and Distance.
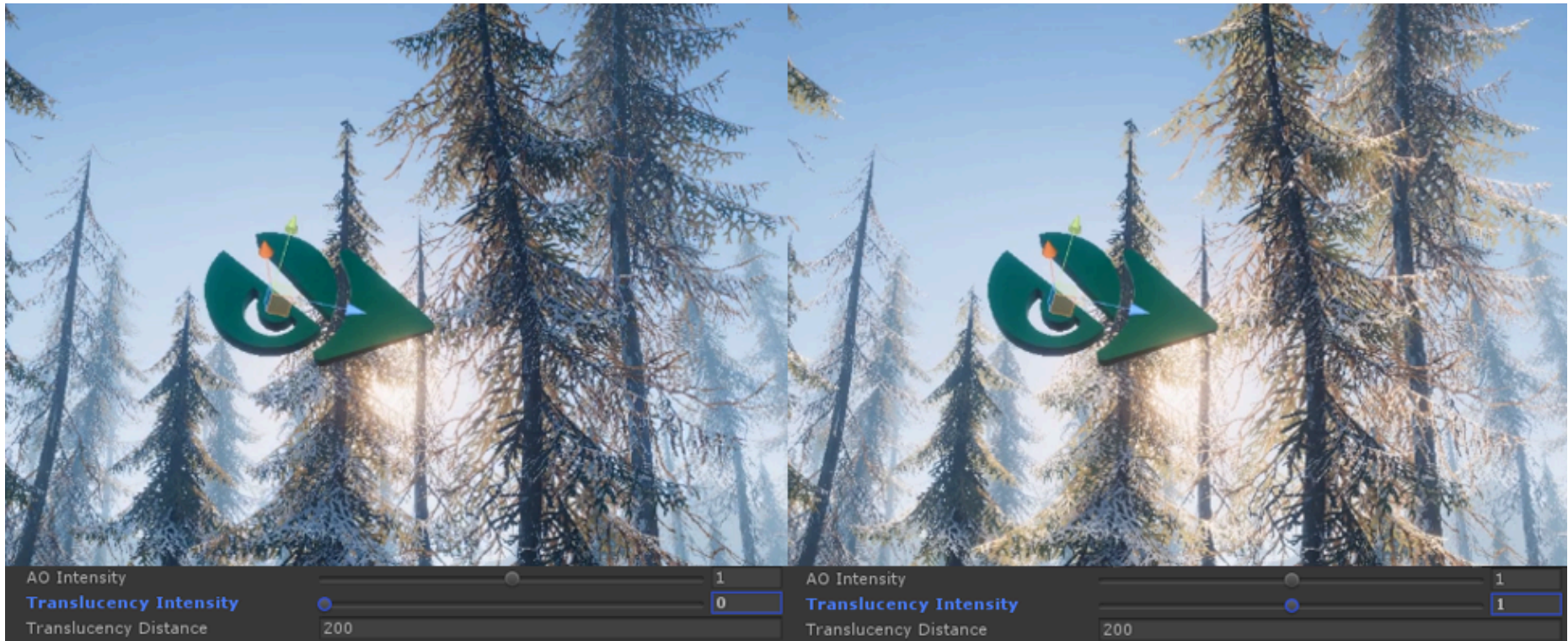
Important

You must keep one of the AG Global Settings or AG Global Snow (Limited) prefabs in each scene. When you create a new scene, make sure that you have an AG Global prefab in your scene.

Use only one AG Global prefab in your scene. Multiple AG Global prefabs are not supported.

