Interview with Dr. Raeanne Miller by Louise Lap - Gender CC



Dr. Raeanne Miller's outward energy, enthusiasm, and passion for science and communication permeate her work as a scientist and communicator at the Scottish Association for Marine Science. In her current role, Raeanne focuses on bringing together climate scientists, policymakers, businesses, and indigenous communities in the Arctic to bridge the gap between the climate science and the people

who use it. Her other interests include understanding how the installation of man-made structures in the sea influences marine habitats, and how this affects the wider ocean ecosystem. Raeanne's research has taken her around the world, visiting places as far flung as Egypt and Western Australia, as well as some of the most remote coastlines around Scotland. As a strong advocate of public engagement with science, she has worked with schools, developed activities for music festivals, and delivered public lectures to encourage an ongoing dialogue around renewable energy development, the history of women in marine science, and science leadership across diverse audiences.

LL: What has been your biggest achievement so far?

RM: I'm not sure I can select a single 'greatest' achievement I think I have accumulated a number of small achievements, which in itself is a big achievement! This include completing my PhD, going to Antarctica with the Homeward Bound Project for women in science, completing (and finishing 2nd) in the Big Ben Nevis Triathlon, running a marathon, and having the honour of being selected as one of the Leading Women of Scotland by Equate Scotland for women in STEM

LL: Why should more women and girls work in climate science?

RM: Because they can! It is a fascinating field and there are so many different opportunities to challenge any interest. For example, you could be building computer models, out on research vessels observing the ocean, piloting subsea robots, monitoring animal migration patterns, examining microscopic algae, or helping people to understand how a changing climate might affect them through science communication. It is challenging, but you get to meet all sorts of people from all over the world, and it really feels like your work can have real impact.

LL: What would you say to encourage more women and girls to work in climate science?

RM: I would say that it is an interesting and incredibly fulfilling field to work in, which can take you to some really interesting places around the world. There are so many

opportunities to make a positive impact on the world by better understanding how it works - it's a fantastic feeling.

LL: What do you feel women can bring to the fight for climate action?

RM: Traditionally, the fight for action has been pitched as an 'us' and 'them' battle, but in reality the impacts of a changing climate will affect us all. With this in mind, women in particular are skilled in bridging the gap between groups who disagree through empathy and understanding. Women listen, and more often than not try to establish a common voice which speaks for everyone - not just one side or the other. Climate action needs to speak for everyone - both men and women - so we need everyone's voices to be involved.

LL: What difference would it make if women were adequately represented in climate science?

RM: If women were adequately represented in climate science, I think the field would be less intimidating to the outsider. Perhaps non-scientists might feel a stronger connection to climate science, in that the science is carried out by people like them, for people like them. Perhaps there would be less perceived barriers to understanding climate science, and more willingness to discuss climate and climate change more openly and more willingly.

LL: What barriers have you faced working in climate science?

RM: I'm fairly new to climate science, but I have worked in marine and environmental science for the past 8 or 9 years. In that time, I think the biggest barriers have been ones which I imposed on myself - thoughts like "I couldn't possibly do that...", or "why would they want to hear from me?", or "I'm not senior enough or expert enough to contribute my ideas". In the past, these self-imposed barriers stopped me from taking risks or trying new things - but now I'm trying to silence those thoughts and forge ahead, confident in my abilities to make a difference.

LL: In what way do you believe that male bias in climate science has an impact on research/policies?

RM: I think the under representation of women in climate science may have impacted both research and policy in that a narrower scope of research and policy initiatives may have been funded or approved. I think the growing diversity of people working in this field means that now, projects are more collaborative and in different ways. The impacts of changing climate are now explored across multiple disciplines, linking more traditionally 'male' subjects, such as modelling, to other fields, such as ecology and social science. With increasing diversity in climate science, I think we get a broader perspective on the topic, and we begin to better understand not just the mechanistics of what is happening, but how it is affecting the planet and human wellbeing.