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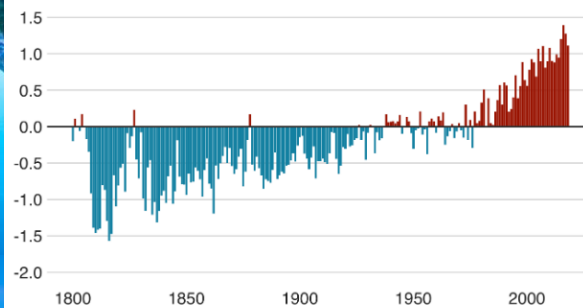
**The future of the
mankind is under the
threat!!!**

1) The Earth's average temperature is about 15C but has been much higher and lower in the past. There are natural fluctuations in the climate but scientists say temperatures are now rising faster than at many other times. This is linked to the greenhouse effect, which describes how the Earth's

atmosphere traps some of the Sun's energy. Solar energy radiating back to space from the Earth's surface is absorbed by greenhouse gases and re-emitted in all directions. This heats both the lower atmosphere and the surface of the planet. Without this effect, the Earth would be about 30C colder and hostile to life.

The world has been getting warmer

Annual mean land temperature above or below average (°C)



Note: Average is calculated from 1951-1980 land surface temperature data

Source: University of California Berkeley

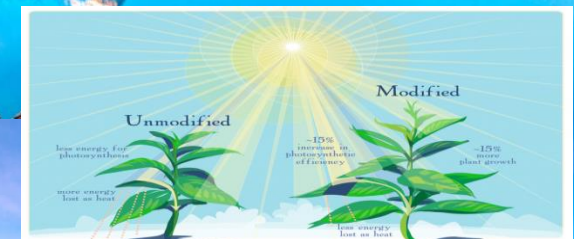


2) A polar ice cap or polar cap is a high-latitude region of a planet, dwarf planet, or natural satellite that is covered in ice. There are no requirements with respect to size or composition for a body of ice to be termed a polar ice cap, nor any geological requirement for it to be over land, but only that it must be a body of solid phase matter in the polar region. This causes the term "polar ice cap" to be something of a misnomer, as the term ice cap itself is applied more narrowly to bodies that are over land, and cover less than 50,000 km²: larger bodies are referred to as ice sheets. The composition of the ice will vary. For example, Earth's polar caps are mainly water ice, whereas Mars's polar ice caps are a mixture of solid carbon dioxide and water ice. Polar ice caps form because high-latitude

regions receive less energy in the form of solar radiation from the Sun than equatorial regions, resulting in lower surface temperatures



3) Genetic Modification of Crops. Environmental issues caused by man-made chemicals are becoming clearer. For example, there has been a 90% reduction in the Monarch butterfly population in the United States that can be linked to weed killers that contain glyphosate. There is also some speculation that genetically modified plants may leak chemical compounds into soil through their roots, possibly affecting communities of microorganisms.

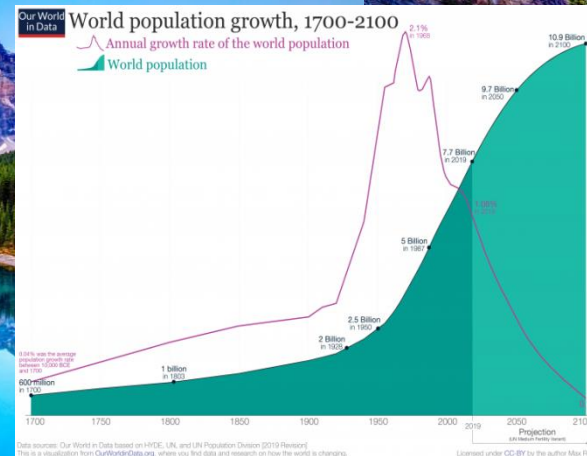


4) **Waste Production.** The average person produces 4.3 pounds of waste per day, with the United States alone accounting for 220 million tons per year. Much of this waste ends up in landfills, which generate enormous amounts of methane. Not only does this create explosion hazards, but methane also ranks as one of the worst of the greenhouse gases because of its high global warming potential.



5) **Population Growth.** Many of the issues listed here result from the massive population growth that Earth has experienced in the last century. The planet's population grows by 1.13% per year, which works out to 80 million people. This results in a number of issues, such as a lack of fresh water, habitat loss for wild animals, overuse of natural resources and even species extinction. The latter is particularly

damaging, as the planet is now losing 30,000 species per year.