AG Global system works only with Nature Packs by ANGRY MESH.
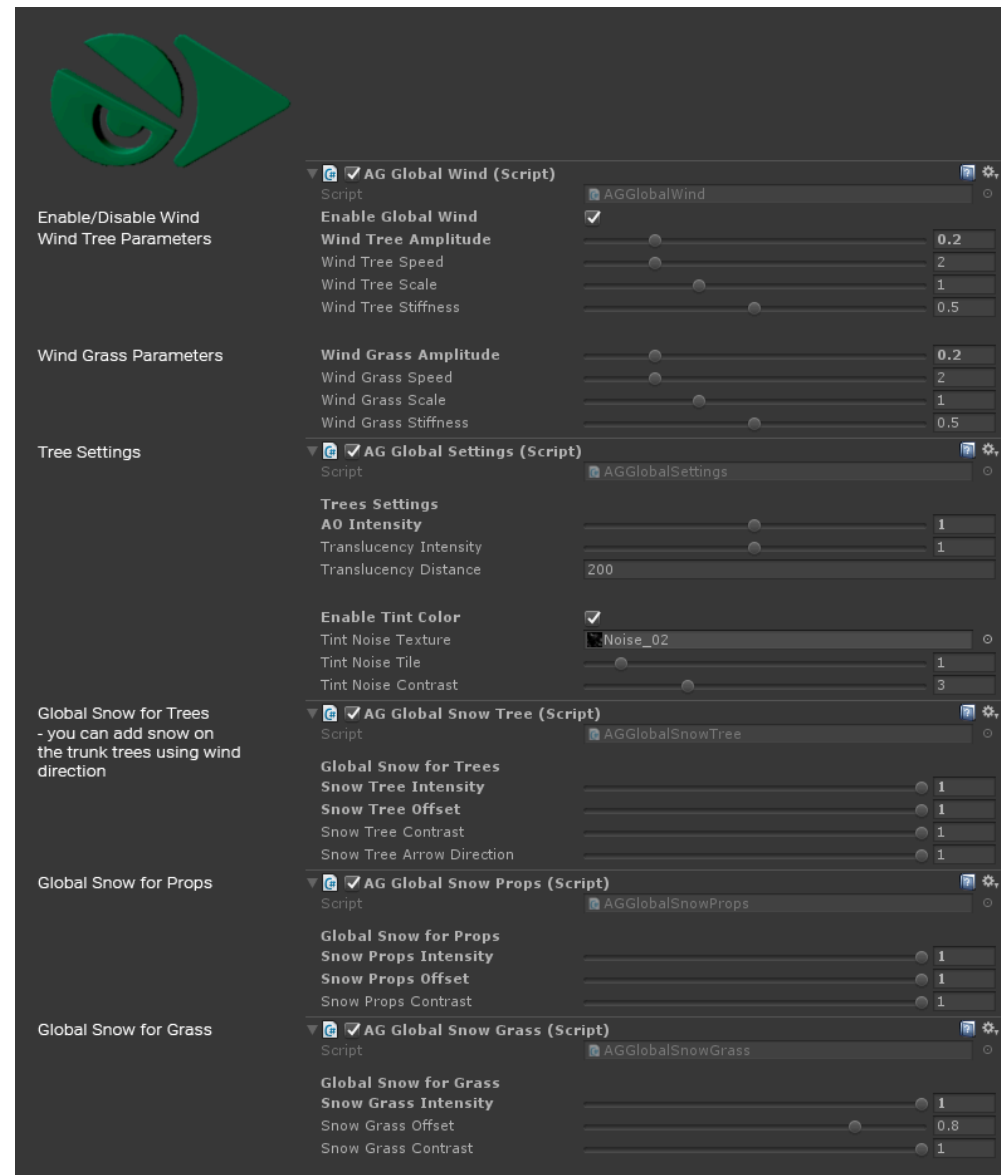
AG Global Snow Limited

AG Global Snow (Limited) is a limited version that offers only some of the features available in AG Global Settings.

- Use AG Global Snow if you own only the PBR Rocks package.
- Use AG Global Settings if you have any other Nature packages, such as **Winter Environment**.

AG Global Settings

AG Global Wind (Script)

