[未知的寄生巢]

ARTIFICIAL CELLS

DOCUMENTATION V.1.0

INTRODUCTION

Thank you very much for buying ARTIFICIAL CELLS Packs. This packs was created from scratch inspired on **natural patterns of real cells**, mixing various **exotic plant and animals** species from the world and **strange caves locations**, the result is a pretty **strange mutations** that can be used for **create unique sci-fi atmospheres** for your projects.

You can acquire all the assets with the **Complete Pack** or 3 different lite version: **Vegetation Pack**, **Rocks and Caves Pack** or **VFX-SFX Pack** depends on what kind of assets you are looking for.

You can check the entire online documentation here:

https://docs.google.com/document/d/10y8Gb7m-SVFfnEEoQwa-2dHg_D6ttPu4EJQ1x-yqbGc/

ARTIFICIAL CELLS: Complete Pack

The Complete Pack includes all the assets of the other lite versions of Artificial Cells.

if you already have purchased one of this lite version and you want the full version I strongly recommend you to buy the left lite versions that you don't have to **automatically upgrade** to the Complete Pack.
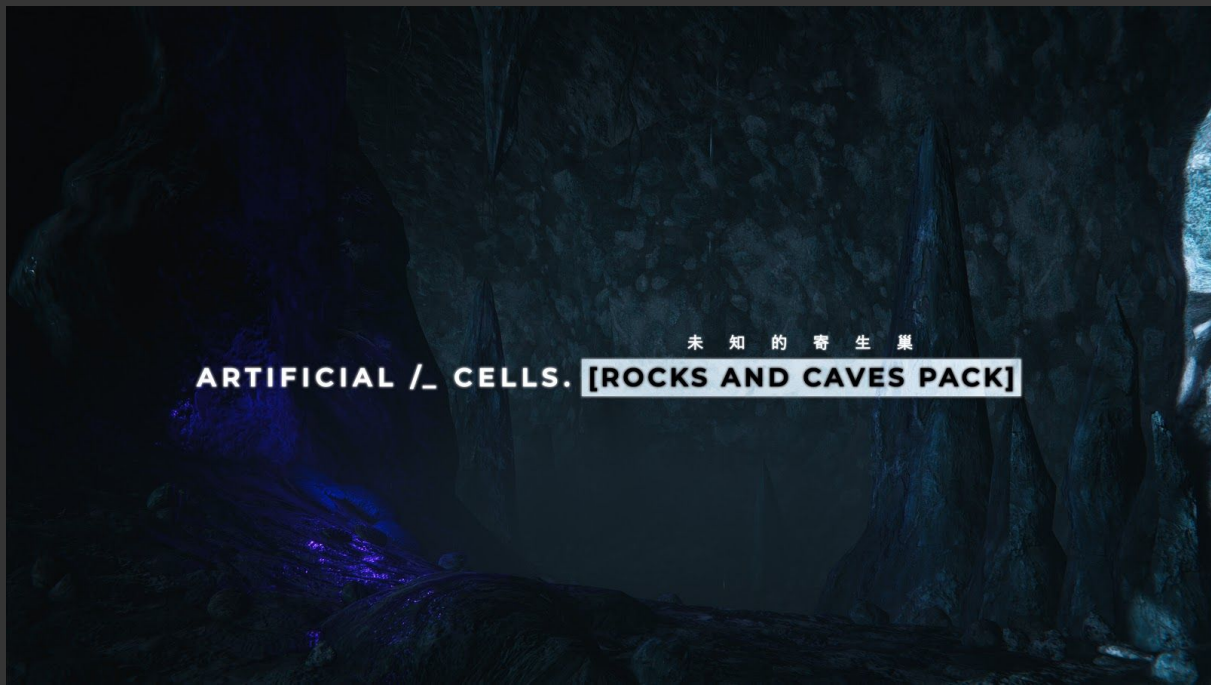
ARTIFICIAL CELLS: Vegetation Pack

This pack contains all the scripts, models, shaders and materials for the plants, trees, bushes, lianas and fruits.

This pack use **custom shaders** for bark and leafs to achieve translucency, color variation, wind effect and more features.

Check the details about setup and compatibility in the **First steps** section bellow.

ARTIFICIAL CELLS: Rocks and Caves Pack

Rocks and Caves Pack contain models, textures and materials for the rocks, stones and caves.

All the prefabs of this pack have assigned a "**Level-Design**" material so you can design your level first and then assing later the materials you want **just dragging and dropping** from the project tab to your objects on the scene or hierarchy tab.

