

CLUMSY VALLEY WHITE PAPER 1.0

Farming & Land



CLUMSY
STUDIOS

Abstract

Clumsy Valley built by Clumsy Studios is a browser-based and mobile ready Play-To-Mint utility ecosystem. Initially, the Valley is made up of 10,000 Land Plot NFTs, viewable in a fully-interactive isometric map. Users are able to lock their Clumsy Ghosts NFTs and their Clumsy Valley Land Plot NFTs in Clumsy Valley to participate in the ecosystem. The primary function of the Valley is for users to place their Ghost NFTs on Land Plot NFTs to trigger a staking-like farming mechanism in which fully off-chain, in-game materials are generated and rewarded to the users' in-game Clumsy Valley accounts via Loot Boxes. Users can use the rewarded off-chain materials in the Clumsy Valley Crafting mechanism to mint new NFTs.

The new NFTs can then be either used in various ways throughout the Valley including in future gaming plug-ins, or can be combined with other Valley NFTs in the Valley Crafting Mechanism to mint fully upgraded and customizable NFTs. Because the user is Crafting (minting) NFTs, the user verifiably owns the Valley NFT items entirely and can do with them as they please. This includes, but is not limited to growing a collection, actively using the NFTs in the Valley, or selling them on secondary markets. Clumsy Valley's Play-To-Mint Utility Model exists as a gamified alternative to the traditional NFT Minting process, giving users the ability to use their Ghost and Land Plot NFTs as tools to play a farming/staking-style strategy game with the end goal being to mint new NFTs that give new utility to the owner.





Introduction

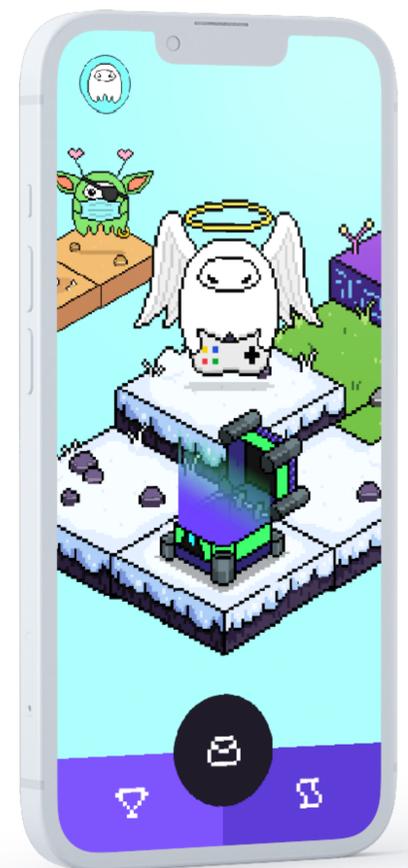
This portion of the Clumsy Valley Whitepaper 1.0 covers the entirety of the Land and Farming mechanisms of the Valley. Crafting plays a pivotal role in the overall function of the ecosystem and will be covered at length in another portion. The initial Turn-Based Battling Game will also be covered at length in future portions of the Whitepaper. Clumsy Studios is progressively building the Valley in phases with the initial Land sale and Farming phase set to launch around September of 2022. As it stands, the final and all-inclusive version of the Whitepaper will be released prior to the launch of Phase 1 of Clumsy Valley.



Clumsy Valley Browser / Mobile App

Clumsy Valley is playable on both a Browser-Based Platform and on a Mobile App on iOS and Android. Users can make a Clumsy Valley Account and connect their Cardano Wallet to their account with the option to connect multiple wallets to a single Valley Account. In order to load the users' Ghosts and Land Plot NFTs into the Valley for use, users must interact with a Smart Contract, locking the assets in Clumsy Valley much like listing an NFT for sale on a secondary NFT marketplace. Removing any Clumsy Ghosts or Clumsy Valley Land Plot NFTs from a user's Clumsy Valley account back to a Cardano wallet is just like delisting an asset from a secondary NFT Marketplace and can be done at any time.

