Valleys Between: bringing environmental issues to games

Niamh Fitzgerald
Little Lost Fox. Wellington, New Zealand.
Email: niamh@littlelostfox.com

Valleys Between\(^1\) is an environmental puzzle game, where your goal is to grow your world for as long as you can while protecting it from threats that will damage its health.

When we started designing Valleys Between we wanted to explore ways to get people thinking about environmental issues, and while the game has evolved during the game development cycle, the core themes of the game are still there. While we considered real world ecology and nature, we realised early on that to create a fun and engaging game we would need to take inspiration from them without being too literal.

One of our goals is to create a strong bond between the player and the world they’ve created, and one of the ways we do this is by allowing you to literally shape the world with your fingertips. Players only have the ability to swipe up or down to interact with the world, but small actions such as pulling a tree up out of the ground can actually have a big impact. Much like the real world, one action isn’t always enough to solve larger problems but a group of small actions can result in a big change.

Many of the games mechanics are inspired by nature, though in a simplified or abstract way. This allows us to craft gameplay that’s enjoyable and relatable without ever straying too far into something that feels completely at odds with reality (at least in most cases). With that in mind we had two important rules that guided our design:

\(^1\)Released in 2018 by Little Lost Fox. Currently available for iPhone/iPad and coming soon to Android. Learn more at [http://littlelostfox.com/](http://littlelostfox.com/)
1. The game is inspired by nature, so the environmental theme should always be present while never overpowering or distracting the player from the gameplay.

2. We won’t sacrifice enjoyable gameplay for the sake of keeping something too realistic or similar to how our real world works.

These rules allowed us to find a balance between fun and relatable mechanics that are easy for the player to understand. When designing mechanics we often started from an ecological concept and explored how we could distill it down to base elements to see how they could work well within the game. The best way to illustrate this is to look at the primary mechanics in *Valleys Between*.

At its core, *Valleys Between* is about creating a thriving world. The first step to doing this is to create an environment where things can grow, so the first move a player makes is to create water tiles in their new world. Water makes all dirt tiles around it turn into grass, and trees can only be planted on grass. To plant a tree, the player pulls up on a grass tile and essentially plucks a fully-grown tree out of the ground. While this is clearly a few steps removed from reality, it feels close enough, and this familiarity helps create a stronger connection between the nature presented in the game and what the player expects from nature in the real world.

Trees that are next to each other can be combined to make a forest, which grows your world by adding a new row of land. In this way, the base relationship between water and trees are shown as being critical to growing a world. Groups of forests can be further combined to make a house, which introduces humans as part of the ecosystem in *Valleys Between*. While this is an incredibly simplified representation of nature to a few small mechanics in *Valleys Between*, it’s part of what makes it feel environmentally rich.

Grow a thriving world and find the balance sustain it.
The game wouldn’t be very fun without something challenging you, so we decided to introduce the two sides of human influence on the environment. The first is a positive influence of creating a house by combining trees which helps your world grow and expand. However, as your world grows, we also introduce a negative influence in the form of factories and other man-made objects. Factories threaten the health of your world and they can spill oil to surrounding tiles if you leave them for too long. While there isn’t necessarily an easy action to fix things these things in our world, we wanted players to want to protect their world from these threats even if they can’t stop them from occurring. We also found in early playtests that people became very attached to the animals that wander their world, and this helped them feel connected to it, so we decided to tie these concepts together and have animals act as the primary protectors of your world. Animals wander throughout your world, and while you can influence their path, you aren’t able to control them directly. You can choose to use them to nurture and enhance a specific area, or use them to convert a factory to

Animals are the protectors of your world.
something that won’t damage the health of your world. Once you’ve used an animal, they fall asleep for a period of time so the player has to choose when to nurture and when to protect their world. While these mechanics may seem to be quite a stretch from the real world, we’ve found that by taking inspirations from nature rather than literal representations, we’ve been able to craft an enjoyable game.

About the Author

Niamh Fitzgerald is a producer and game designer at indie studio Little Lost Fox, based in Wellington, New Zealand. She organised the New Zealand Game Developer Conference in 2017 and 2018, and likes to combine her love of travel with game development by getting involved in game developer events around New Zealand and internationally.