This allows you to **create thousands of combinations and variants** to your scene.
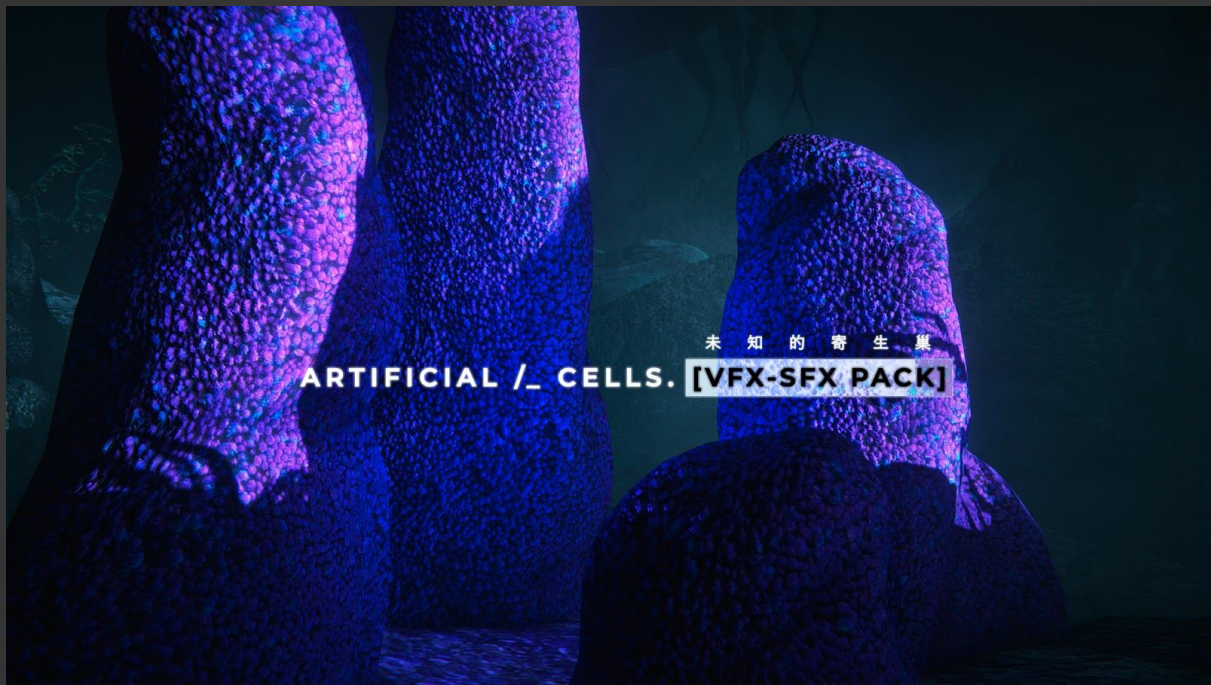
ARTIFICIAL CELLS: VFX-SFX Pack

This pack contains various Particle Systems, 3D audio sources, Reverb zones and loop ready audio clips for **increase the inmersion and ambient atmosphere quality** of your scenes.

You can edit of create more variants of the Audio Sources and Particle Systems.

Also this pack contains galaxies and caves **Skybox** materials and **post-processing profiles**!

TECHNICAL DOCUMENTATION INDEX

1: First steps

To be able to import resources it is not necessary to have a new project. Just go to **Assets** -> **Import Package** -> **Custom Package** or import directly from the **Asset Store**.

This asset needs **Linear** color space and **Deferred** rendering path to work well, you can change this options on **Project Settings** -> **Player** -> **Other Settings** -> **Color Space** and **Project Settings** -> **Graphics** -> **Tier Settings** -> **Rendering Path**.

IMPORTANT: Compatibility

ARTIFICIAL CELLS: Rocks and Caves Pack use only unity standard material shader so it **is compatible with all the pipelines and unity versions**. In order to build the Metallic/Roughness/Specular workflow we provided the original Roughness and Metallic maps and a "**Non-Metallic**" map texture in **Artificial Cells** -> **Textures** -> **Shared** folder for build your own channel mixed textures.

ARTIFICIAL CELLS: VFX-SFX Pack use only unity standard surface particle materials shaders so it **is compatible with all the pipelines and unity versions**, But maybe you need to make some manual adjust like switch shaders and modify material properties depends on your Unity version and/or Render Pipeline in order to make this look and work well. This materials can be found **Artificial Cells** -> **Materials** -> **VFX-SFX-Pack** the changes can be visible in realtime and the prefabs going to be automatically updated as well.

ARTIFICIAL CELLS: Vegetation Pack is fully compatible with **Built-in Render Pipeline**, in order to use it on **Lightweight Render Pipeline** / **Universal Render Pipeline** / **High Definition Render Pipeline** you can test the **SRP-BETA** Shaders in **Artificial-Cells** -> **Shaders** -> **SRP-BETA** folder depends on your unity project version. But at the moment **SRP compatibility still in beta so be carefull**.

HDRP: 4.10 / 5.7.2 / 5.16.1 / 6.9.1 / 6.9.2 / 7.1.6

LWRP: 4.10 / 5.7.2 / 5.16.1 / 6.9.1 / 6.9.2 / 7.1.6

URP: 7.1.6 / 7.1.8

If HDRP / LWRP / URP doesn't work and common mistakes

Be sure to download the **correct supported SRP Version**. Be sure you've downloaded all the **SRP dependency files** from the <u>Package Manager</u>! Be sure to **switch to linear** Space color when using HDRP.

2: Demo Scenes

You can try the different scenes that are included in this pack to have a reference of how they can be used to generate different atmospheres in different scenarios. To be able to appreciate them better, you must have <u>Post Processing Stack V2</u> installed (see more details in the <u>Third Party Assets section</u>).

