

## Summary

Valheim is a survival/crafting game in the vein of Minecraft. You are dropped into a simulated world surrounded by forests and six large quest marker stones, and a raven tells you to slay these six beasts in order to enter Valhalla.



## Day/Night Cycle

Valheim is built around a cycle of day and night which lasts for ~20 minutes. During the night, visibility is greatly reduced and certain enemy types spawn in greater numbers. The night is also colder, which causes a “Cold” status effect while not near a fire.

## Weather

Alongside the system of day and night is a system of Weather. Storms will blow in randomly and last for several minutes, or even entire days. Weather systems are dependent upon Biome. Most biomes will get basic thunderstorms, but the cold Mountain biome will get snow instead. Biomes will also affect frequency of weather, with places like the Swamp biome raining much more constantly than the Meadows. These weather systems will also affect the growth rate of crops.

## Wind

The wind direction also plays into the game, bringing your scent towards or away from enemies, and dictating which direction you may travel in a sail-based boat.

## Inventory



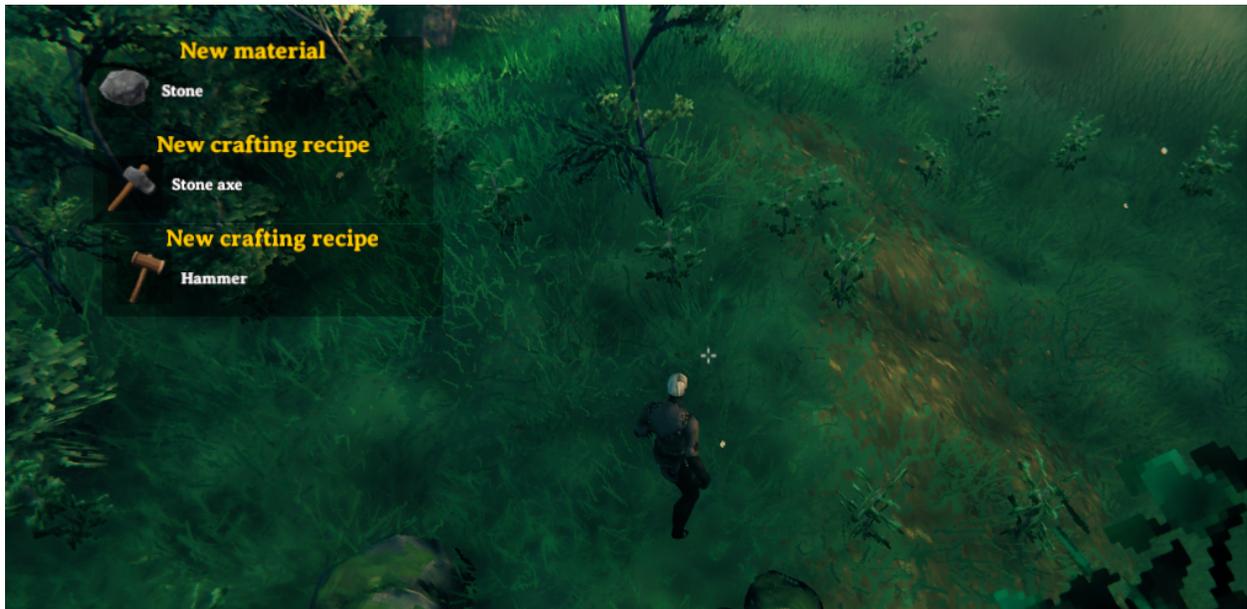
The core system of Valheim is its inventory system. Players get a constant inventory size and an amount of weight that they can carry. The max weight value changes over the course of the game, and items go into your inventory in large enough stacks that inventory management is generally not a problem.

## Tools



The other core system of Valheim is its crafting, which allows you to create tools that let you build structures, harvest resources, and kill enemies. Each tool comes with its own menu full of things it allows you to create, if given the proper resources.

## Building



Players begin the game with a limited list of tools they can create. These tools represent the minimum requirements to begin crafting complex shelters. As you pick up materials, such as Stone or Wood, your character “remembers” how to use them and you get new recipes related to those materials. All progression is locked around finding better and better materials.



As you progress, you upgrade a small set of tools and crafting tables, like your Workbench. A Workbench is good for crafting anything related to wood, and there’s also a Forge for working metal, Stonecutter for stone, and various equipment for making food, such as a Cauldron or a Fermenter.

All crafting stations have certain things that can be built only while standing at that station. Standing at a Cauldron will allow you to cook soups and prepare ingredients for fermentation. In order to use these types of stations, they must be placed under a roof, and safely enclosed on several sides.

