

Environmental Degradation

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English 202

What is Climate Change?

Summary or Paraphrase : Climate Change describes a change in the average conditions over a period, typically the Earth gets warmer.

Quote : "There are lots of factors that contribute to Earth's climate. However, scientists agree that Earth has been getting warmer in the past 50 to 100 years due to human activities."

Reaction : I think that it is significant that the climate is changing, and kind of scary how it could affect the human population in the long term.

Source : NASA. (n.d.). What is climate change? NASA. Retrieved February 23, 2023, from <https://climatekids.nasa.gov/climate-change-meaning/>

What is Climate Change?

Summery or Paraphrase : Climate Change refers to significant changes in global temperature, precipitation, wind patterns and other measures of climate that occur over several decades or longer.

Quote : "Evidence suggests many of these extreme climate changes are connected to rising levels of carbon dioxide and other greenhouse gases in the Earth's atmosphere."

Reaction : I think it is bad that a lot of climate change is connected to human causes.

Source : Tdus. "Climate Change Terms and Definitions." UC Davis, 17 Feb. 2023, <https://climatechange.ucdavis.edu/climate/definitions>.

How does Climate Change affect people in society?

Summery or Paraphrase : Climate change has a greater affect in poorer places, which makes the climate change even worse in those places.

Quote : "Climate change will widen health inequities; action on the social determinants of health is essential."

Reaction : I never really thought about how people of different affluencies have a different experience with Climate Change, I thought this was very eye opening.

Source : Climate Change, Society and Health Inequities - Mja.com.au.
https://www.mja.com.au/system/files/issues/217_09/mja251731.pdf.

What is Planetary Health Equity?

Summery or Paraphrase : Planetary Health Equity is the sustainability of the environment and good health. If the Earth stops functioning due to bad Planetary Health Equity, then humans are at risk.

Quote : "The major contribution from a transdisciplinary research agenda on governance for planetary health equity, as proposed here, lies in detailing the "what, who and how" of effective governance that advances health, social equity and the environment in an interconnected way."

Reaction : I think that this Journal was super informative about detailing and describing Planetary Health Equity.

Source : Login, https://wisconsin-uwsp.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991015245229802130&context=L&vid=01UWI_SF%3ASP&lang=en&search_scope=DN_and_CI&adaptor=Local+Search+Engine&tab=Everything&query=any%2Ccontains%2Cwhat+is+climate+change&offset=20.

What is Biodiversity?

Summery or Paraphrase : Biodiversity refers to the variety of living species on Earth, including plants, animals, bacteria, and fungi. While Earth's biodiversity is so rich that many species have yet to be discovered, many species are being threatened with extinction due to human activities, putting the Earth's magnificent biodiversity at risk.

Quote : "Much of Earth's biodiversity, however, is in jeopardy due to human consumption and other activities that disturb and even destroy ecosystems."

Reaction : I think that it is sad that the actions of people are disrupting the natural ecosystems of the earth.

Source : "Biodiversity." Education, <https://education.nationalgeographic.org/resource/biodiversity/>.

What is Climate Change?

Summary or Paraphrase : Climate Change is a global problem that more people need to be talking about.

Quote : "There is a broad consensus among stakeholders that while climate change is caused at a global level, action depends on regional circumstances and resources."

Reaction : I liked this article, because it gave me actual information on things that can be done to reduce climate change.

Source : Author links open overlay panelUdayan Singh a, et al. "Future Research Directions to Facilitate Climate Action and Energy Transitions." Energy and Climate Change, Elsevier, 14 Dec. 2022, <https://reader.elsevier.com/reader/sd/pii/S2666278722000228?token=80533FC789794EC26B9A9FD7727C54C9ECFD1A8C4B7C5B71D5228F76204EB7258EF9FD15A38CC48E0B69292069906531&originRegion=us-east-1&originCreation=20230221145246>.

What is Environmental Degradation?

Summery or Paraphrase : Environmental degradation is a process through which the natural environments is compromised in some way, reducing biological diversity and the general health of the environment.

Quote : "Narrower: degradation of natural resources, ecosystem degradation, environmental footprint."

Reaction : This website gave me ideas for if I still want to narrow down my topic a little more.

Source : Environmental Degradation, <https://www.eionet.europa.eu/gemet/en/concept/15154>.

What is Biodiversity?

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Quote : "Scientists have estimated that there are around 8.7 million species of plants and animals in existence. However, only around 1.2 million species have been identified and described so far, most of which are insects."

Reaction : I think that it is cool that there are so many species of plants and animals on one planet.

Source : "Biodiversity." Education, <https://education.nationalgeographic.org/resource/biodiversity/>.

What is Biodiversity?

Summary or Paraphrase : Biodiversity is all the different kinds of life you'll find in one area, the variety of animals, plants, fungi, and even microorganisms like bacteria that make up our natural world.

Quote : "But as humans put increasing pressure on the planet, using and consuming more resources than ever before, we risk upsetting the balance of ecosystems and losing biodiversity."