Prefabs-Viewers

In Prefabs-Viewers scenes the grid prefabs are shown. A more practical way to take a look at the whole pack or choose your favs, the lighting is quite cold for match with some sci-fi atmosphere. Also **you can read some extra text information of the assets in this scenes**.

Showcase

This scene is designed to show how **all the packs can work together** in order to create an complex scene scenario, the density of the vegetation and rocks are quite high so it is not totally suitable for gameplay on low tier devices, but to achieve a very realistic look, the **lighting simulates otherworldly planet or satellite illumination conditions like a moon surface**.

3: Third-Party Assets

This pack includes some **presets** that can be used with other assets available in the Unity Assets Store. to use them it is **necessary to have previously installed versions compatible with these presets**. (We are working on new presets for other assets for purposes that will be included in future releases).

Post Processing Stack v2 Profiles

Post-processing profiles contain the touch-up seen in the sample scenes, it is necessary to have **Post Processing Stack v2** installed from **Windows -> Package Manager** to maximize its compatibility. Also included here are some extras such as **Cookies** for flashlight spotlights and textures for the **Lens-Dirt** effect in post processing.

Mtree (Source)

If you have purchased **Mtree** you can import the profiles included in this folder to edit the contents of **ARTIFICIAL CELLS: Vegetation Pack** at your leisure or create new trees based on them, **it is highly recommended to do this in a dedicated project** and then import the resources to the desired one (to know how to edit with Mtree, go to the respective documentation).

4: Working with LODs

The prefabs in **ARTIFICIAL CELLS: Vegetation Pack** make use of the <u>Unity LODs System</u>, these are pre-configured to work with a **LOD Bias: 2** and **Maximum LOD Level: 0**. You can edit these configuration settings in **Project Settings** -> **Quality** -> **Others**.

Editing Prefabs with LODs

In certain cases and depending on the configuration of each project, it may be necessary to edit the LODs of the prefabs, you can access this option from the "<u>LOD Group</u>" component located in each prefab. In turn to access the models you can go to the folder **Artificial Cells** -> **Models** -> **Vegetation-Pack** there you will find extra less polygonal variants that were not used.

5: Prefabs

The Prefabs are located in the **Artificial Cells** -> **Prefabs** folder where you will find subfolders that divide the content according to their Package or content type (Rocks-and-Caves-Pack/Vegetation-Pack/VFX-SFX-Pack). Is important to know that **prefabs are using variants by the new nested prefabs workflow introduced officially on Unity 2018.3 release**.

Rocks-and-Caves-Pack/Caves, Rocks, Stones subfolders

Contain the rocks, caves and stones base models with the **level-design.mat**.

Rocks-and-Caves-Pack/Ground-Surfaces

Here are some <u>Terrain Layers</u> to use on your own terrains, **specially useful for blend terrain surface with the Rocks and Caves** Pack content (check the Showcase scene example).

Vegetation-Pack

Contain all the bushes, fruits, lianas, plants and trees **variants**.

VFX-SFX-Pack/VFX

Contain the **particle effects** prefabs for bubbles, falling stones, fireflies, fluid leaks, gas leaks, mist, rain, underwater and waterfalls.

VFX-SFX-Pack/SFX

Contain the **audio source** prefabs for caves, bubbles, falling stones, fluid leaks, gas leaks, rain, underwater and waterfalls. Also it contains **audio reverb zones for simulate cave and outdoor acoustic**.

VFX-SFX-Pack/Skyboxes

To help with the ambient lighting and reflections of your scenes you can use a skybox of the several available with drag and drop from the **Lighting tab** -> **Skybox Material** then pressing **Generate Lighting** button above the window.

Vegetation-Pack/Wind-Zones

ARTIFICIAL CELLS: Vegetation Pack works with the **Unity Wind Zone** component in conjunction with the "**Mtree Wind**" component. 3 wind presets for vegetation are included in this pack: **Breeze** (quiet) / **Windy** (normal) / **Storm** (strong). You only need to delete from your scene any Wind Zone that you have previously and drag and drop within your scene one of the 3 presets to achieve the wind effect, these can be modified in real time via script to adjust its direction and intensity.

6: Change Log

-   First Release.

7: Known Issues

-   We noticed that "Falling Rocks" Particle systems produce (in some Unity versions) the next error:

    "Assertion failed on expression: 'task.computeData.buffer == NULL' UnityEngine.GUIUtility:ProcessEvent(Int32, IntPtr)"

    As We can see this error is a editor one that involve Particle System with renderer mesh mode based systems and trail renderer that are supposed fixed on old versions of unity but this issue is replicated in various new unity versions since 2018.. There is no apparently solution for that than not use mesh mode particles.

So if you get this error please don't use this prefabs, until we found a fix for that!

8: Contact

If you find some errors, suggestions or need a new customized pack of vegetation you can contact me at: **alexanderelert@outlook.com**

Check my other assets for sale on: https://assetstore.unity.com/publishers/46732

- I'm waiting to see your creations using the ARTIFICIAL CELLS Packs!