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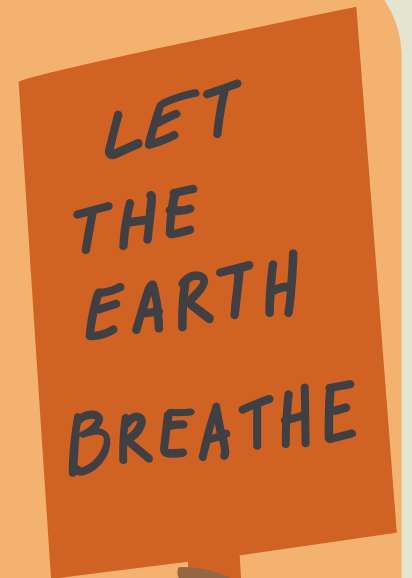
- 1 What is climate change?
- 2 What factors cause it?
- 3 What repercussions does this phenomenon have for sea and marine life?
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What is Climate Change?



Climate change is a long-term change in the average weather patterns that have come to define Earth's local, regional and global climates.



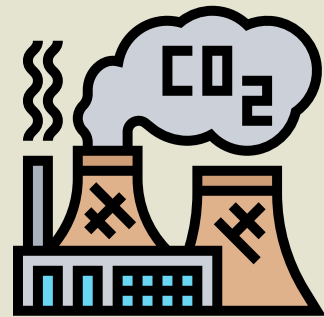


The Primary Causes of Climate Change



Human Causes

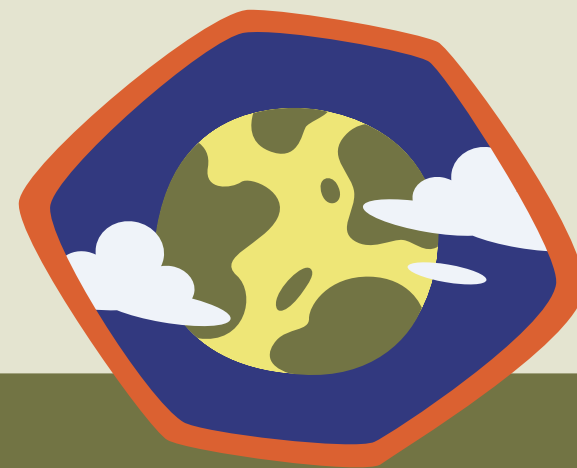
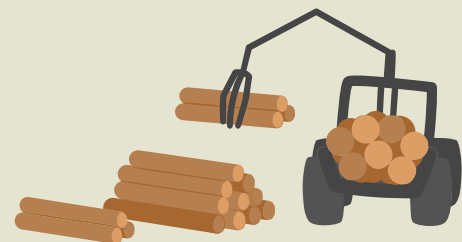
Global Carbon Emissions



Agriculture



Deforestation

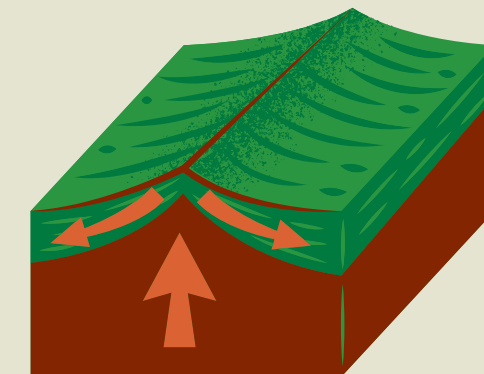


Natural Causes

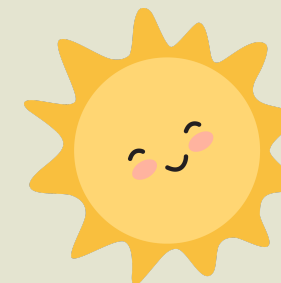
Volcanic Activities



Tectonic Shift



Solar Irradiance



Repercussions on sea and marine life



Changes in the ocean ecosystem

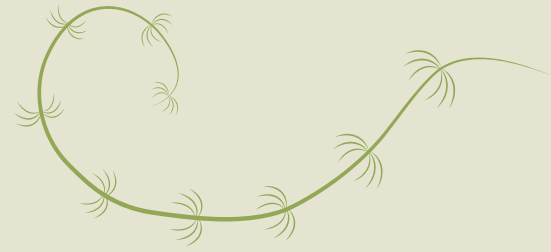


More severe and extreme marine events



Causes an acidification of the water

Posidonia



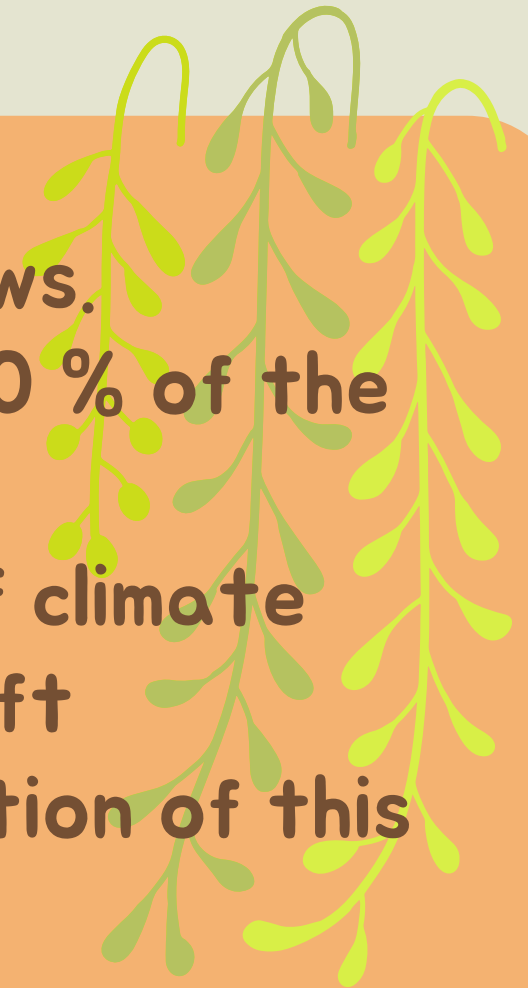
Meadows



Climate changes are affecting the fate of *Posidonia oceanica* meadows. Seagrass covers less than 0,2 % of ocean floor, but store about 10 % of the carbon buried in the oceans each year.

In this way, *Posidonia oceanica* is able to counteract the effects of climate changes through the high thermotolerance of the species, range shift processes of the meadows and variations in the community composition of this valuable marine ecosystem.

Anyway, the power of acclimatization to temperature shifts and the adaptative capacity of *Posidonia oceanica* meadows against human pressures let to suggest a positive trend in the long evolutionary pathway of the species.



Why posidonia help reduce climate change?

The meadows generate between four and 20 liters of oxygen per square meter per day, constituting one of the most important sources of oxygenation in the Mediterranean. Part of this oxygen is released into the earth's atmosphere during periods of maximum productivity. Posidonia seagrass makes terrestrial forests 20 times more capable -per unit area- of capturing carbon dioxide (CO₂), generating oxygen, and filtering that layer of polluting gases that causes global warming and, of course, it thus helps to combat climate change. The more coastal pollution increases, the more the Posidonia meadows and their capacity to be the Mediterranean's carbon sink shrink.



OUR PLANET IS
ON FIRE



SAVE THE TURTLES
NO TO PLASTICS!

Thank You

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