Users can use The Clumsy Valley Interactive Map Platform to explore all 10,000 Valley Land Plots and all the actively farming Clumsy Ghosts. The plots are arranged on various isometric floating islands and each Ghost and Land Plot pair will be interactive, allowing users to view farming status and other relevant details. The Valley App also includes a "My Island" feature which users can select to view the Land Plots and Ghosts they own, displayed as a private floating island above the rest of the Valley. Users can select which Ghosts they want to farm and on which Land Plots, harvest the farming rewards their plots have generated, manage upkeep on their Land Plots, and more.





Token

Clumsy Valley utilizes a central Clumsy Token. This token is entirely off-chain and only used for in-game utility. All NFT minting transactions will be done using \$ADA.

Users can earn Clumsy Token by trading farmable off-chain materials in the Clumsy Valley off-chain market. Users can also purchase Clumsy Token directly using Fiat or \$ADA similar to many Mobile App In-Game currencies.

An Off-Chain utility token makes for a lightning quick in-game trading economy, is independent of crypto market volatility, and acts as a valuable tool to onboard users from outside the crypto space. Utilizing \$ADA as the primary on-chain Token for minting transactions removes the necessity for users to ever convert a project token to \$ADA. All on-chain NFT buying/selling transactions can take place on external secondary NFT marketplaces, independent of Clumsy Valley.

Ghosts



Ghosts are required to farm materials from Clumsy Valley Land Plots. Placing a Clumsy Ghost on a Land Plot in the Clumsy Valley Interface triggers a staking-like mechanism in which the Land Plot generates off-chain, in-game materials rewarded in farming cycles via Loot Boxes. The manner in which materials are farmed is dependent on both the Land Plot and the Ghost.

Farming Skills

Ghosts are assigned Farming Skill Levels based on their individual unique attributes. The Farming Skills are as follows:



Luck - With an increased Luck skill, Ghosts receive an additional boost on their Loot Rolls. This means that higher luck leads to a higher chance of rolling for rare loot.



Speed - With an increased Speed Skill, farming cycles are shortened. This means that higher speed leads to more frequent loot box drops.



Stamina - With an increased Stamina Skill, Ghosts receive a higher overall material multiplier. This means that higher stamina leads to a higher total number of materials generated per farming cycle.



Smarts - With an increased Smarts skill, Land Plots require less upkeep and consumable items used on Land Plots or on Ghosts have a greater effect. (Example: Single Cycle usage Speed Boost Potion). This means that higher Smarts leads to less materials and/or less Clumsy Tokens required to upkeep a Land Plot, and any use of a consumable item will have an amplified effect.



All 195 unique Ghost attributes are assigned a Farming Skill and given a boost count based on the rarity of the attribute, with rarer attributes receiving a higher boost count.

Some attributes also receive an additional boost when paired with a specific Biome. Below is an example of the Backpack Attribute group.

*Stats subject to change.

Backpack	Quantity	Percentage	Boost Count	Stat	Biome	Biome Roll Modifier
None	3942	39.42%				
Dark wings	456	4.56%	+1	Speed	Scorched	+2
Angelic wings	452	4.52%	+1	Speed	Twilight	+2
Jetpack	412	4.12%	+2	Speed	Swamp	+2
Longsword	401	4.01%	+1	Stamina	Meadows	+2
Pickaxe	399	3.99%	+2	Stamina	Dunes	+2

The fully populated tables for all Ghost attributes are embedded in the Clumsy Valley Farming Calculator App as well as published in the Clumsy Valley Public Gitbook.

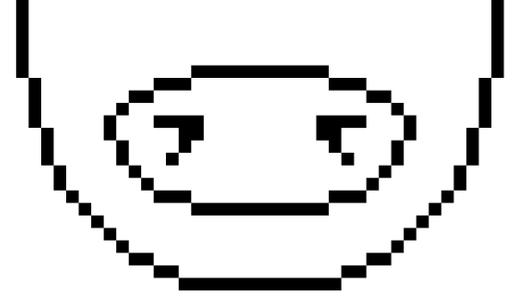


Rarity Multiplier

In addition to the 4 core Farming Skills, each Ghost is assigned an overall multiplier based on the Rarity Rank of the Ghost. This overall multiplier is applied to all 4 Farming Skills. Below is the table depicting what multiplier is applied to what level rarity Ghosts.

