

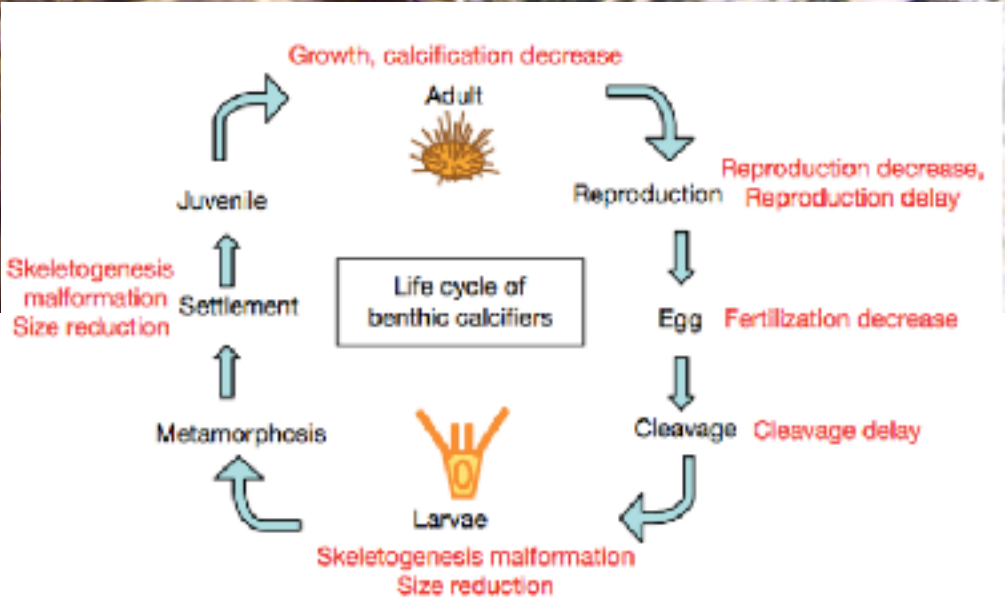
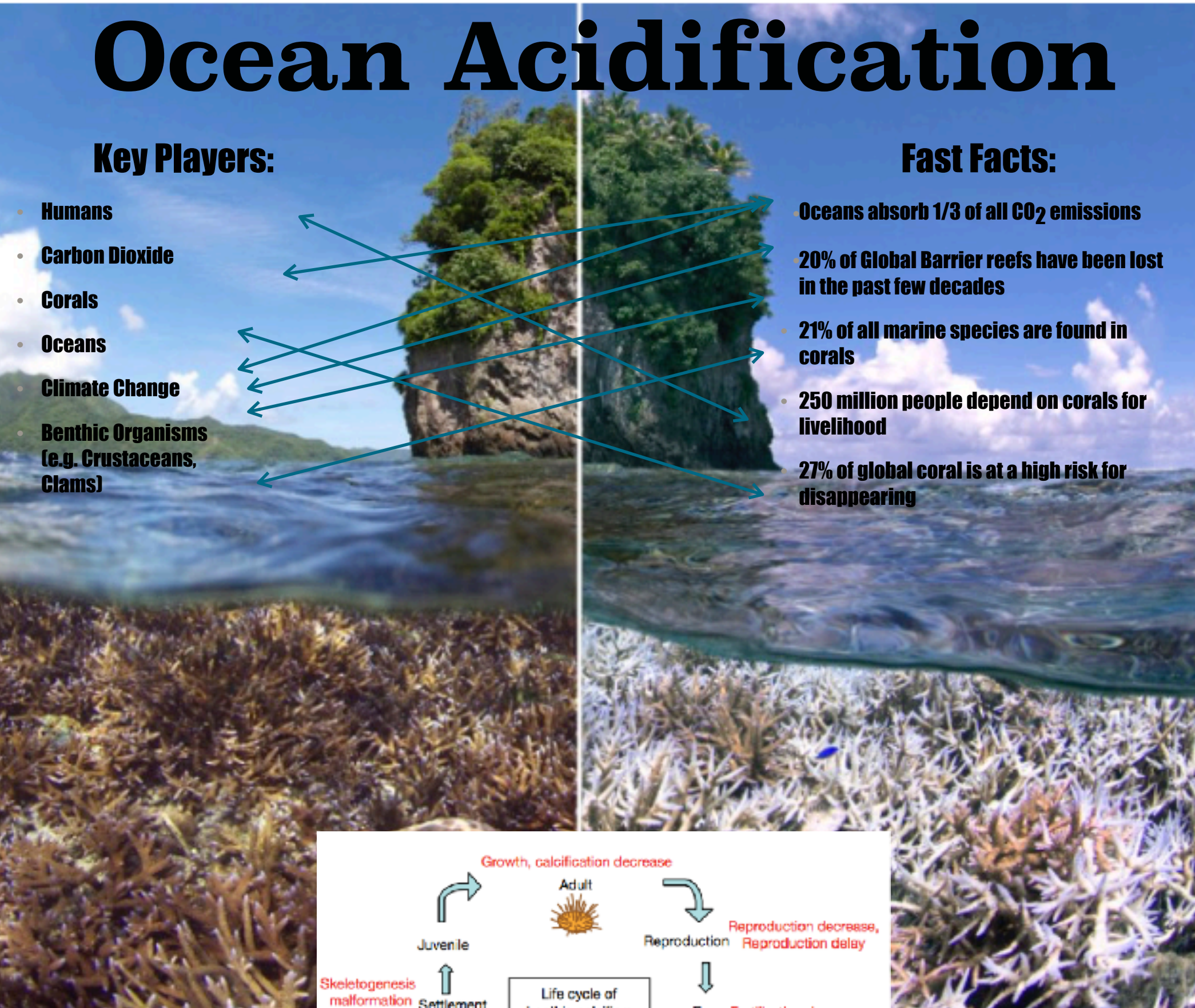
# Ocean Acidification

## Key Players:

- Humans
- Carbon Dioxide
- Corals
- Oceans
- Climate Change
- Benthic Organisms (e.g. Crustaceans, Clams)

## Fast Facts:

- Oceans absorb 1/3 of all CO<sub>2</sub> emissions
- 20% of Global Barrier reefs have been lost in the past few decades
- 21% of all marine species are found in corals
- 250 million people depend on corals for livelihood
- 27% of global coral is at a high risk for disappearing



## What is it?

- Ocean Acidification is a global threat to marine environments.
- Due to excess amounts of carbon dioxide being released into the atmosphere, oceans are becoming more acidic (Kroeker, 2010).
- Research has found that this has negative effects on growth, survival, reproduction and calcification.
- The affects on organisms differ, however organisms that rely on calcification were most sensitive to changes in pH. This affects many life stages of marine invertebrates.

Picture Above: Shows a normal coral (Left) and a bleached coral (Right)

Figure to the left: Outlines a corals life strategy and effects they can undergo.

## What can be done to help?

- Trying to minimize our use of fossil fuels (e.g. carpool, turn lights off when not in use)
- Write to legislators to create restrictions on fossil fuel emissions and/or to mandate research to help better understand how to mitigate the effects of Ocean acidification
- Spread the word!

Figure to the left: Shows the “Hotspots” (at most risk) for bleaching, generally in the tropics.

NOAA/NESDIS Current HotSpots, 4/17/2017