6) **Water Pollution.** Fresh water is crucial to life on Earth, yet more sources are being polluted through human activities each year. On a global scale, 2 million tons of sewage, agricultural and industrial waste enters the world's water every day. Water pollution can have harmful effects outside of contamination of the water we drink. It also disrupts marine life, sometimes altering reproductive cycles and increasing mortality rates.



7) **Deforestation.** The demands of an increasing population has resulted in increasing levels of deforestation. Current estimates state that the planet is losing 80,000 acres of tropical forests per day. This results in loss of habitat for many species, placing many at risk and leading to large-scale extinction. Furthermore, deforestation is estimated to produce 15% of the world's greenhouse gas emissions.



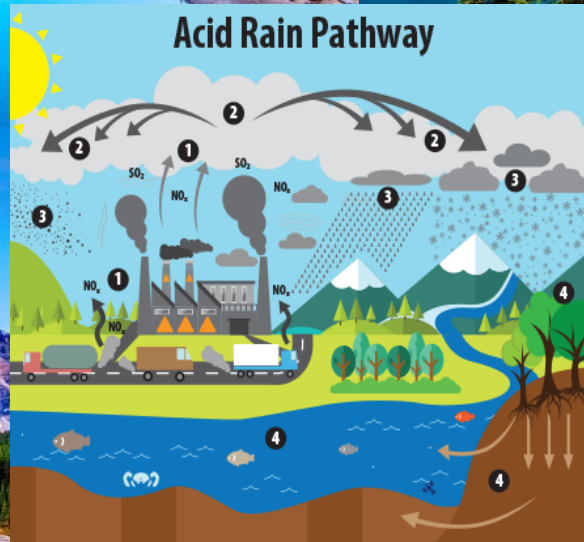
8) **Urban Sprawl.** The continued expansion of urban areas into traditionally rural regions is not without its problems. Urban sprawl has been linked to environmental issues like air and water pollution increases, in addition to the creation of heat-islands. Satellite images produced by NASA have also shown how urban sprawl contributes to forest fragmentation, which often leads to larger deforestation.



9) **Overfishing.** It is estimated that 63% of global fish stocks are now considered overfished. This has led to many fishing fleets heading to new waters, which will only serve to deplete fish stocks further. Overfishing leads to a misbalance of ocean life, severely affecting natural ecosystems in the process. Furthermore, it also has negative effects on coastal communities that rely on fishing to support their economies.



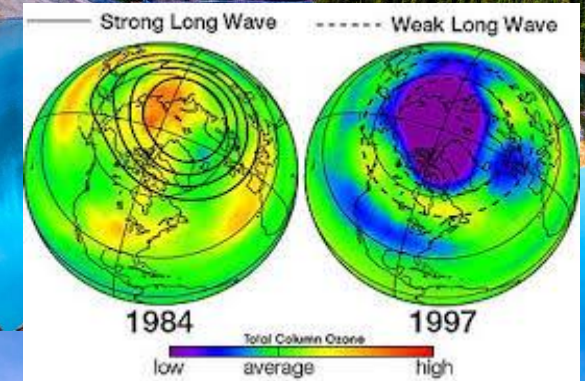
10) **Acid Rain.** Acid rain comes as a result of air pollution, mostly through chemicals released into the environment when fuel is burned. Its effects are most clearly seen in aquatic ecosystems, where increasing acidity in the water can lead to animal deaths. It also causes various issues for trees. Though it doesn't kill trees directly, acid rain does weaken them by damaging leaves, poisoning the trees and limiting their available nutrients.



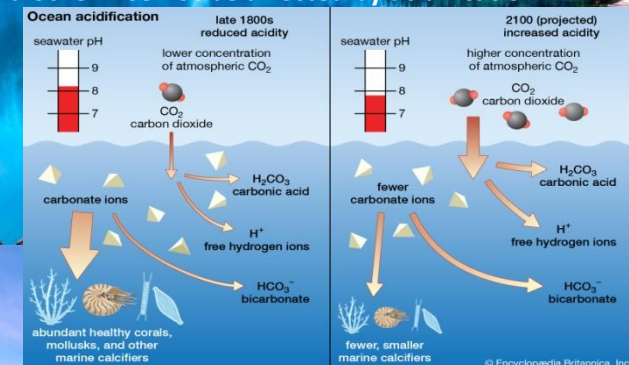
This image illustrates the pathway for acid rain in our environments:
 (1) Emissions of SO₂ and NO_x are released into the air, where (2) the pollutants are transformed into acid particles that may be transported long distances. (3) These acid particles then fall to the earth as wet and dry deposition (dust, rain, snow, etc.) and (4) may cause harmful effects on soil, forests, streams and lakes.