Rank	Multiplier
1	3
2-100	2.25
101-250	2.125
251-500	2
501-1000	1.75
1001-2500	1.5
2501-5000	1.25
5001-10000	1.125





Special Abilities

Rank #1 Clumsy Ghost: Mayor of Clumsy Valley - The #1 ranked Ghost will receive a +10 Boost Count in all 4 Farming Skills. Additional Special Ability TBD.

RGB/Pastel: RGB Ore - Ghosts with the RGB Body Attribute + Pastel Backdrop Attribute will have an additional Loot Roll for RGB ore. This Loot Roll ability lives with the Ghost no matter what Land Plot it is currently Farming. RGB Ghosts also get a 10% Overall Increase in all 4 Farming Skills.

Hide Me: Invisible Ore - Ghosts with the Hideme Special Interaction will have an additional Loot Roll for Invisible ore. This Loot Roll ability lives with the Ghost no matter what Land Plot it is currently Farming. Hideme Ghosts also get a 9% Overall Increase in all 4 Farming Skills.

Viking Helmet: Pillage - Ghosts with Viking Helmet hat attributes receive additional farming rewards dependent on the 4 adjacent plots. At each farming snapshot, the Ghost will receive 2.5% of the total raw materials of each of the 4 surrounding plots' most recent Loot Box, totalling a roughly 10% increase in material generation per farming cycle. This includes the opportunity to pull material from Land Biomes other than the Biome the Viking is farming. This ability does not take materials away from the surrounding Ghosts, only adds 2.5% of the identical yield to the Viking Ghost's Loot Box.



Reaper Hoodie: Soul Absorption - Ghosts with Reaper Hoodie hat attributes will receive farming skill boosts dependent on the 4 adjacent Ghosts. A Reaper Hoodie Ghost will pull 7.5% of each farming skill of each of the 4 surrounding Ghosts and adds to its own Farming Skill Levels. This ability does not take skill levels away from the surrounding Ghosts, simply adds the equivalent to the Reaper Hoodie Ghost.

Bat Mask: Dark Knight - Ghosts with Bat Mask Outfit Attributes get an additional material multiplier on harvests that are initiated during nighttime hours on a universal Clumsy Valley running clock. All Loot Box rewards are multiplied by 1.10 if the user is harvesting at night.

Jetpack: Blastoff - Ghosts with Jetpack Backpack Attributes receive an additional Loot Roll at every farming snapshot to trigger a Blastoff Event. If the Blastoff event is rolled, 1 randomly selected farmed material gets its quantity multiplied by 1.2.



Land Plots



NFTs, Biomes, and Attributes

The Clumsy Valley Land Plot NFT Collection is an SVG-Based Collection of 10,000 Unique NFTs made up of 9 unique Land Plot Biomes and hundreds of unique attributes. Each Land Plot NFT has 1 Biome type attribute and multiple item attributes that dictate what kinds of materials can be farmed on the plot. All 10,000 Land Plots are randomly generated and no 2 Land Plots in the entire collection of 10,000 are the same. Although the initial Clumsy Valley Land Sale will consist of the 10,000 Genesis Land Plots, Clumsy Valley is designed for expansion. This includes the possibility of creating Valley Islands for other projects that may want to utilize the Valley Play-To-Mint Architecture, expanding the gaming landscape beyond the initial Turn-Based Battling Game, introducing Free-To-Play components to the Valley Ecosystem, and more.



