

Hay, Toni¹

¹ Indigenous Environmental Specialists

The Effects of Ocean Acidification

Abstract:

Ocean Acidification (OA) is a decrease in the ocean's pH over a long period as a result of the uptake of carbon dioxide (CO₂) gas from the air. The level of pH in seawater is expected to continue dropping and reach 7.85 by the year 2100.

Ocean Acidification has a major damaging impact on aquaculture, which is among the main industries in Australia and New Zealand. Of all the aquaculture species, molluscs such as mussels, scallops, oysters, abalones, clams, and pearls are the most affected by ocean acidification.

Sea waters that have high levels of acid and low levels of pH cause the shell of marine animals such as coral and molluscs to corrode and dissolve. Also, OA can cause young oysters to die off before growing into adulthood. The more acidic seawater eats away at their shells before they can even form. Oyster hatcheries grow oysters to supply oyster farms with larvae; they need to sustain our businesses. When larvae die off, oyster farms go out of business. This may bring immense financial ramifications for aquaculture companies.

Farmed fish such as salmon and southern bluefin tuna are also affected by OA, which slows down their growth. OA also affects the fish eggs and their development.