Script	AGGlobalWind
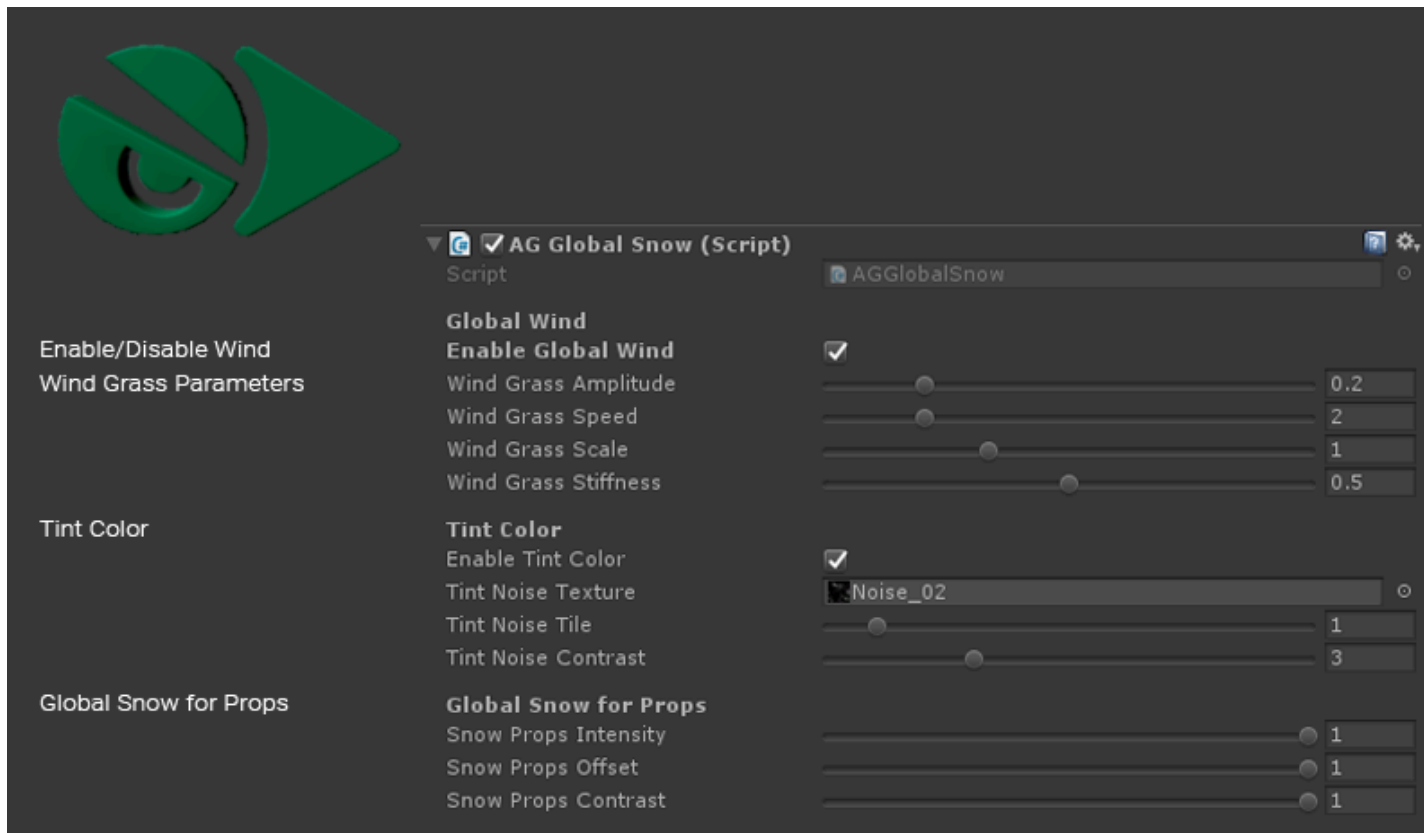
Enable/Disable Wind
Wind Tree Parameters

Enable Global Wind	☑	
Wind Tree Amplitude		0.2
Wind Tree Speed		2
Wind Tree Scale		1
Wind Tree Stiffness		0.5

Wind Grass Parameters

Wind Grass Amplitude		0.2
Wind Grass Speed		2
Wind Grass Scale		1
Wind Grass Stiffness		0.5

Tree Settings

AG Global Settings (Script)

Script	AGGlobalSettings

Trees Settings

AO Intensity		1
Translucency Intensity		1
Translucency Distance	200	

Enable Tint Color	☑	
Tint Noise Texture	Noise_02	
Tint Noise Tile		1
Tint Noise Contrast		3

Global Snow for Trees
- you can add snow on
the trunk trees using wind
direction

AG Global Snow Tree (Script)

Script	AGGlobalSnowTree

Global Snow for Trees

Snow Tree Intensity		1
Snow Tree Offset		1
Snow Tree Contrast		1
Snow Tree Arrow Direction		1

Global Snow for Props

AG Global Snow Props (Script)

Script	AGGlobalSnowProps

Global Snow for Props

Snow Props Intensity		1
Snow Props Offset		1
Snow Props Contrast		1

Global Snow for Grass

AG Global Snow Grass (Script)