Some crafting stations also allow creation of objects in the world, such as walls, floors, ceilings, etc. These stations have an operating radius around them which appears as a dotted white line following the ground. As long as you stand within that radius, you may place any of the appropriate objects anywhere within your reach.



## Crafting Progression

Crafting stations and tools all have a system of progression built around them. A Workbench or Forge can be upgraded by building additional stations nearby. A Tanning Rack, for instance, is an unusable station on its own, but upgrades the nearby Workbench to Level 2. In the image below, you see my Workbench at level 4 (denoted by the star on the top right), allowing me to upgrade my Stone Axe, which only requires that bench to be level 2.



Increasing a tool's level increases its stats, such as increasing damage dealt to enemies, or decreasing stamina cost per use.

Upgrading a crafting station gives access to new crafting recipes, but does not reveal those recipes. To learn new recipes, you must find the material which unlocks it, and only then can you use that upgraded crafting station.

## Farming

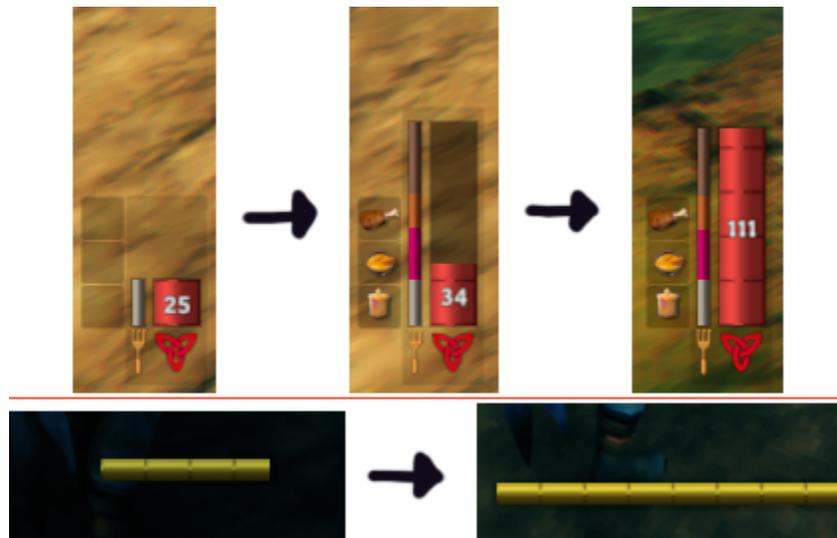


Farming in Valheim is a rather simple system. You eventually craft a tool designed specifically for tilling the land and planting crops. Once the land is prepared, this tool allows you to plant seeds into the dirt, which grow over a course of several in-game days.

Plants grow on a binary switch between “sprout” which is their state when planted, and “mature” which is their final state. This state switches after the specified time is reached. The rate at which a plant reaches maturity will depend on the environment in which it’s raised. Plants under constant shadow will grow less, or not at all, when compared to their sun-drenched brethren. Similarly, certain biomes are unsuited to farming, such as the Swamp which is constantly under a shroud of darkness.

Similar to plants, it is possible to “farm” certain animals. Boar and Wolves can be domesticated by luring them into an enclosure of man-made walls. Feeding them increases the amount of domestication from 0 to 100. Domesticated animals can be bred with one another to generate more such animals for your harvesting needs.

## Health and Stamina



Players maintain a set amount of health and stamina throughout the game. Instead of increasing these numbers via experience points or other constant progression tracking, Valheim allows players to increase these based on the food eaten. You can eat 3 (non-repeating) meals at any time, and each meal gives a different value to health and stamina.



As players progress in the game, access to new materials allows new meals to be made, and the better meals are locked in more distant lands or behind tougher enemies.

## Character Skills

Skill	Level
Jump	28
Run	33
Axes	27
Wood cutting	33
Clubs	1
Sneak	22
Blocking	1
Unarmed	6
Swim	8
Bows	26
Spears	4
Pickaxes	19
Knives	10
Polearms	0
Swords	0

Characters advance their abilities as they are used. When running, you increase experience in your running skill, while swimming you increase your swimming skill, etc. Higher levels of a skill means that doing the action requires less stamina. This matters little for things like woodcutting, but change the game a great deal for things like Swimming, which will change your ability to avoid enemies by swimming around them, or Running which allows you to explore new territory more easily.

## Status Effect



Status effects tell the player how their character is feeling. Being near a campfire will give you the “Fire” effect which warms you and removes “Wet” status. “Wet” will happen when you are exposed to water either by swimming or being rained on, and causes your stamina to regenerate less quickly. There are also many other effects, such as Poisoned, Freezing, or Burning.