The Genesis Land Plot Biomes are:

Meadows

Dunes

Tundra

Scorched Earth

Toxic Swamps

Cyber District

Deadlands

Twilight Forest

Ocean



Main Function and Mechanics

The Clumsy Valley Land Plots are the source of material generation. Each Land Plot will have a dedicated Loot Table dependent on the Biome and the Land Plot's individual attributes. A Land Plot's loot table dictates what types of materials it is able to generate. For each possible farmable material in each Biome, there will be a Loot Roll performed to randomly decide how much (if any) of each material the specific Ghost gets. The algorithm that drives the Loot Rolls will rely on both the attributes of the Land Plot and the Farming Skill Levels of the Ghost farming that Land Plot.

A Farming Snapshot will be taken at the end of the Ghost's farming cycle and the Loot Roll will determine the number of each material the Land Plot generates. A Loot Box containing the farming rewards will be placed on the Land Plot and interaction with the Loot Box from the user will reveal what the rewards are and automatically transfer them to the user's Clumsy Valley Inventory stored in the Clumsy Valley Database.

Multiple Loot Boxes can stack up on a user's Land Plot up to (TBD) number of total Loot Boxes before they must be opened to continue farming that Land Plot. If a Ghost is removed from a Land Plot, all unopened Loot Boxes on that Plot will be opened automatically. If a Land Plot NFT is removed from the Valley completely (similar to delisting) all unopened Loot Boxes on that Plot will be opened automatically.



Each Biome comes with a base list of possible farmable materials, drop weights for each material out of 100 that dictate the possible number of farmed materials, a Loot Roll range used for the Loot Roll algorithm, and a possible Random Ghost Trait Effect.

Below is an example of a Biome Loot System.

Biome	Materials	Base Drop Rate (Weight)	Loot Roll Range	Random Trait Effects
Meadows	Stone	1 item = 60 2 item = 30 3 item = 10	1 item = 1-60 2 item = 61-90 3 item = 91-100	Shovel = +1 to roll
	Iron	0 item = 45 1 item = 40 2 item = 10 3 item = 5	0 item = 1-45 1 Item = 46-85 2 item = 86-95 3 item = 96-100	
	Diamond	0 item = 90 1 item = 9 3 item = 1	0 item = 1-90 1 item = 91-99 3 item = 100	

The Random Trait Effect in this example adds +1 to the final Loot Roll if the Ghost farming the plot has a Shovel attribute.

The Luck Skill Level of the Ghost also adds a boost to the Loot Roll, giving the Ghost a better chance of rolling higher for rarer materials.

These Biome Loot tables are made for all Biomes and all farmable materials and are embedded in the Clumsy Valley Farming Calculator App as well as published in the Clumsy Valley Public Gitbook

Upkeep

At the end of each Farming Cycle a level of degradation is applied to the farmed Land Plot. The health levels of Land Plots are viewable in the Valley Interface for users to plan upkeep strategies accordingly. Different Biomes will degrade at different rates, with some Biomes being more “difficult” to farm. In order to restore Land Plots to 100% Farming Capacity, users must upkeep their Plots. This can be done in 2 ways:

- Paying a Clumsy Token Fee
- Using consumable materials on the Plot such as fertilizer or insecticide. These materials are Craftable in the Clumsy Valley Crafting Mechanism and will be detailed in the Crafting portion of the Clumsy Valley Whitepaper



An increased Smarts Skill reduces the Clumsy Token/Consumable Material requirements on Land Plot upkeep.



The only way to entirely bypass the upkeep requirements on Land Plots is to utilize Ghostwatch. If users own Ghostwatch NFTs they can opt to load their Ghostwatch into the Valley and eliminate upkeep on selected Land Plots. Higher Tier Ghostwatches will eliminate upkeep requirements on multiple plots of land.

