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Rising Waters

Struggling to Save Our Fish

by

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and Jerry

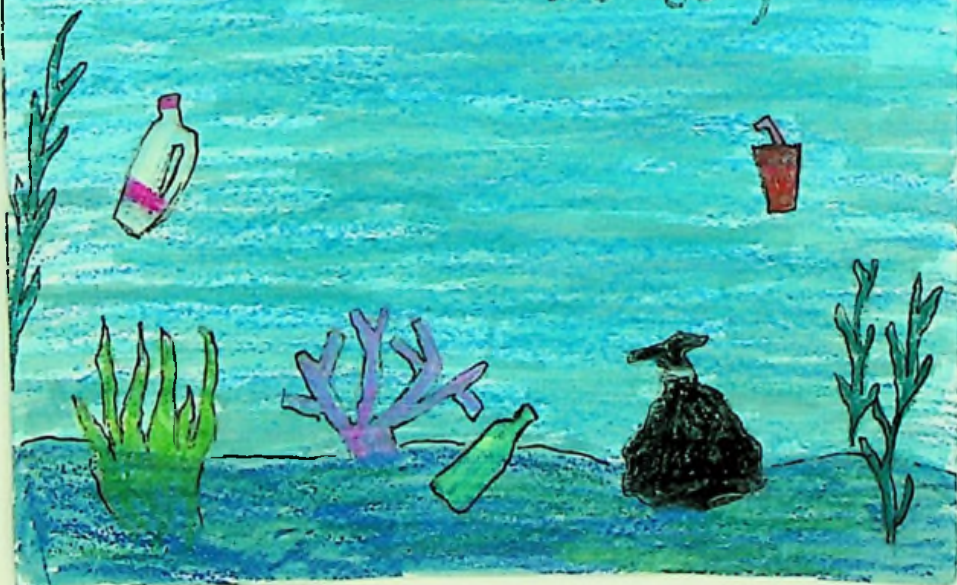


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~Introduction~

All over the world, climate change is affecting everyone one way or another. Such as little things like energy, transportation, wildlife, agriculture, ecosystems, human health, and most importantly how it is affecting the ocean.



The ocean makes up at least 71% of the world and holds 96.5% of all of Earth's water. When the ocean is being affected by climate change causes serious problems. The ocean holds more than just water as well. It contains wildlife, different forms of plants, and unfortunately a lot of trash. Learning about how the problems occurring in the ocean are important to finding a solution to the larger issue being faced in today's society

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AQUATIC LIFE

• climate change Adaptation ability for Aquatic ecosystems is constrained. It will be important for humans to engage in activities to reduce the substantial effects.

• among these include preserving trees, lowering nutrient intake, repairing harmed ecosystems, minimizing ground water removal, and locating new reservoirs

• climate change has major effects on coral reefs. The warming oceans put reefs in dangers. They produce algae and it can't carry out photosynthesis in warm water.

WAYS CLIMATE CHANGE AFFECTS AQUATIC LIFE

• According to the findings of scientists, global warming & climate change has resulted in extinction of twice as many marine species, particularly around the equator where temperatures are already high.

• Animals were forced to leave their natural habitat to find better living conditions or they would try to survive with the waters warming in their habitat.

Kilimanjaro's and Africa's last glaciers to be gone by 2050!

Glaciers in Mount Kilimanjaro, the Alps and the Yosemite National Park in the U.S. will melt within three decades because of global warming and with the way things are going the UN predicts there is no way to stop it from happening.

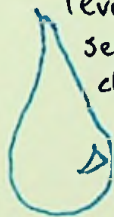
4.5% of the global sea level rise in the last 20 years was created by the ice loss in the World Heritage Sites. To put that into perspective the annual volume of water used in France and Spain put together is equivalent to the annual ice loss from these glaciers.

Even though we who do not live near these sites do not see these glaciers melt in person nor have to bear the flood or water scarcity directly, we still need to take action against climate change because we are all a part of the system that causes it.

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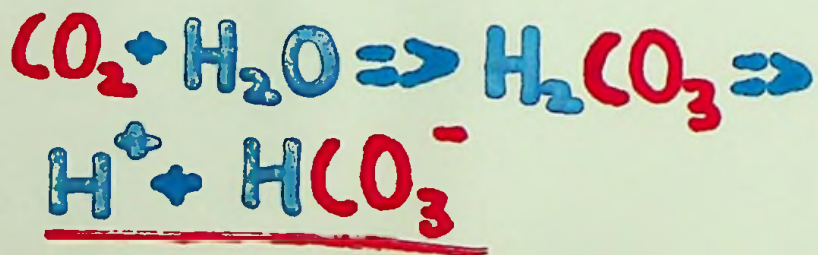
This leads to the threat of scarcity of fresh water during the dry season to the many people who's main water source depends on these glaciers. The people who will be affected by the flooding the most by this are local communities and the indigenous people who live closer to the glaciers. If we don't take action beyond just the political level then future generations and our older selves will all be directly affected by climate change in our day to day lives.



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- Ocean Acidification, a reduction of pH levels in the ocean, has been hurting our oceans for around 200 years now. It is caused from CO₂ emissions into the atmosphere primarily from the burning of fossil fuels and humans changing the landscape.
- Our oceans absorb 30% of all of these emissions and it is starting to hurt life within the deep blue sea. Calcifying creatures such as mollusks, coral, and sea urchins. These are a few examples of organisms who aren't able to develop properly. Coral bleaches faster, killing it off and destroying many homes for our aquatic friends.
- We as human beings need the oceans to thrive for us to also thrive. In order to save our oceans we need to combat climate change and reduce our use of fossil fuels for it is slowly killing all of us!