## Biomes

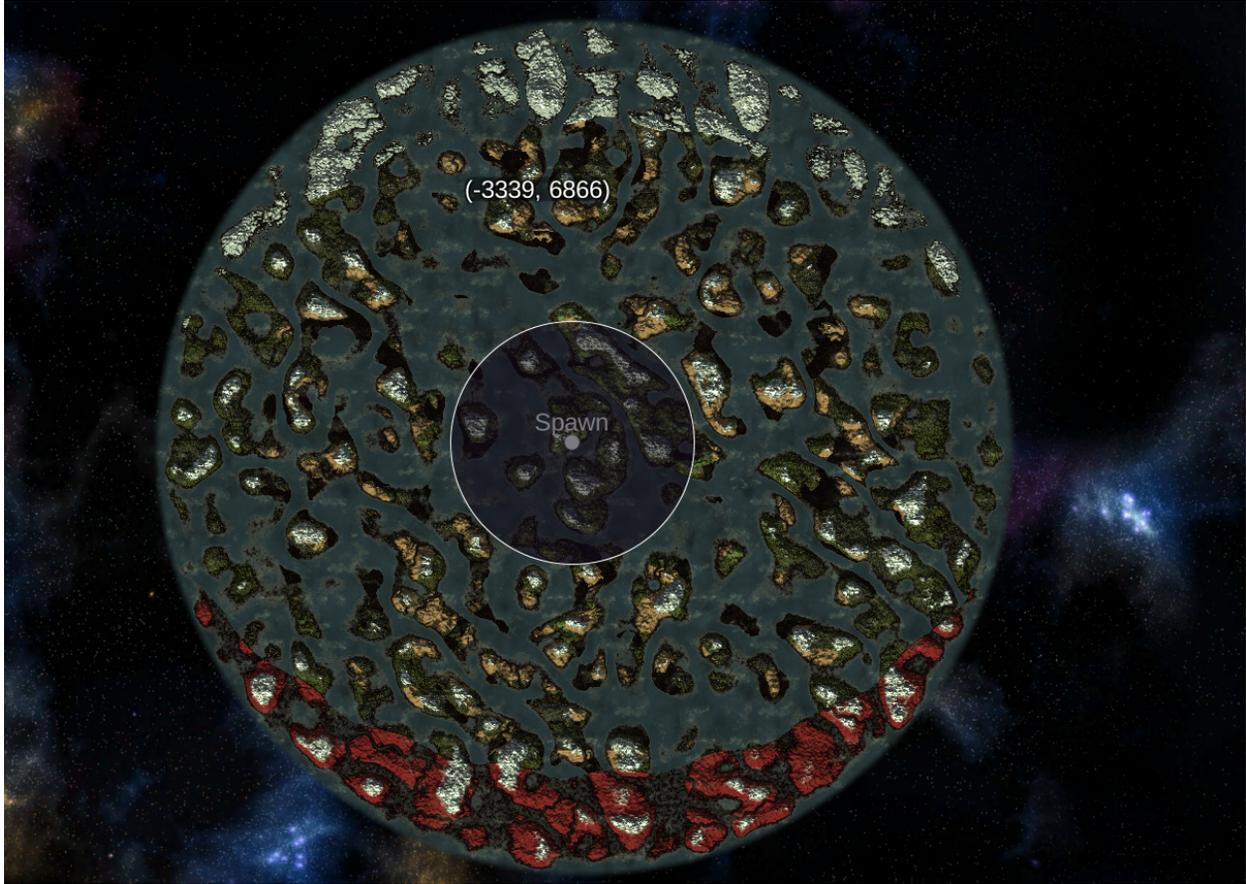
Valheim begins in the Meadows biome, a place where only weak enemies spawn, and do so infrequently. As you progress you find the Black Forest, and then the Swamp, Plains, Mountains, etc. as you explore.

Each island generates with a random set of biomes, based on its distance from the initial spawn point. A set distance from the original spawn is enforced to be Meadows, ensuring players begin the game in a safe environment.



After that initial radius, the world will create random amounts of Meadows, Black Forest, and Mountains. Only the Meadows and Black Forest are explorable at this level, however, with the Mountains acting as foreshadowing for end-game content to keep players motivated.

A second ring exists around the starting spawn, but at a much greater scale.



For a set distance around the spawn, islands will not generate with every biome. Swamp and Plains biomes are locked behind this ring, only spawning outside of its radius. As best as I can tell, all biomes are available once you breach this second ring.

As you can see in the image above, there are also two additional biomes which appear only at the top and bottom of the map.

