A Minecraft Project

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Minecraft is a survival/sandbox game from 2009 where the goal is to survive in a world filled with blocks. You can find monsters in the game that will spawn in dark areas. Observations have found out that there are more monsters in caves underground during daytime compared to at night. This suggest that the population density of monsters in a place is affected by how many places in the area that is suitable for monsters to spawn. The fewer places, the higher density. I used the game's own method for programing to testing automatically how many monsters that will spawn on a platform placed in the game's landscape. Different variables like landscapes, heights and ground-types were tested to see if they had any impact on the monster population. The number of monsters came up on the screen and was written down on a separate computer during the experiment. The results showed that landscapes like ocean biomes with few other places for monsters to spawn had the highest number of monsters, and forest biomes had the lowest numbers. The same goes for different heights, where platforms near the landscapes surface had fewer monsters overall, compared to high up in the air. Ground types had almost no effect on the monster population. This study suggests that the total number of available places for monsters to spawn influences how many monsters will spawn in an area. However, the reason why is still unanswered.