Research suggests that a simple description can prompt concern

Summer 2012 Special Report: Public Awareness of Ocean Acidification

As part of The Ocean Project's ongoing market research initiative, a representative sample of Americans were asked a set of questions about ocean acidification in the Spring of 2012. Based on these baseline results and our previous research, the data strongly suggest that now is the time for zoos, aquariums, and museums (ZAMs) to reach out to their visitors on this issue.

Current unaided awareness of ocean acidification is very low.

On our scale, where a value of 100 indicates complete agreement with a statement, the score for "I have heard of the issue of ocean acidification" was 14 for the public as a whole ("US composite"), 19 when looking only at recent visitors to a ZAM, and 31 when looking only at those who already claimed concern about climate change - all far from the score of 65 or higher that would have indicated strong agreement with the statement, i.e. general awareness of the issue.

Not surprisingly, the numbers were even lower when the statement was rephrased as "I am familiar with the concept of..." or "I am informed about..." ocean acidification. With the latter phrasing, the agreement score dropped to 10 for the US composite, 12 for recent visitors, and 18 for the climate-concerned.

Yet once aware of the issue, concern spiked significantly.

Even just seeing the words apparently was enough for some to express concern. Although the US composite agreement score for "I have heard..." of ocean acidification was only 14, the agreement score for "I am worried about..." ocean acidification was 17. When prompted with a brief explanation of the problem, the numbers jumped even higher. For all recent visitors, the agreement score on "worried about" went from 26 (without prompting) to 60 (with prompting). For those already concerned about climate change, it went from 58 (without prompting) to 78 (with prompting).
Therein lies the opportunity for aquariums and other informal science education centers.

The research suggests that not only is now the time to help place this issue on the public radar, but also there is a remarkable opportunity to frame this issue accurately, raise awareness, and inspire action on ocean acidification.

Our prior research has shown that the public expects ZAMs to provide them with information about the problems and ways to be part of the solution. The research also indicated that these efforts are most likely to be successful when the problems are put in the context of specific species, and the solutions in the form of personal actions.

In sum, our research suggests that visitors are very likely to welcome information about the problems and solutions associated with ocean acidification, especially when framed in the context of conserving shellfish or corals, for example, but highly unlikely to want to increase their knowledge on the issue, such as the chemical processes at play or the logarithmic nature of the pH scale. In other words, to help people take action, ZAMs do not need to make them scientifically literate on the issue, but do need to provide some ways to help.

A number of ZAMs already are exploring the possibilities for increased outreach on this issue.

A pilot survey this past spring of some of our partner institutions indicated that there is a general recognition of acidification as an important issue. Very few aquariums have programs or exhibits that discuss it - even when they are tackling the related issue of climate change – and where they do, activities connected to specific species or places are centered exclusively around corals and reefs. Looking to the future, those ZAMs that currently are communicating about the issue noted that they do intend to do more. Many others said they are seeking insight and advice, as well as funding, in order to follow suit.

The Ocean Project continues to find ways to support our partners in their ocean conservation efforts, especially by motivating their millions of visitors to take measurable conservation action. Through the summer of 2012, we will be learning more about our partners' interests and needs, and developing an action plan with our partner network to address the growing issue of ocean acidification.

Methodology

Ocean Acidification survey data was based on a sample of 1,817 responses from adults in the United States between March and April 2012. The survey was conducted online, and respondents were screened, certified, and paid. The sample accurately reflects the U.S. population, and the overall confidence level is 99%.

NOAA scientists have warned that more acidic oceans will have dramatic effects, especially on calcifying species such as oysters, clams and corals, potentially putting the entire food chain at risk.