ACIDIFICATION

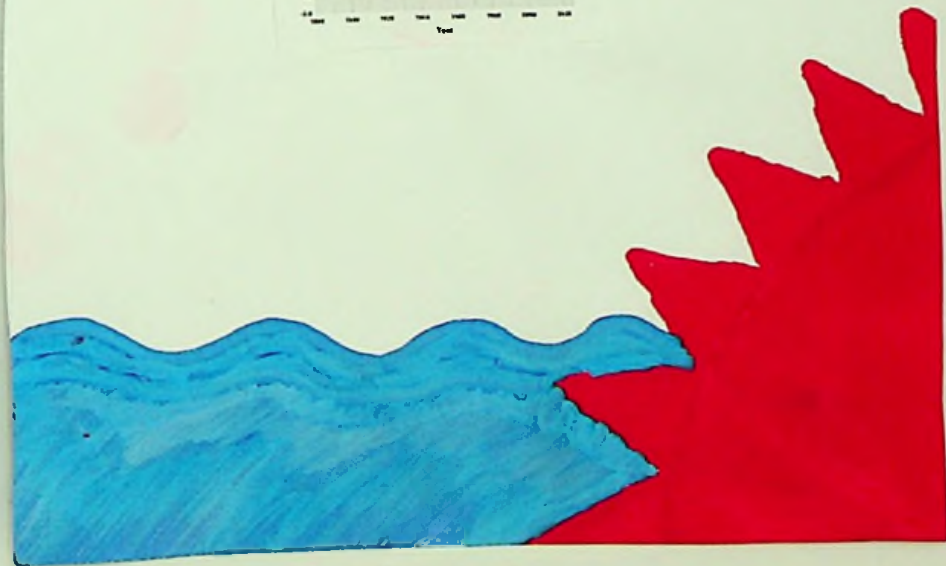
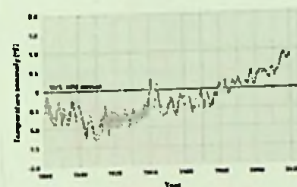


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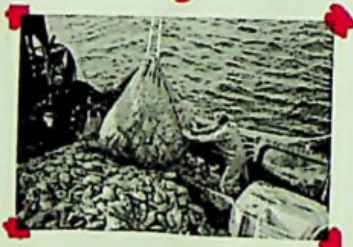
RAISING TEMPERATURE

- Climate change isn't just decreasing the pH of our oceans, it is also increasing the temperature all around the world. The oceans absorb a lot of things. Like we said it absorbs 30% of all of our carbon emissions but it also absorbs a lot of the heat from our sun. Greenhouse gasses such as CO₂ trap and release the sun's energy back to our earth. With the increase of these gasses being emitted into the atmosphere, more of the sun's energy is being reflected back. This in turn increases the heat of the world.
- This heat ruins many opportunities of life in the ocean. Many organisms in the water are sensitive to the temperature of the ocean and require it to be within a certain range to live. Many species of fish are finding our waters becoming more toxic and harder to reproduce in. Oxygen is decreasing within the oceans and it's making certain places harder to breathe in for fish. Almost every living creature in the ocean is hurt by the increasing temperature and soon the impact will hurt us and other land animals. In order to do your part, try to limit your use of cars and consumption on a daily basis.



OVERFISHING

- Fishing is a hobby, sport, and means of food for many around the world. It is very popular and makes up parts of many cultures. However, in the past hundred years, New technology has brought more effective ways of fishing. Wildlife has decreased significantly because of overfishing. Overfishing is decreasing the population, and in turn making it harder for fish to reproduce and decreasing the rate at which fish mature.
- Fish will become more limited as the population of aquatic life decreases, and many people will lose their jobs and both people and aquatic organisms will find it harder to find food. Already, a third of all the sharks and rays are at risk of extinction.
- Many fisheries around the world are being harmed daily and pushed beyond their limits. Some companies and fishermen are illegally fishing in these spots as well, hurting these fisheries even more than we already are.
- In order to help marine life we need to protect them and expand protected areas in the ocean. Cutting back on how much we consume fish and other marine life would also help. Educating people about overfishing, ocean acidification and ocean temperature rising could spread awareness and help put an end to the harm we are doing to our beloved oceans.

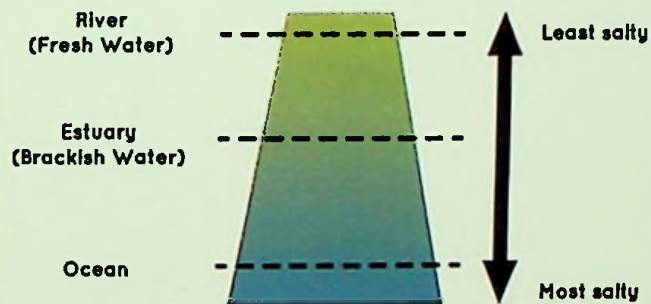


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The Ocean's Currents

• *Currents are the cohesive streams of water that circulate through the Ocean. The ocean currents can change upon the wind, density differences in water masses, gravity, and events such as earthquakes or storms. The water masses in the ocean can begin to differ due to temperature or salinity variations.*

Saltier water is heavier than less salty water; in other words, it contains a higher density. Now when the Ocean water freezes it fails to hold the salt within it. So then the salt will mix with the water below making it saltier and contain a higher density. Glaciers, icebergs, and land ice are all made up of freshwater. The water in the North Atlantic is very dense and high in salt, yet if too much ice melts it can affect the salt levels in the ocean. This will lead the change in currents in the ocean will also affect ocean life as well.



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