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College Now English

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Spring 2019

### Overpopulation; A Real and Destructive Environmental Issue

As the world expands reaching into every possible corner we can find, we experience a phenomenon known as over-population. As our size continues to dramatically increase, resources like water and fossil fuels become more and more meager. The change in our population size has occurred rapidly and has only begun to snowball in the last few hundred years. Such a phenomenon has arguably led to changes such as, global warming, unsustainable farming practices and an increase in worldwide hunger. Although aspects of overpopulation can be attributed to political and social organization issues, the overshadowing issue is one that includes our size and the choices we make that contribute to it. In order to reduce our size we need to be aware of our impact and the effect it has which extends all across nations and borders impacting people and organisms of every type.

Overpopulation has occurred as a result of a continuously mounting population that has only grown and exhausted all of the non-renewable resources the earth has to offer. In recent years this phenomenon has led to an “increase in world population [that is] three times greater than during the entire previous history of humanity—an increase from 1.5 to 6.1 billion in just 100 years” (Lerner). Following such a dramatic change in size results in a lack of resources such water and an increased use of non-renewable resources like fossil fuels. The effects of

overpopulation are expected to continue which will in turn increase the spread of disease and the expansion of worldwide hunger. The UN Population Division projects that the world population will, “ range from 8.1 billion to 10.6 billion” in 2050 (Bloom).

Most famously known as an economist and demographer, Thomas Malthus predicted in *An Essay on the Principle of Population* that the “population would grow geometrically...and ultimately faster than the arithmetic rate of growth of output” (Bloom). More simply put, population size would grow faster than resources could be produced or replenished. A study conducted by the UNEP Global Environment Outlook found that today, “each person on Earth now requires a third more land to supply his or her needs than the planet can supply” (Overpopulation Effects). Although, fertility rate has decreased, “every year 141 million are born and 57 million die – the difference is the number of people that we add to the world population in a year: 84.21 million” (Roser and Ospina-Ortiz). Despite our reduction in fertility rate, primarily in developed nations like the United States and China, countries in Africa still contribute to population growth, with growth rates higher than 3% when compared to that of the United States which is virtually 0%.

Overpopulation is bound to happen in every species, as Malthus once predicted, there will be a time in every species where the number of members will override the amount of food or resources available. Although true, aspects of our extreme increase in size can be attributed to a higher incidence of food security and as a result of modern medicine and technology. In every species natural selection is responsible for maintaining a balance between nature and its inhabitants, however, everyday our size grows larger and larger. It goes without saying, that our size has already created issues that affect not only select regions but the world as a whole. As

resources become more scarce, an increase in competitiveness ensues, which in many areas can lead to an elevation in crime rate. Globalization has also been a factor that has contributed to overpopulation, which has allowed for nations to exchange and trade goods whether they be tangible or intangible. As long as the world remains interconnected there will be factors such as the trade of fossil fuels and oil that will keep our size the way it is or potentially make it larger.

On the contrary, our population size has always grown ahead of its aforementioned “carrying capacity”. In a New York Times opinion column, environmental scientist, Erle C. Ellis states that prehistoric hunter-gatherers used technology like domestication and agriculture to challenge the constraints of nature in order to benefit them. “The rise of agriculture enabled even greater population growth requiring ever more intensive land-use practices to gain more sustenance from the same old land” (Ellis). Ellis argues that in modern society we are seeing another rendition of a process that has occurred time and time again in history. For many “there really is no such thing as a human carrying capacity” (Ellis). Our main obstacle as a society is finding ways to support a growing size, we have had turning points in society like the Neolithic Revolution and the Green Revolution, that have expanded our realm of possibilities and the way we produce food.

Although we have been growing “relatively” fast since after the Neolithic Revolution, our size has not always increased in such a short amount of time. It can be said that “the world population today that is 1,860-times the size of what it was 12 millennia ago when the world population was around 4 million – half of the current population of London” (Roser and Ospina-Ortiz). It is true that humans have been pushing ecological boundaries, although for the first time in history these effects have had a rather large effect on the world and our resources.