Reaction : I hope that we stop putting so much pressure on the planet.

Source : "What Is Biodiversity?" WWF, World Wildlife Fund, <https://www.worldwildlife.org/pages/what-is-biodiversity>.

What is Environmental Degradation?

Summery or Paraphrase : Common forms of environmental degradation include desertification, land degradation, rising sea levels induced by global warming, and deforestation with its many consequences.

Quote : "Some fear environmental degradation will produce "waves of environmental refugees that spill across borders with destabilizing effects."

Reaction : This paper was super informative about things that I did not ever think about like what could happen in the future if we don't take action.

Source : CMI (Chr. Michelsen Institute). <https://www.cmi.no/publications/file/1374-pressure-points-environmental-degradation.pdf>.

How much does the climate change in a year?

Summery or Paraphrase : According to NOAA's 2021 Annual Climate Report the combined land and ocean temperature has increased at an average rate of 0.14 degrees Fahrenheit (0.08 degrees Celsius) per decade since 1880; however, the average rate of increase since 1981 has been more than twice as fast: 0.32 degrees Fahrenheit per decade.

Quote : "Today, our activities burning fossil fuels and clearing forests add about 11 billion metric tons of carbon to the atmosphere each year."

Reaction : While the amount that the Earth is heating up is small, it is still super alarming, because it is also increasing still.

Source : Dahlman, Rebecca Lindsey AND LuAnn. "Climate Change: Global Temperature." NOAA Climate.gov, [https://www.climate.gov/news-features/understanding-climate/climate-change-global-temperature#:~:text=According%20to%20NOAA's%202021%20Annual,0.18%20%C2%B0C\)%20per%20decade.](https://www.climate.gov/news-features/understanding-climate/climate-change-global-temperature#:~:text=According%20to%20NOAA's%202021%20Annual,0.18%20%C2%B0C)%20per%20decade.)

What causes Climate Change?

Summery or Paraphrase : Climate change is caused by the emission of greenhouse gases, and carbon dioxide. Our activities including burning fossil fuels and clearing forests are what contribute to the increasing change in climate.

Quote : "According to the 2017 U.S. Climate Science Special Report, if yearly emissions continue to increase rapidly, as they have since 2000, models project that by the end of this century, global temps will be at least 5 degrees warmer then the 1901 to 1960 average.

Reaction : That is kind of scary to think about, especially since it is exponential.

Source : Dahlman, Rebecca Lindsey AND LuAnn. "Climate Change: Global Temperature." NOAA Climate.gov, [https://www.climate.gov/news-features/understanding-climate/climate-change-global-temperature#:~:text=According%20to%20NOAA's%202021%20Annual,0.18%20%C2%B0C\)%20per%20decade.](https://www.climate.gov/news-features/understanding-climate/climate-change-global-temperature#:~:text=According%20to%20NOAA's%202021%20Annual,0.18%20%C2%B0C)%20per%20decade.)

What does pollution do to the environment?

Summery or Paraphrase : Air pollution can have a variety of effects on the environment, including Acid rain, Eutrophication, Haze, Effects on wildlife, Ozone depletion, Crop and forest damage, and Global climate change.

Quote : The Earth's atmosphere contains a delicate balance of naturally occurring gases that trap some of the sun's heat near the Earth's surface. This "greenhouse effect" keeps the earth's temperature stable."

Reaction : I think pollution is one of the biggest things that people can control so it is something that I want to focus on in my paper.

Source : Health & Environmental Effects of Air Pollution - Massachusetts.
<https://www.mass.gov/doc/health-environmental-effects-of-air-pollution/download>.

How does driving affect Climate Change?

Summary or Paraphrase : Burning fossil fuels like gasoline and diesel releases carbon dioxide, which contributes to the excess of greenhouse gases in our atmosphere, causing the Earth to go through climate change.

Quote : "Greenhouse gas emissions from transportation account for about 27 percent of total U.S. greenhouse gas emissions, making it the largest contributor of U.S. GHG emissions."

Reaction : 27 percent is huge, and I think people should be using bikes and walking more, because it is healthier in every way.

Source : Carbon Pollution from Transportation | US EPA. <https://www.epa.gov/transportation-air-pollution-and-climate-change/carbon-pollution-transportation>.

What are Greenhouse Gasses?

Summary or Paraphrase : Greenhouse Gases are the gasses that keep the Earth warm that are trapped in our atmosphere. When greenhouse gases are released into the atmosphere, there is an excess, causing the Earth's temperature to rise gradually.

Quote : "Unfortunately, evidence is mounting that humans have disturbed this natural balance by producing large amounts of some of these greenhouse gases, including carbon dioxide and methane."

Reaction : This seems like a problem that needs a solution.

Source : Health & Environmental Effects of Air Pollution - Massachusetts.
<https://www.mass.gov/doc/health-environmental-effects-of-air-pollution/download>.