11) **Ozone Layer Depletion.** Ozone depletion is caused by the release of chemicals, primarily chlorine and bromide, into the atmosphere. A single atom of either has the potential to destroy thousands of ozone molecules

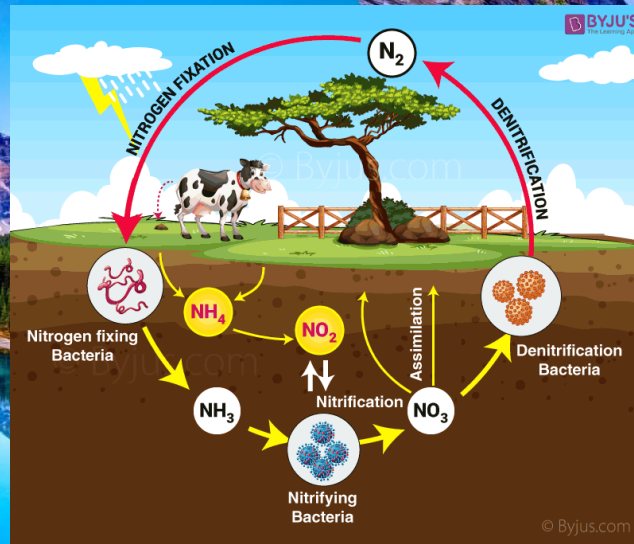
before leaving the stratosphere. Ozone depletion results in more UVB radiation reaching the Earth's surface. UVB has been linked to skin cancer and eye disease, plus it affects plant life and has been linked to a reduction of plankton in marine environments.



12) **Ocean Acidification.** Ocean acidification is the term used to describe the continued lowering of the pH levels of the Earth's oceans as a result of carbon dioxide emissions. It is estimated that ocean acidity will increase by 150% by 2100 if efforts aren't made to halt it. This increase in acidification can have dire effect on calcifying species, such as shellfish. This causes issues throughout the food chain and may lead to reductions in aquatic life that would otherwise not be affected by acidification.



13) Air Pollution. Air pollution is becoming an increasingly dangerous problem, particularly in heavily-populated cities. The World Health Organization (WHO) has found that 80% of people living in urban areas are exposed to air quality levels deemed unfit by the organization. It is also directly linked to other environmental issues, such as acid rain and eutrophication. Animals and humans are also at risk of developing a number of health problems due to air pollution.



The FINAL word

The impact that human activities have on the environment around us is undeniable and more studies are being conducted each year to show the extent of the issue. Climate change and the many factors that contribute to emissions could lead to catastrophic issues in the future. More needs to be done to remedy the major environmental issues that affect us today. If this doesn't happen, the possibility exists that great swathes of the planet will become uninhabitable in the future. The good news is that many of these issues can be controlled. By making adjustments, humanity can have a direct and positive impact on the environment. Nowadays, people are beating Nature to **DEATH**. Humans have become Earth's biggest enemies. It's time for people to help our planet survive and to live in harmony with it...



15) Transportation. An ever-growing population needs transportation, much of which is fueled by the natural resources that emit greenhouse gases, such as petroleum. In 2014, transportation accounted for 26% of all greenhouse gas emissions. Transportation also contributes to a range of other environmental issues, such as the destruction of natural habitats and increase in air pollution.



14) The Nitrogen Cycle. With most of the focus being placed on the carbon cycle, the effects of human use of nitrogen often slips under the radar. It is estimated that agriculture may be responsible for half of the nitrogen fixation on earth, primarily through the use and production of man-made fertilizers. Excess levels of nitrogen in water can cause issues in marine ecosystems, primarily through overstimulation of plant and algae growth. This can result in blocked intakes and less light getting to deeper waters, damaging the rest of the marine population.

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