

Exploring Ocean Acidification in Perth, Australia

Students from South Coogee Primary School recently assembled at Coogee Beach in Perth to continue their Sandwatch activities. An important aspect of the Sandwatch program is the implementation of the MAST methodology and students were excited to participate in an experiment on ocean acidification.

Guided by Activity 6.2 of the Sandwatch Manual, students collected a range of materials from the beach including shells, sand, cuttlebone, limestone rock and granite rock. Vinegar (acetic acid) was added to the samples and the students recorded any reactions. It was evident that all samples containing calcium carbonate reacted with the acid producing bubbles of carbon dioxide gas as the calcium carbonate in the samples dissolved.

Perth Region NRM Coastcare Officer, Craig Wilson explained to the students that increasing ocean acidification levels from dissolving carbon dioxide in the ocean may affect the ability of animals to produce the calcium carbonate required to build shells or skeletons for animals including crabs, oysters and coral.

Students then discussed the effect ocean acidification may have on marine organisms, our local fishery and global food chain. The importance of reducing carbon dioxide emissions was discussed and students then prepared a poster outlining ocean acidification impacts.

Information from the experiment will soon be entered on the Sandwatch database and shared with all interested viewers.

Sandwatch in Perth is supported by City of Cockburn, Verve Energy and Perth Region NRM's Adopt a Beach initiative.

Craig Wilson, Manager Coastal and Marine Program, Kwinana, Australia



Sandwatchers in Australia discussing the ocean acidification experiment.