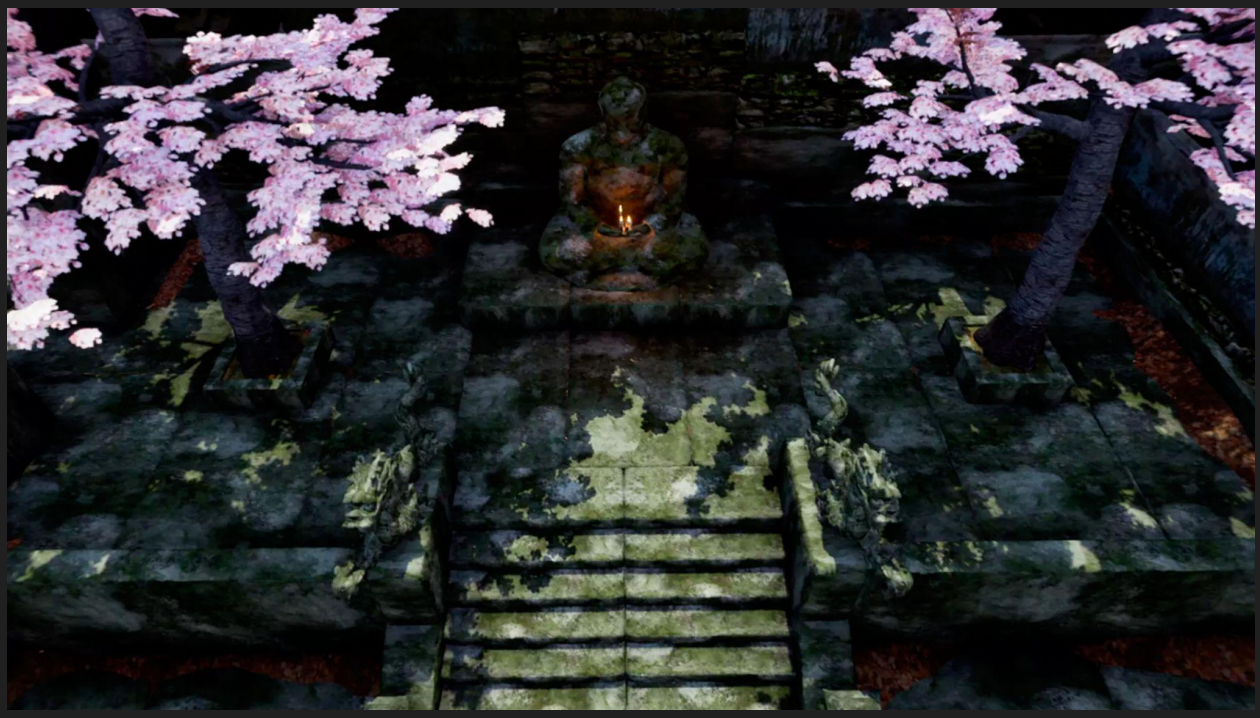
IMPORTANT UPDATE! // NEW DISCORD CHANNEL: https://discord.gg/NJZhZVY

CUSTOM VEGETATION PACK

JAPANESE GARDEN



Introduction

Thank you very much for buying **C.V.P - Japanese Garden**. This vegetation pack was created from scratch collecting references, textures and real sounds of various natural environments. The following will explain the main features and tips to get the most out of it.

// You can check the latest: online documentation version

1: First steps

Download and Import: Just go to **Windows -> Package Manager -> C.V.P - Japanese Garden** or import directly from the **Asset Store**.

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

IMPORTANT: Compatibility

This asset is fully compatible with **Built-in Render Pipeline**, **Universal Render Pipeline** and **High Definition Render Pipeline**. But only on the **LTS** more stable versions so **we don't garantie that will work on alpha or beta versions**.

This asset contains **.unitypackages** files with **pre-configured** content (materials, post processing profiles, demo scenes, etc) for some of common LTS and API versions. Otherwise **DEC Shaders** and **DE Core** scripts can work with a lot of more Unity and API versions.

Note: All the **C.V.P (Custom Vegetation Packs)** from **Alexander Elert** are going to provide the same version of **DE Core** from **DE Environment** (thats include DEC Shaders and DE Core Scripts like Global Controller) so will be **fully compatible between**. But is important to know this **DE Core version are going to be static (locked) for a long period of time**, so if you want to get the latest updates/bug fixes/new features of DE Environment you need to **purchase the asset** at the Unity Asset Store and then **make the manually required adjustments** on C.V.Ps.

Supported Render Pipelines (C.V.P Pre-Configured Content):

Standard Render Pipeline (**Standard**): Unity 2019.3 or higher

Universal Render Pipeline (**URP**): 10x

High Definition Render Pipeline (**HDRP**): 10x

Supported Render Pipelines (DEC Shaders):

Standard Render Pipeline (**Standard**): Unity 2018.04.20 or higher

Universal Render Pipeline (**URP**): 7x // 8x // 10x // 11x

High Definition Render Pipeline (**HDRP**): 7x // 8x // 10x // 11x

If HDRP / 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 **Package Manager**.

IMPORTANT: Æ Manager

Once you get read the previous information you are ready to setup and import the packages to get it perfectly working. This will be easily done with the **Æ Manager** (just a few clicks), please read the **dedicated documentation** for it!

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.

Note: To be able to appreciate them better in the standard render pipeline, you must have **Post Processing Stack V2** installed (see more details in the **Third Party Assets section**).

Prefabs Viewer

In **Prefabs Viewer** a **grid prefabs** are shown. A more practical way to take a look at the whole pack or choose your favs, the lighting is quite standard simulating a **sunny day** outdoors.

