Communicating about marine climate change: The challenge is on!

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The term "climate change" has become very familiar. It features regularly on the news, especially at times of environmental disasters and extreme weather events. Most people seem to have an opinion about climate change and this ranges from unconvinced scepticism to apocalyptic predictions, Hollywood style. For those who accept it the signs are all around them, visible and measurable. For those who deny it, it is equally easy to dismiss those same signs as something else.

When it comes to the marine environment the effects of climate change are more removed from us, obscure, a lot more complex and difficult to explain and understand, just like the marine environment itself. Climate change is already impacting the marine environment, and its effects often overlap with those caused by human activities e.g. pollution and overfishing, making it difficult to unravel cause and effect. Ocean acidification, sea temperature rise, oxygen depletion, loss of biodiversity, changes to species distribution, coastal erosion and coastal squeeze, coastal flooding and storminess are some of the effects of climate change that are impacting marine ecosystems, which in turn has an impact on our society. In the scientific community, the emphasis has moved on from proving the existence of climate change to understanding its effects and therefore our options for adaptation, as well as mitigation.

As scientists we face the challenge of talking about aspects of marine climate change in a way that is relevant, accessible and useful to the general public. Plus, we are competing for the public's attention against Television and Internet, which nowadays are the main sources of information for the majority of people. The first step is to get to know our audience, to listen to them. Who are they? Are they industry groups, local authorities, policy makers, government, education, the health sector, leisure and tourism, the general public? We need to understand their needs and values, the issues that concern them, and how receptive they are to climate change topics.

The next step is to focus our message, make it relevant for them: fishermen may want to hear about the impact of marine climate change on commercial species to help them make an informed decision to diversify and exploit new species. On the other hand, businesses may need information about future changes to storminess and extreme weather, and the likelihood of coastal flooding, to be prepared and suitably insured.

We then need to choose the right channel to communicate; Television and Internet are the obvious choice but engaging directly with people in open fora and debates should also be promoted. Where appropriate, knowledge gaps and uncertainty must be highlighted, so our audience are able to make informed decisions and assess the level of risk they are prepared to accept. Scientists are rigorous and precise, but to grab the attention of people they must also be concise and have conversations rather than discussions. We need to convey the human story rather than the scientific conclusion in a way that is convincing and relevant.

References

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