

## ***Celebration of the Census of Marine Life***

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***Natural History Museum, London, UK***

It gives me a real pleasure to welcome you all to the natural history museum – This organisation is dedicated to discovering the diversity of life and the processes that generates this diversity. We have been doing this for 250 years, firstly as part of the British Museum more lately on our own site here in South Kensington opened in the 1880s. We have some of the very earliest marine samplings from the 19th century [Challenger, etc] right up to the present day. We used the latest technology then (a simple grab and lots of rope) and we use the latest technology now (though usually someone else's ship and ROV). The collections here, some 70 million in number, are visited by >8000 scientific visitors a year and we very much hope to continue that way.

As an outsider, I'm not a marine biologist, I wonder if I might be permitted to make a few observations on the CoML. As I see it, the census of marine life is one of the very few biodiversity based programmes to actually reach its goal – so many are still being very busy and still trying to work out what their goals are.

Have we identified all life forms in the seas? Of course not. We never were going to, but we do at least now know to a good first approximation just how many different kinds of life there are in different groups. And that is a real achievement. Why weren't we able to achieve a complete census, or perhaps will ever achieve a full census, because experience shows us that as soon as we get close to Nature new tools or perspectives allow us to delve deeper – the units we are looking at recede away from us – where we once thought there was a species of coral we discover a species complex and new tools allow us to differentiate them. The CoML is unlike a human census where we know what the units we are measuring are and the challenge is simply organisational. The CoML has gained real knowledge and forged a cooperative community – so uncommon in biology. I can't imagine this being done for rainforests!

The position the CoML finds itself now is not dissimilar to publishing the first draft of the human genome – it was not definitive either endpoint either (how could it have been?) it was a somewhat arbitrary marker in a continuum of activity. Looking back, the real impact of the draft genome was to stimulate interest in the power of genomic biology and to demonstrate that when a community works together great steps can be taken.

I think CoML is also a testament to foundations, especially the Alfred Sloan foundation, which took the risk by putting in place the cement that would enable to multitude of different national and international groups to work together. Again a similarity to the Human Genome, where the foundation I worked for was the single largest funder. Foundations are really good at taking risks, leaving more established and conservative governmental funding sources to do the heavy lifting.

It now remains the work of the multitude of institutes to continue the work. I very much intend that the Natural History Museum will be one of them.