Ancient Temple

This scene is designed to render cinematics, the density of the **vegetation is quite high** so it is not suitable for gameplay at all, but to achieve a very realistic forest, the lighting simulates something more similar to near the **sunset** than **Prefab Viewer**.

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.

Google Fonts

Some fonts files are included in the pack, they are **open source** free fonts from **fonts.google.com** they can be used with **Text Mesh Pro** or unity built in text.

4: Working with LODs

The prefabs in Japanese Garden make use of the **Unity LODs System**, 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 "**LOD Group**" component located in each prefab. In turn to access the models you can go to the folder **AE Alexander Elert -> C.V.P - Japanese Garden -> Assets -> Meshes**.

5: Prefabs

The Prefabs are located in the **AE Alexander Elert -> C.V.P - Japanese Garden -> Assets -> Prefabs** folder where you will find subfolders that divide the content according to their type.

Oceanic-Rocks

This contains all the **rocks**.

Ground-Surfaces

This contains **terrain layers** examples ready to use in **unity terrain**.

Particles

This contains the **particle systems**, note you probably need to adjust the shape size depending on your needs also colors, lifetime, etc.

Props

This contains the **Temple** and **Ground Covers**, such as statues, walls, concrete blocks, etc.

Props > Temple > Customs

This contains some prefab examples created with the **Temple** models like tunnels, bridges, etc.

Sounds

This contains the **ambient sounds** for spread around your forest areas.

Vegetation > Billboard Fast Clusters (WIP)

It contains billboard versions of trees to **populate far away zones of your scene and add a lot of density without losing performance**, in future we will add some vegetation clusters with an **impostors** approach on this folder.

Vegetation > Plants

This contains small / medium plants to populate the ground of your forests, like **young trees**, **bushes**, **ferns**, etc.

Vegetation > Trees

This contains big / very big / ancient trees to populate your forests, these are the **most expensive trees to render** in polycount so be careful populating your scene with the most big ones.

About 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 the **Generate Lighting** button above the window.

6: Physics Prefabs

Probably you are notified that some prefabs have **Rigidbody** and **Mesh Collider** components attached to it. The idea behind this is to position the objects on the surface in a realistic and easy way, emulating at some point the technique seen in the **Book of the Dead - Uber Tree Spawner.** Once the desired result is obtained, both components of these objects in the scene must be eliminated to reduce the consumption of GPU and CPU.

Note: for this we develop a tool called "**Æ G.O Simplifiers**" in the **AE Core**, you can learn more about this in the Æ Core Documentation **AE Alexander Elert -> AE Core**.

7: Tips and Tricks

Some helpful ideas to improve the graphics, performance and level design.

Object Placement Tool

To take advantage of **Physics Prefabs** it is highly recommended to use this tool, which is available at the following **link** of the asset store.

By setting a **Y (up) Offset to 1** you can spawner small objects to cover the surface realistically.

Several **Ground Details** prefabs use a single **material** so they can take advantage of the **Combine Mesh** tool for **meshes**, grouping and combining them to dramatically reduce the number of **drawcalls**.

Reduce Shadow Distance

It is a good practice to limit the distance of the shadows as much as possible in scenarios with high density of objects such as forests, since you will not be able to see too much in the distance anyway. You can access this from **Project Settings -> Quality -> Shadow Distance**.

Occlusion Culling

Use walls, terrain elevations or other obstacles on your stage to **reduce the amount of objects rendered per frame**, making efficient **Occlusion Culling** bake.

Note: for **reducing the flickering popping** by Culling data is not recommended to set all the vegetation and small details to **Occluder Static**, just **Occludee Static** in game objects properties.

Use far Fog

It is useful for simulating **shadows** and **ambient occlusion** or **volumetric light** from distant areas of the forest. Set subtle values and colors that integrate well with your scene. **This technique helps compensate for the loss of quality** by adjusting the Shadow Distance mentioned above. Be sure to check your camera's Post Processing Layer option: **Deferred Fog -> Exclude Skybox** to prevent the fog from covering your sky.

9: F.A.Q (Frequently Asked Questions)

Can I use other C.V.Ps like Eucalyptus Forest or Pine Woods together with Japanese Garden?

Yes. You can purchase and use together all the others C.V.Ps with **C.V.P - Japanese Garden** All you need to do is have the same update version upon **v3.0**.

I purchased the DE Environment can I use C.V.Ps with it?

Yes. As we mention before **you can use the newest versions available** of **DE Environment** including **DEC Shaders** anytime, just need to be careful reading the **change logs** of it and **making the update by your own**.

Note: C.V.Ps are 90% models and textures packs so **technically you can use it with any other third party assets**.

10: Change Log

- v1.0.0 (First Release).
- v2.0.0 (Upgrade to DE Environment).
- V3.0.0 (Added new DEC Shaders / Scripts / All Textures Optimized / Etc).

11: Known Issues

- **Visible transparent leaves artifacts (partially solved)**: when you are using DEC translucent shaders together with **deferred** effects like HBAO / Post Processing: Ambient Occlusion / SSR you will notice some transparent leaks on these materials. **HBAO (Horizontal Based Ambient Occlusion)**: you need to use the **after lighting** or **before reflections** pipeline stage.

  Post Processing: Ambient Occlusion: You need to uncheck **Ambient Only** mode.

  Post Processing: Screen Space Reflections: This effect is **not compatible** now.

12: Contact

Thank you for reading this documentacion. If you find some errors, suggestions or need a customized vegetation pack you can contact me at: **alexanderelert@outlook.com**

Join my Discord community for fastest support and check the WIP of upcoming content!

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