Speaker Quiz – Meredith Miller

**What did you learn from the entire speaker series?**

There are many ways to be a successful ecologist or scientist. You must have good communication with yourself, other scientists, and the general public (Emma, Sean and Karlisa). It is also very important to look at your research and questions from a broader perspective (Karlisa, Shannon). You can ‘zoom-out’ by analyzing not just your study system, but also the broader environment and socioeconomic systems surrounding it, as well as checking and assessing your biases so they don’t affect the outcome of your work (Karlisa). I also learned not to let uncertainty scare me (Emma). Sometimes it can be difficult to peruse a certain question, or explore topics because they seem daunting and untouchable, but it is good to embrace the unknown and look into things that seem intimidating.

**What three vital pieces of information were given to you to succeed as an ecologist? (And how they can be used in the future)**

Sean Godwin said we should learn basic programming skills and basic statistical modelling. Emma also said that we should develop computer skills alongside field skills. We don’t learn the importance of statistical analysis in regular University courses, and there is little emphasis on learning coding or modern statistics. Learning to code will be very beneficial to be a successful ecologist as many aspects of a research project require both preliminary and post-project modelling and analysis.

Shannon Hennessey said that observation is key. You need to carefully look at things to fully understand them, but also zoom out and look at the big picture to understand the system. As a scientific illustrator, Shannon also looked very carefully at a small scale to understand specific organisms, but it is also helpful to analyze a system with a bigger lens, such as the general intertidal. ‘Zooming-out’ can help you piece together the smaller mechanisms within a system. This is a good way to begin to analyze systems, looking at both the big picture, and the small details.

Sean Godwin said we should contact scientists with the same interests as us. We shouldn’t wait until we want a job to reach out to people, we should be emailing or talking with individuals who we might want to work with a head of time. This was a really great tip for many of us who want to go into academia and are looking for master’s professors or mentors to help us get a well-rounded education. It also opens doors for honors projects or work in industry or with governments. I have started to do this on Linked-In, but now realize that I should be putting more effort into my academic relationships.

**What information from the lectures were you able to use during this course?**

We used the tips from Shannon Hennessey on scientific illustration for our species ID guide. Paying close attention to detail, taking pictures from every angle, and looking at the environment as a whole to capture the essence of our organism in our illustrations.

Emma Atkinson said we should develop skills in both the field and lab. For both species ID and the biodiversity project, we had a field aspect where we had to use proper field techniques to identity organisms, then come back into the lab and create our project write-ups in R. All assignments in this course required me to step out of my comfort zone and work on statistical analysis within R, a coding language I’ve never used before coming to Bamfield. Both this course and Emma have helped me begin to learn how to balance field work with statistical analysis.