How can people contribute to the health of the environment?

Summery or Paraphrase : People can contribute to the health of the environment by polluting less and reducing their greenhouse gas contribution.

Quote : “Environmental pollutants can cause health problems like respiratory diseases, heart disease, and some types of cancer.”

Reaction : People could use public transport or bikes or walking to reduce greenhouse contributions.

Source : “Environmental Health.” Environmental Health - Healthy People 2030, <https://health.gov/healthypeople/objectives-and-data/browse-objectives/environmental-health>.

How does pollution affect our atmosphere?

Summery or Paraphrase : Air pollution includes greenhouse gases such as carbon dioxide. Greenhouse gases cause the climate to warm by trapping heat from the sun in the earth's atmosphere. Greenhouse gases are a natural part of Earth's atmosphere, but their increasing amounts in our atmosphere are causing the climate to get warmer. The increase comes from Carbon emissions that humans cause.

Quote "According to a NASA study, an increase in ozone pollution, or smog, is causing warming in the Arctic regions."

Reaction : If the Arctic warms, that would damage a lot of ecosystems, which would contribute to environmental degradation.

Source : "Center for Science Education." Air Quality and Climate Change | Center for Science Education, <https://scied.ucar.edu/learning-zone/air-quality/air-quality-and-climate-change>.

How does recycling help the environment?

Summary or Paraphrase : Recycling prevents the emissions of many greenhouse gases and water pollutants and saves energy which also contributes to less carbon emissions.

Quote : “There’s more to recycling than setting out your recyclables at the curb. In order to make recycling economically feasible, we must buy recycled products.”

Reaction : Recycling is confusing to me, but I want to understand it more and hopefully buy more recycled products.

Source : “Reduce, Reuse & Recycle.” Boulder County, 21 Apr. 2021, <https://bouldercounty.gov/environment/recycle/reduce-reuse-recycle/#:~:text=Recycling%20prevents%20the%20emissions%20of,and%20processing%20of%20virgin%20materials.>

What is Fracking?

Summary or Paraphrase : Hydraulic fracturing is a method for extracting gas and oil from shale rock. The process involves injecting water, sand and chemicals into bedrock at high pressure, which allows gas and oil to flow out of the Earth and into a well to then be collected to sell.

Quote : “The process creates vast amounts of wastewater, emits greenhouse gases such as methane, releases toxic air pollutants and generates noise.”

Reaction : I understand that we need oil, but I don't think the health of our Earth is a good price to pay for it.

Source : Lin-Schweitzer, Anna. “Integrated Effort Needed to Mitigate Fracking While Protecting Both Humans and the Environment.” Yale School of Public Health, Yale School of Medicine, 30 Mar. 2022, <https://ysph.yale.edu/news-article/integrated-effort-needed-to-mitigate-fracking-while-protecting-both-humans-and-the-environment/#:~:text=The%20process%20creates%20vast%20amounts,migratory%20disruptions%20and%20land%20degradation.>

How do greenhouse Gasses effect the environment?

Summery or Paraphrase : Greenhouse gases, such as carbon dioxide, methane, nitrous oxide, and certain synthetic chemicals, trap some of the Earth's outgoing energy, thus retaining heat in the atmosphere.

Quote : "Multiple lines of evidence confirm that human activities are the primary cause of the global warming of the past 50 years. Natural factors, such as variations in the sun's output volcanic activity, the Earth's orbit, the carbon cycle, and others also affect earth's radiative balance.

Reaction : Greenhouse gases are a huge cause of climate change and need to be addressed.

Source : Greenhouse Gases | US EPA. <https://www.epa.gov/report-environment/greenhouse-gases>.

What has the U.S. done for Climate Change

Summary or Paraphrase : Passed a law called the inflation reduction act, which puts money aside for climate change.

Quote : "Includes \$369 billion for an array of climate priorities."

Reaction : This is good, because stuff is finally being done.

Source : <https://www.vox.com/science/23691377/earth-day-2023-facts-wins-climate-biodiversity>

Summery or Paraphrase :

Quote :

Reaction :

Source : “Home – Climate Change: Vital Signs of the Planet.” NASA, NASA, 23 Nov. 2022, <https://climate.nasa.gov/>.

Summery or Paraphrase :

Quote :

Reaction :

Source : "Climatechange." *United Nations*, United Nations, <https://www.un.org/en/climatechange>.

Summery or Paraphrase :

Quote :

Reaction :

Source : “Climate.gov Home.” *NOAA Climate.gov*, <https://www.climate.gov/>.

Summery or Paraphrase :

Quote :

Reaction :

Source : Nilsen, Ella. "The Willow Project Has Been Approved. Here's What to Know about the Controversial Oil-Drilling Venture | CNN Politics." *CNN*, Cable News Network, 14 Mar. 2023, <https://www.cnn.com/2023/03/14/politics/willow-project-oil-alaska-explained-climate/index.html>.