 <p>A digital card titled 'GHOSTWATCH' with a dark blue background and colorful, wavy patterns. It lists the following values:</p> <table border="1"> <thead> <tr> <th>Coin</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>ADA</td> <td>0.45</td> </tr> <tr> <td>DOT</td> <td>8.70</td> </tr> <tr> <td>DOGE</td> <td>0.077</td> </tr> </tbody> </table>	Coin	Value	ADA	0.45	DOT	8.70	DOGE	0.077	<p>Tier 1 Ghostwatch:</p> <p>Eliminates upkeep requirements on 1 Land Plot</p>				
Coin	Value												
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Coin	Value												
ADA	0.46												
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 <p>A digital card titled 'GHOSTWATCH' with a dark green background. It lists the following values:</p> <table border="1"> <thead> <tr> <th>Coin</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>ADA</td> <td>0.46</td> </tr> <tr> <td>BTC</td> <td>28867.54</td> </tr> <tr> <td>MATIC</td> <td>0.58</td> </tr> <tr> <td>BNB</td> <td>296.35</td> </tr> <tr> <td>AVAX</td> <td>22.79</td> </tr> </tbody> </table> <p>At the bottom of the card is a red push-button and two small colored buttons (green and purple).</p>	Coin	Value	ADA	0.46	BTC	28867.54	MATIC	0.58	BNB	296.35	AVAX	22.79	<p>Tier 3 Ghostwatch:</p> <p>Eliminates upkeep requirements on 9 Land Plots</p>
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Farmable Materials



At the time of writing Clumsy Valley has 38 farmable materials spanning over 9 different Land Biomes. New farmable materials can and will be released in the future and many existing farmable materials can and will be discontinued. Below is a list of all Farmable Off-Chain Materials and their corresponding Craftable On-Chain Materials.

Farmable Off-Chain Materials	Craftable On-Chain Materials
Iron Ore	Iron Ingot
Copper Ore	Copper Ingot
Silver Ore	Silver Ingot
Gold Ore	Gold Ingot
Mithril Ore	Mithril Ingot
Celestite Ore	Celestite Ingot
Unrefined Diamonds	Diamonds
Unrefined Emeralds	Emeralds
Cotton Scraps	Cotton



Farmable Off-Chain Materials	Craftable On-Chain Materials
Silk Scraps	Silk
Rawhide Leather	Leather Squares
Soft Wood Logs	Soft Wood Planks
Hard Wood Logs	Hardwood Planks
Ancient Wood Logs	Ancient Wood Planks
Bone Shards	Bones
Scales	Armored Scales
Totems	Elaborate Totems
Silicon	Microchip
Shimmering Crystals Fragments	Shimmering Crystals
Crystal Core Fragments	Crystal Cores
Corrupted Core Fragments	Corrupted Cores
Molten Core Fragments	Molten Cores
Glacial Core Fragments	Glacial Cores



Farmable Off-Chain Materials	Craftable On-Chain Materials
Evergreen Fragments	Evergreen Cores
Foul Essence	Putrid Essence
Venom Sacs	Powerful Venom Sacs
Scorched Stones	Powerful Scorched Stones
Red Flower	Red Dye
Orange Flower	Orange Dye
Green Flower	Green Dye
Blue Flower	Blue Dye
Purple Flower	Purple Dye
White Flower	White Dye
Black Flower	Black Dye
Brown Flower	Brown Dye
RGB Ore	RGB Ingot
Invisible Ore	Invisible Ingot



Farmable Materials

The Farmable Off-Chain Materials can be minted into their corresponding Crafted On-Chain materials by using Clumsy Valley's Crafting Mechanism. It will not always be 1:1 as users may have to accumulate a multitude of Farmable Off-Chain Materials to craft a single Crafted On-Chain Material.

Users will be able to combine various different Crafted On-Chain Materials in recipes to Mint fully custom NFTs. These new NFTs will carry utility in the Turn-Based Battle Game as well as utility in both the farming system and the crafting system. Each user will be able to use the NFTs they craft to upgrade their Island, optimize their farming and crafting strategies, battle other Valley dwellers, and more.

Crafting and Battling Components of Clumsy Valley will be included in future releases of the Whitepaper.

Disclaimer: All Stats and Percentages shown in this iteration of the White Paper are subject to change.