Script	AGGlobalSnowGrass

Global Snow for Grass

Snow Grass Intensity		1
Snow Grass Offset		0.8
Snow Grass Contrast		1

03 | PROJECT STRUCTURE

Nature Pack - PBR Rocks

```
▼ 📁 ANGRY MESH
  ▶ 📁 Nature Pack - Common
  ▼ 📁 Nature Pack - PBR Rocks
      📁 Ground Textures          - Textures used for terrain ground and top blend rocks
      📁 Particles                - Textures, materials and prefabs for particles
    ▶ 📁 Post-Processing          - Post Processing Profiles used in trailer/screenshots
      📁 Prefabs Nature           - Prefabs for Plants/Grass/Roots
    ▼ 📁 Prefabs Rocks Desktop    - Prefabs for high version
        📁 Moss Rocks
        📁 Sand Rocks
        📁 Snow Rocks
        📁 Terrain Detail Unlit   - Unlit shader rocks that you can use with the terrain tool
    ▼ 📁 Prefabs Rocks Mobile     - Prefabs for low version
        📁 Moss Rocks
        📁 Sand Rocks
        📁 Snow Rocks
        📁 Terrain Detail Unlit   - Unlit shader rocks that you can use with the terrain tool
      📁 Scenes                   - 3 demo scenes
      📁 Shaders                  - Old custom shaders
      📁 Skybox                   - Skyboxes used in demo scenes
    ▼ 📁 Sources                  - The sources for all prefabs
        📁 High Meshes            - Meshes for high version
        📁 Low Meshes             - Meshes for low version
      ▼ 📁 Materials              - All materials
          📁 Moss Rocks
          📁 Nature
          📁 Sand Rocks
          📁 Snow Rocks
          📁 Terrain Detail Unlit
        📁 Terrain Layers         - Terrain layers used with new terrain system
        📁 Textures               - All textures including Detail textures
      📁 SRP                      - HD and LW SRP Templates
```

Notes

- All rocks from the *Prefabs Rocks Mobile* folder use the same atlas as the basic texture. This allows you to considerably reduce the number of draw calls. It is recommended to use these prefabs if you have chosen to make a Mobile game.
- In the high version, the big rocks use a 4k texture and medium/small rocks are mapped two or more in a 4k texture.
- There are 3 variants of rocks. With moss, with sand and snow. Each rock uses the same basic texture in all three variants. The difference is that they are blended with different textures and have different properties on materials, depending on the environment.

- We have in plan to launch more Nature assets in the future. We created the "Nature Pack - Common" folder to keep all common files in one place. This allows you to reuse scripts, shaders and functions in all packages from the Nature Pack.

- In the Nature Pack - PBR Rocks folder, you can find the folders that are only used in this pack.

