



# Ocean acidification and biodiversity

<b>Title</b>	<b>Ocean acidification and biodiversity</b>
<b>Content/ Key words</b>	Ocean acidification and loss of biodiversity
<b>Description</b>	<p>Ocean acidification is the process of lowering of ocean pH. This phenomenon is correlated with greenhouse gas emissions, which are partly absorbed by the oceans: the growth of carbon dioxide emissions (CO<sub>2</sub>) linked to human activities increases ocean acidity.</p> <p>Nitrogen of agricultural origin, derived from fertilizers and manure, as well as sulphur from fossil fuels also contributes to the phenomenon of acidification. The scientists observed it by measuring the evolution of the pH: at the beginning of the 19th century, it amounted to 8.16. Today it has reached 8.05 and its development should reach 7.6 in 2100.</p> <p>Ocean acidification has an impact on ecosystems and marine biodiversity. Research is underway to determine the extent to which different marine organisms are affected by a more acidic environment. Acidity is a problem especially for organisms producing calcareous shells such as molluscs, corals and phytoplankton: too much acidity could bring oysters and mussels, for example, to no longer be able to form their shell. The consequences on the food chain and the fishing industry would then be very harmful, from an economic and social point of view: people living from fishing lose a valuable resource.</p> <p>Research programs are underway to better understand the evolution of the phenomenon and its consequences, such as the EPOCA program in Europe (European Project on Ocean Acidification).</p> <p>The acidification process can only be halted by reducing CO<sub>2</sub> emissions. A so-called "Monaco Declaration" brought together more than 150 scientists to question political leader on the need to reduce CO<sub>2</sub> emissions to fight against global warming, but also to reduce the acidification of the ocean.</p>
<b>Link to a national support by country</b>	<b>Croatian:</b>





	<p><b>Greek:</b></p> <p><b>Italian:</b></p> <p><b>French:</b></p> <ul style="list-style-type: none"> <li>• <a href="http://oceanclimat.blog.lemonde.fr/2015/11/18/tout-ce-quil-faut-savoir-sur-lacidification-des-oceans/">http://oceanclimat.blog.lemonde.fr/2015/11/18/tout-ce-quil-faut-savoir-sur-lacidification-des-oceans/</a></li> <li>• </li> <li>• <a href="https://share.america.gov/fr/conversations-en-anglais-expliquer-aux-jeunes-eleves-la-vie-des-oceans-audio/">https://share.america.gov/fr/conversations-en-anglais-expliquer-aux-jeunes-eleves-la-vie-des-oceans-audio/</a></li> <li>• (site anglais/ français)</li> </ul>
<p><b>Links to activity/project sheets</b></p>	<p><b>Link to:</b>  <b>Activity: Experiment on how does the acidification of the sea impacts marine life</b></p>

