Reddit - Dive into anything

by Rred26

-

[Guide][1.12] How to (mostly) disable vanilla biome generation in Biomes O Plenty worlds without other mods.

Introduction

If you disabled a number of biomes in the Biomes O Plenty configs, you end up with a world that looks a lot like vanilla with a few BOP biomes here and there. That's what I did and that's not what I wanted. I wanted a world that has a unique theme/identity, and consists of mostly BOP biomes. I did a lot of research and found that BOP does not support disabling vanilla biomes and many users pointed to BiomeTweaker or GeographiCraft/Climate Control. I tested both.

BiomeTweaker did not work with the Biomes O Plenty world type. It offers just 7 functions for BOP worlds. Something as simple as the following script does not work.

```
plainsBiome = forBiomes(1)
plainsBiome.removeBOP()
```

GeographiCraft works at disabling vanilla biomes, but its own world gen engine left some to be desired still. Edge biomes did not generate and neither did sub-biomes. It also oversimplifies BOP's climate system to just 4 categories. What you get is a world that looks kind of fragmented.

So I set out to solving this problem and spent about a week in my free time to look over the BOP source code and play test different configurations in hopes I can come up with a solution. And I found a solution I'm more than satisfied with. (pics) Since, in my research, there seems to be a lot of people asking this same question without answer, I decided to write this guide.

Climate Zones

To understand why vanilla biomes are so prevalent, we have to understand how climate zones work. When the world generates, a temperature layer is generated and a rainfall layer is generated and they overlap to create climate zones. BOP defines climate zones based on the combinations of these temp & rainfall values. Each climate zone has a list of biomes that the world generator chooses from when it creates the world. If you remove all the modded biomes from a climate zone, all that's left in that climate zone is the vanilla biomes. Anywhere in your world where that climate zone occurs, will be 100% vanilla biomes, even if you raised the weights of the other BOP biomes. I created a spreadsheet to illustrate this using the 20 enabled BOP biomes in my world. In this example, all the mediterranean climate zones will be entirely vanilla plains biomes, and hot_swamp climate zones will be entirely swamp. Since climate zones are typically very large, this world will have huge swaths of plains and swamps which is probably not what you intended. Also look at the weight %'s within the climate zones. If you want to see ominous woods in more than 1% of your world, you are going to have to increase the weight of that biome so it can compete with other biomes WITHIN that cold_swamp climate zone. Keep in mind that climate zones have different rarities as well. For example cold swamp is less common than the other climate zones and since that is the only zone that ominous woods belongs to by default, it will be even more rare.

Solution

To MOSTLY remove a vanilla biome from generation, you need to add one or more of your chosen biomes to the climate zone in the BOP config files and increasing the weight to a value that dramatically overpowers the vanilla biomes IN THAT CLIMATE ZONE. Since temperature zones tend to border similar temperature zones, it would be wise to choose a biome to add which has a similar temperature. ie. adding lush_desert to mediteranean or savanna. You wouldn't add tropical_rainforest to the Ice_cap climate zone unless you want tropical rainforests to border the alps.

To see how I tweaked the configs to solve this problem, look at the 'Biomes by Climate' sheet. Green cells are biomes that I added to a climate zone that were not there by default. Also take note of the % columns in this sheet. Many vanilla biomes are reduced to 1% in some climate zones. Other vanilla biomes have higher %'s because I

still wanted to see some of them in my world.
Using the Spreadsheet

Link to spreadsheet:
https://docs.google.com/spreadsheets/d/1wOmW4DJHSDmL_iXjpVk76TbLMQv76aJUQjrdh
Pv1eCw/edit?usp=sharing

1. To edit it, click 'File' > 'Make a Copy'

2. Edit the biome_ids.json so that all the BOP biomes you want to disable have an id of -1.

3. Run minecraft until it loads to the title screen then close it.
   `biomesoplenty\biomes\defaults\biomesoplenty` should now only contain json files for your enabled biomes.

4. Go through each json file in this folder and add the name of the biome and its weight (bottom of the file) to each climate column in the spreadsheet that the biome occurs in. The % column will autofill. The subbiome files will not have weights. Ignore them.

5. Make sure there are no climate zones with only vanilla biomes in it. If there are, add a BOP biome from a neighboring climate to that column and give it a weight.

6. The % column represents the relative weight, or average occurrence, of all the biomes **WITHIN THAT CLIMATE ZONE**. Not the global occurance. Scale up the weights of the BOP biomes in each climate zone until the vanilla biomes have a desirable % average occurrence.

7. Further adjust the weights of the BOP biomes by adding or subtracting weight from one and distributing or borrowing the weight to/from the other BOP biomes in that climate category. This will keep the average occurrence of the vanilla biomes constant.

8. Once you are satisfied with the weights and %'s, it's time to edit the configs.

Editing the Configs

You can view and download my Biomes O Plenty configs here if you want to try them out:
https://github.com/Rred26/Biomes-O-Plenty-Configs

1. In your minecraft folder, go to `config\biomesoplenty\biomes\defaults\biomesoplenty` and copy all the biome json files with weights that you want to edit, and paste them in `config\biomesoplenty\biomes`. Ignore subbiomes.

2. Go through each biome json file in `config\biomesoplenty\biomes` and delete all the keys and values except for `"weights"`. For example, a meadow.json should look something like this.

3. The `"weights"` key is a comma seperated list of key value pairs in the format of `"climate_zone": x` where `climate_zone` is the climate id and `x` is the weight. Add any climate ids to the list along with the weight, and edit the weights to match your spreadsheet. Don't forget to use commas where necessary.

4. Start Minecraft and create a new world with the Biomes O Plenty world type. Fly around in creative to see if you need to adjust the weights further. If so, edit the spreadsheet, edit the configs, and try again with a new world until you get it right.

5. Enjoy.

Pics of My Configured BOP World

https://imgur.com/a/r2jl7hy
Also pictured: Project: Vibrant Journeys trees (no biomes), Forestry Trees, Pam's Harvestcraft Trees, Tinkers' Construct Slime Islands.
Biomes O Plenty customizations:
Biome Size: Small
Temperature Zones: Latitudinal
The rest is default.