## Enemies



Enemies in Valheim are simple affairs, mostly using a melee or a ranged attack to deal damage, and either running towards or away from the player character. The enemy's awareness of the player is more complex, however, with enemies being able to see, hear, and smell the player at different ranges. Certain enemies also move differently compared to others, such as Leeches which swim underwater, or mosquitos which fly.

Enemies come with alliances as well. Greydwarves are beings made of life energy which oppose any enemy undead, and the two will frequently clash as a result. Leeches will ignore other swamp dwellers, but will attack many other enemy types who stumble into their watery domain. Deer will run away from any noise at all. These combinatory systems mean that as you explore the wild, you may stumble into a fight in progress, or that you may choose to instigate one as a way of getting out of a dangerous situation.

Enemies also come in different flavors, 1-star enemies will be the same as their starless counterparts, but have increased attack and defense potential. 2-star enemies will be even stronger still. Each star added to an enemy makes it a different creature, and each version comes with a different skin tone and/or added visual details.

When enemies die, they spawn both unique enemy items, as well as generic materials like wood and stone.

## Bosses



Boss fights happen at specific locations which spawn in the wild. Each boss's summoning location spawns into the world once, and only in the biome relevant to it. Eikthyr, the first boss, spawns in Meadows near where the player lands upon creating their character. The Elder, the second boss, spawns somewhere in the Black Forest biome a bit further away from the original spawn. This pattern repeats for later bosses and boss spawn locations, with a boss for each biome (seemingly. I'm not that far yet).

When you kill a boss, you get some item reward when the boss dies, directly, but those drops also include a trophy of the boss's head. That trophy can be hung on the stone circle at the place where you spawn into the game for the first time, and doing so unlocks a new special power.

Special powers are a limited buff which makes you drain less stamina, or harvest more quickly, things like that. They last for several minutes and then require a long cool down time in between uses, but are otherwise free to use.

## Dungeons



Throughout the world you find dungeons to be explored. Dungeons are small, contained spaces with a considerably higher level of combat than the overworld at large. Great risk for great reward, these dungeons are the home of many of the rare materials you need to progress, such as the Surtling Cores needed to craft portals.

Dungeons spawn randomly in all biomes other than Meadows, and range in type from Skeleton Crypts to giant Troll Caves.

## Death



Exploring the game is gated by death. When you die, you are sent back to either the starting location or the last bed you slept in. You respawn with no items, and everything you had in your inventory is put into a gravestone that you must retrieve manually. This incentivizes players to build camps throughout the world as they explore.

Resting at a camp gives you a resting bonus which increases your recovery rates significantly. The resting bonus is acquired any time you are under a roof and near a campfire.

## Portals

To connect your many camps to each other, you gain the ability to craft portals



Portals work based on a manual tagging system, where the player inputs a text string to a portal and that portal connects to any other portal with the same tag. If more than 2 portals have the same tag, only the first two are active and connected. However, you can change a portal's tag at any time, allowing one portal at home to be your gateway to anywhere you've connected out in the world.

The most interesting aspect of portals, however, is not what they can do, but what they can't. Portals will deactivate if you are holding metal in your inventory. Metal is also the rarest and most valuable item in the game's crafting system. This means that the only way to transport metal is manually, and every boat the player can create comes with a space for storing items on it. There is also a cart you can build for travelling over the land with your metals, but the vast majority of the game will be locked beyond a watery wall.

## Key Takeaways

1. The difference between exploration games like Valheim and farming games like Stardew Valley is just a matter of focus and scale. Valheim has large systems of exploration and a small farming element. Stardew inverts that. All gameplay systems in these genres are otherwise shared (or at least sharable)
2. Less is More. Valheim has a complex building system, and that's about it. Enemies are relatively simple AIs with only one or two attacks each. Dungeons are small, simple spaces with a larger number of the same enemies found on the surface, just in a new context that makes things more difficult. Even the procedural generation is relatively simple, spawning only 5 biomes with 2 additional biomes reserved for specific regions, and the ability to exclude biomes from spawning within specific areas. The most complex part of the game, the crafting and inventory systems, still only revolve around a small handful of items that each reuse the same mechanic (bringing up a UI with right-click, and choosing a specific item to place into the world).
3. Mechanical progress, instead of arbitrary gating. In other words, Valheim doesn't really care what level you are, it cares about what items you have access to. You could theoretically explore the entire world with the raft you get near the start of the game, but it would be painful. Everything you unlock after that point just makes the game easier.
4. Define a clear goal. I bounced off Minecraft very early on, but have played Valheim for 60+ hours. What's the difference? Valheim begins the game by giving you the goal of slaying the 6 bosses to ascend to the afterlife. In every other way the games are the same, but having that spoken goal will lower the barrier to entry.