

Senior Teacher I.M. Dovgun

Student O. Repek

National University of Food Technologies, Kyiv, Ukraine

Animal and Human Overpopulation

Overpopulation is an undesirable condition and always occurs when a population of any species exceeds the capacity of its ecological niche. Overpopulation is a function of the number of the individuals compared to the relevant resources, such as water and essential nutrients which they need to survive. The reasons of overpopulation can be an increase in births or immigration, reduced mortality rates, better medical facilities, an unsustainable biome and depletion of the precious resources. These are only few of the causes which result in overpopulation. It is a leading factor of hunger, species depletion, desertification and a number of social maladies across our planet.

The overpopulation problems of the species are often solved by the growth in the predators' population. The predators tend to look for signs of weakness in their prey, and, therefore, usually first eat the oldest or sickest animals. It has the side effects of controlling the prey population and ensuring its evolution in favour of genetic characteristics that enhance an escape from predation (and the predator may co-evolve, in response). In the absence of the predators, species are bound by the resources they can find in their environment, but this does not necessarily control overpopulation, at least in the short term. In fact, an abundant supply of the resources can produce a population boom that ends up with more individuals than the environment can support. In this case, starvation, thirst and sometimes violent competition for scarce resources may effect a sharp reduction in the population in a very short term. Lemmings, as well as other less popular species of rodents, are known to have such cycles of rapid population growth and subsequent decrease.

Some species seem to have a measure of self-control, by which individuals refrain from mating when they find themselves in a crowded environment. This voluntary abstinence may be induced by stress or by pheromones. In an ideal setting,

when animal populations grow, so do the number of predators that feed on that particular animal. Animals that have birth defects or weak genes (such as the runt of the litter) are unable to compete over food with stronger, healthier animals. In reality, an animal that is not native to an environment may have some advantages over the native ones, such being unsuitable for the local predators. If left uncontrolled, such an animal can quickly overpopulate and ultimately destroy its environment.

There are some examples of overpopulation caused by the introduction of a foreign species abound:

1. In Argentine Patagonia European species such as trout and deer were introduced into the local streams and forests, respectively, and they rapidly became a plague, competing with and sometimes driving away the local species of fish and ruminants.

2. In Australia, when rabbits were introduced by the European immigrants, they bred out of control and ate the farm crops and food that both native and farm animals needed. Farmers hunted the rabbits, and also brought cats in to guard against rabbits and rats which created another problem, becoming predators of local species.

There are such examples of the overpopulation caused by natural cyclic variations:

1. The 2004 locust outbreak in West and North Africa.
2. The Australian locust plagues.
3. Palestine locust plague eight month long in 1915.

The human population has been growing continuously since the end of the Black Death, around the year 1400, although the most significant increase has been in the last 50 years, mainly due to medical advancements, increases in agricultural productivity and the historically-unique availability of abundant cheap energy. The rate of the population growth has been declining since the 1980s. The most contemporary estimates for the carrying capacity of the Earth under existing conditions are between 4 billion and 16 billion. Depending on which estimate is used, human overpopulation may or may not have already occurred. Growing advances in modern technology with each year has affected humanity in many ways. One of these

has been the ability to save lives and create better medical treatment. A direct result of this has been increased lifespan and the growth of the population. In the past fifty years the growth of the population has boomed and has turned into overpopulation. In the history of our species, the birth and death rate have always been able to balance each and maintain a population growth rate that is sustainable. The Inter Academy Panel Statement on Population Growth, circa 1994, has stated that many environmental problems, such as rising levels of atmospheric carbon dioxide, global warming, and pollution, are aggravated by the population expansion [1]. Other problems associated with overpopulation include the increased demand for resources such as fresh water and food, starvation and malnutrition, consumption of natural resources (such as fossil fuels) which is faster than the rate of regeneration, and deterioration in living conditions. However, some people believe that waste and over-consumption, especially by wealthy nations, is putting more strain on the environment than overpopulation [2].

Overpopulation of the urban areas has led to numerous problems. Better living conditions, as well as more career opportunities are main factors that attract people to live in big cities. As a result, many cities around the world face nowadays the problems of overpopulation such as the increasing unemployment and polluted environment. To start with, pollution is one of the most serious damages caused by overpopulation. The fact is, every human being usually creates an amount of rubbish through his or her activities in everyday life. The environment, therefore, will be directly affected. In other words, the more people live in the city, the more polluted it becomes. Another worrying trend is that there are more people who look for workplaces while the supply of jobs is limited. It is true to say that the employers will gain most competent and experienced applicants through the high competitive environment; nevertheless, more people may either be unemployed or work in unexpected spheres. Consequently, unemployment rates will probably increase. To decrease these issues, the government should control the birth rate and develop rural areas. The law that prohibits a family from having more than two children should be kept in crowded areas. In addition, the citizens should be aware of the objective of

reduction in birth rate. Furthermore, for long term strategy, the government should invest more money in the country areas infrastructure to encourage people to live away from crowded areas. The reduction of the population in urban areas would possibly be the result of this action. In conclusion, overpopulation in big cities may inflict pollution and dramatic unemployment rate which are seriously troublesome for people to live comfortably.

References:

1. Overpopulation [Electronic Resource]. – Mode of access: URL: <http://www.conserve-energy-future.com/causes-effects-solutions-of-overpopulation.php>. – Title from the screen.
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