As time has passed, the amount of time it has taken for our world population to double has decreased dramatically and is only expected to continue to decrease. In a graph by *Our World Data*, it demonstrates that, “It wasn't until 1803 that the world reached its first billion; it then took another 124 years to reach two billion. By the third billion, this period had reduced to 33 years, [then] reduced further to 15 years to reach four” (Roser and Ospina-Ortiz). This evidence demonstrates that humans are now pushing boundaries more than ever, which at one point *will* put a strain on the earth leaving permanent damage.

Overpopulation is said to have minimal to no effect on global climate change and food distribution. Lyman Stone, a regional population economics researcher argues that our population size has little to no effect on the global climate change, and if allocated correctly there is enough food in the world to support every human being and then some. According to Lyman, if the United States redistributed its food imports internally, “we could feed more than 400 million people, total, merely by consuming locally what we now export” (Lyman). In order to continue feeding the world, we would need to adopt policies that would require us to make use of our own land and resources nearby. Regarding our effect on global climate change, Stone argues that size is not an issue, at least not in the United States, “lowering US carbon intensity by about a third...has a bigger effect than preventing 100 million Americans from existing”(Lyman). Some issues are better resolved region by region and with the shared efforts of the people, which at times is enough to overcome any adversity.

With the way things are currently operating, the efforts of human beings to try and save the planet will not be enough if we continue to grow in size. Third world countries are currently strained by these effects and a study published by Harvard University suggests that “many

developing countries...will experience a degradation of their quality and length of life as they face increasing difficulties to supply water, food, energy and housing to their growing populations, which will have major repercussions for public health, security measures and economic growth” (Overpopulation Effects). There already exists heightened tension among countries to alleviate this issue because of political and economic differences. The efforts of one country will not be enough to help change the world. Despite the innovations of developed nations like the United States, their efforts alone will not be enough. Therefore, without addressing the problem as a whole there is no solution.

Overpopulation has had a negative impact on society and has also negatively impacted the environment. Our size as a whole has had detrimental effects on neighboring species, habitats that have been lost to farming and on natural resources like water and fossil fuels. Although we are almost nearing permanent damage and destruction to the planet, there exist solutions to help mediate some of the issues that we face today. These include the spread of education on sexual health and on sustainable living practices. As our world becomes a more crowded one, it is essential to promote knowledge on how to sustain it and how to prevent more damage from occurring. Overpopulation is a real problem, with real effects that has affected real people, therefore, it is vital we spread awareness in order to create a better world for us and for the future.

## Reflection

As I began this essay, I can confidently say that it was extremely difficult to write but absolutely satisfying to finish. This essay threw me for a loop, and although I enjoyed writing it, it took a lot of effort to find sources that would add and contribute to my argument. My topic being that of “overpopulation” was not super easy to support because I did not know there was even an argument regarding its existence and its effects. I am proud to finally have finished after procrastinating for so long, which is primarily due to the fact that this topic was not as “interesting” as other topics. Regarding my first few bodies, my main objective was to create a solid foundation from which to build an argument from. I did this somewhat successfully by repeating and establishing my point multiple time with statistics and numbers, which helped illustrate the effects.

Moving forward into my paper I referred to Thomas Malthus, in order to establish credibility so that later I could contrast different perspectives using an established source and scholar. Although this paper was similar to an argumentative, I only dedicated 2 or 3 paragraphs on contrasting views in order to constantly re-establish and define my point. This part I found relatively easier than your traditional argumentative piece because I could present another side and instead of arguing it, I could use it to make my stance more solid and concrete. This assignment was fun to write, however it required lots of digging before which I was not too fond of. All in all, I am satisfied with the piece I produced and I would love some feedback for the future going forward as this is my first ever “research critical analysis”.