Nature Pack - Common
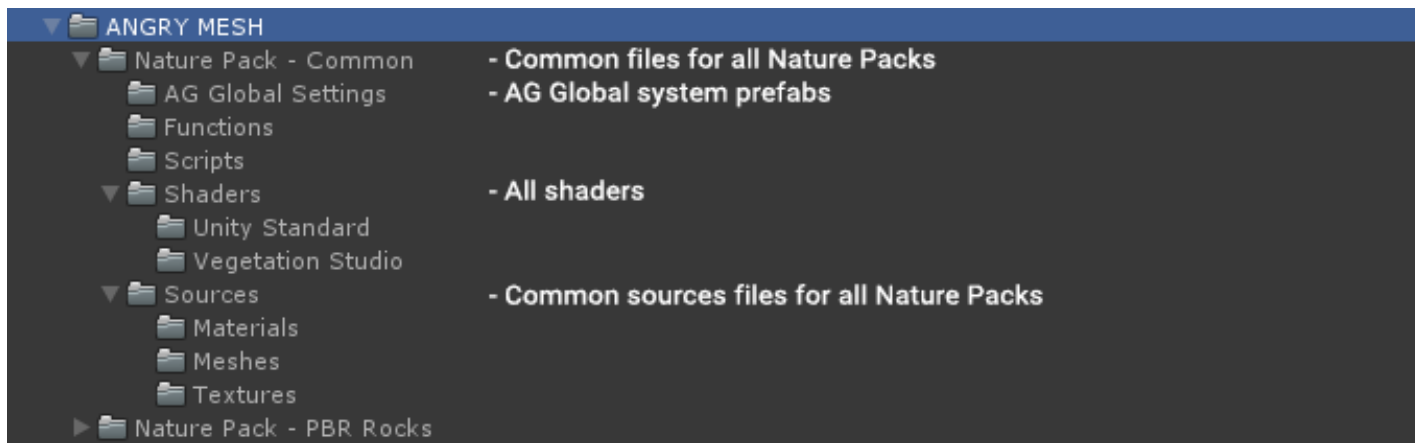
04 | SHADERS

Shader | Grass Shaders

Clover

Shader | ANGRYMESH/Nature Pack/Standard/Grass

Alpha Cutoff   0.5

Base Parameters   **Base**
                             Base Smoothness   0.2
                             Base Color
                             Base Bottom Color
                             Base Bottom Offset   2.5
                             Base Albedo (A Opacity)

                                                               Select

                             Base Normal Map

                                                               Select

Local Tint Color Parameters   **Tint Color**
- you can find the global   Tint Color 1
parameters in AG Global   Tint Color 2
system.   Tint Noise Tile   10

Translucency   **Translucency**
                                  Strenght   2

Local Wind Parameters   **Wind**
- you can find the global   Wind Amplitude   0.2
parameters in AG Global   Wind Speed   2
system.   Wind Scale   10
                                  Wind Grass Stiffness   1

                                  Render Queue   From Shader   2450
                                  Enable Instancing   ☑

Shader | Detail Props Snow

Rock_02_Moss
Shader | ANGRYMESH/Nature Pack/Standard/Detail Props Snow ▾

Base Parameters

Base
Base Smoothness ——————————●———— 0.541
Base AO Intensity ————●———————————— 0.249
Base Normal Intensity —————————●———— 1
Base Color [   ] ✎
Base Albedo (A Smoothness)

Select

Base NormalMap

Select

Base AO (A NoiseMask)

Select

Top Parameters
- you can find the global parameters in AG Global system.

Top
Top Enable Noise ☐
Top Noise UV Scale ————●———————————— 4.31
Top Smoothness —————————●———— 0.484
Top UV Scale ——●————————————————— 5
Top Intensity ————————————————●— 1
Top Offset ——————————●———————— 0.575
Top Contrast ——————●———————————— 0.53
Top Normal Intensity —————————●———— 1.23
Top Color [   ] ✎
Top Albedo (A Smoothness)

Select

Top NormalMap

Select

Detail Parameters

Detail
Detail UV Scale ——●——————————————— 2
Detail Albedo Intensity ——————————●——— 0.613
Detail NormalMap Intensity ●————————————————— 0.025
Detail Albedo

Select

Detail NormalMap

Select

Shader | Examples

SHADER | **COLOR** | **TOP COLOR**

SHADER | **TOP INTENSITY**

Shader | Notes

- You can change the shaders on the rocks, depending on the project requirements you are working on. For desktop, you can use the shaders from ANGRY MESH > Nature Pack - Common > Shaders > Unity Standard.
- As against the desktop version, for mobile you can use the shaders with "*BP*" at the beginning, these shaders use Blinn-Phong lighting and have AO texture applied over Albedo. You can find this in shaders in ANGRY MESH > Nature Pack - PBR Rocks > Shaders. The mobile versions of the shaders are compatible only with the standard version of unity.
- BP Shaders support SM2, except on DirectX 9

Reminder
You must keep one of the AG Global Settings or AG Global Snow (Limited) prefabs in each scene.
Use only one AG Global prefab in your scene. Multiple AG Global prefabs are not supported.
AG Global system works only with Nature Packs by ANGRY MESH.

06 | CONTACT & SUPPORT

To stay updated on our upcoming asset releases, make sure to join our [Discord](#) server! If you have any questions, feel free to reach out to us on the support channel in Discord or via Email. We're always happy to help!

- **Discord**: https://discord.gg/DsSR9Vv8bv
- **Email**: contact@angrymesh.com

- **Youtube**: https://www.youtube.com/@angrymesh1059
- **Twitter**: https://x.com/ANGRY_MESH
- **Facebook**: https://www.facebook.com/ANGRYMESH

- **Unity Asset Store**: https://assetstore.unity.com/publishers/32104

- **Unreal Fab**: https://www.fab.com/sellers/ANGRY%20MESH