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Crabby's Reef - Using games to bring people closer to the issue of ocean acidification

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Ocean acidification is often referred to as climate change's hidden evil twin. As the world's oceans partly absorb the carbon dioxide that humans are pumping into the planet's atmosphere, the oceans' pH decreases, making the water more acidic. This comes with a range of negative consequences, one of them being the recently uncovered impairment of the sense of smell of marine animals like fishes and crabs.

Awareness of ocean acidification, including its impacts on marine life, however, is low amongst the public. It is something that is viewed as remote to peoples' lives, happening a long distance away and not for a long time into the future. It is important we take action now as a society to curb climate change and reduce the potential impacts of ocean acidification. Raising awareness and helping to make an emotional connection to the issue is a first step on this journey.

In *Crabby's Reef* we use the power of gaming to enable players to experience the impact of this invisible and abstract process of ocean acidification. Inspired by classic arcade games, it puts players into the metaphorical shoes of Crabby, the crab. They navigate daily life on the ocean floor, guiding Crabby through the maze-like reef, seeking food and avoiding predatory octopuses who would make Crabby dinner. With each new level, you are transported to a more acidic future, your senses dampened by blurring the screen, reflecting Crabby's loss of ability to smell the food.

With life getting harder, we ask how long can you survive?

Play the game here - <https://seriousgeo.games/activities/crabbysreef/>