## Bringing Nature to Our Backyard

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Professor Sean Menke (right) with students Joel Gard '12, Victoria Jones '13 and Alex Gilbert '12 (left to right) helping to database the department's Herbarium collection, which is an old and very valuable collection!

If you ask me, "I work with ants in the tropical rainforest" is not a great pick up line, which is also one of the reasons why as a pre-med student I never really understood why I was required to take a course like ecology and evolution. 'Why does it matter if I am going to be off somewhere in a hospital curing people?'-I thought to myself. I believe that I have begun to answer this question with the help of Dr. Sean Menke, Lake Forest College's new ecology professor.

I began my interview with Dr. Menke with a couple of ice breakers just to get a good idea of who he is outside of the classroom. Because I was slightly nervous about interviewing my own professor, I was not sure how he was going to respond to my questions. I asked him what kind of books and music he liked and he told me that he loves "nerdy" science fiction books and hates country. That was the point in the interview where I began to feel more comfortable because I realized we have the same sense of humor- which is slightly sarcastic. I now not only know Professor Menke from what he says in class, but I also have a bit of insight into how his mind works and I hope that I express that in my interview of him.

Dr. Menke's research is focused around studying ants and he has written numerous papers for scientific journals about this field. While his personal research at Lake Forest will be focused on ants he was adamant that if a student approached him with an interesting question he would be more than happy to look into it even if it was unrelated to his ant research. The feeling that I got from Dr. Menke during the interview was one of true passion for his field, but also a desire to help students not just to do research, but actually understand why what they're doing is important.

When Dr. Menke began his search for a school he was looking for a place that takes student based research very seriously, and has a student body that is interested in doing research. Dr. Menke believes that in order to teach students how to research they must be engaged in research themselves and see the whole process from data collecting to publication. He says, "If they don't see that, it doesn't come home as to why we're doing what we do, it just comes

off as esoteric and often times goofy. It's not something you think is absolutely fascinating." Coming from a liberal arts college, Dr. Menke wanted that same feeling at his future workplace as the one he had when he was an undergraduate. He believes that having attended a liberal arts college has made him more broadly and holistically educated unlike his friends who attended large universities, and who he felt were limited by the fields they chose. Lake Forest College was the perfect place for him because of his desire to teach at a liberal arts institution, as well as, the support he has received here.

"I work with ants in the tropical rainforest" is not a great pick up line, whereas "I work in a remote part of the tropical rainforest" is pretty good. Suddenly, you become some adventurer and it's kind of cool, rather than just being a dorky biology geek. Science, like dating, is in large part salesmanship. While Dr. Menke states that the closest to the rainforest that any average person might get is the zoo, he also points out that the closest wildlife is in your backyard. Society has convinced us that it is not actually wildlife because it is so accessible and therefore not a novel aspect of our lives. "When I go to a national park and I'm driving down the road, and all of a sudden the car in front of me slams on its brakes, and someone starts taking pictures, I look out to see what they're taking a picture of, and it's a bloody white-tailed deer. It's the same thing as in their garden back home 300 miles away, and yet they don't look at it there they look at it in the forest, like the forest is what is natural." We ignore these animals within urban environments because we do not see them as anything out of the ordinary and Dr. Menke thinks that is a big problem.

Sean believes that there are two different styles of ecologists. "Those that are interested in answering a question and don't care so much about what organism they study and then those who want to know everything about a certain group of species and I'm more on the question driven side." Because of his fascination for lizards and snakes, Dr. Menke chose to study these organisms while getting his Masters degree at the University of Oklahoma on herpetology. When he went to the University of California for his PhD, he intended to continue his study of herpetology. However, his advisor at the time was working with ants and because of the ease of working with invertebrates and their large local abundances (ants are everywhere), Dr. Menke decided to switch to ants as a main focus. This switch allowed him to ask the questions he was interested in, albeit in a different, but according to him, a better way. He says that he used to think an ant was just an ant, like everyone else. Until he actually began researching and studying them and found not only are they very unique, but they are also an integral part of our environment. "They do crazy things, there are so many different styles of ants, some that glide through the air or walk on water, they do all these really cool things that we tend to have no idea about, and it's stunning." And they have such a large impact on our global ecosystem that it is really exciting to be working on something that has that big of an effect.

Dr. Menke's research now is going to focus predominately on looking at organisms in our urban environment. He is driven by two things: questions about our environment and his desire to get people to realize that they play a role in our environment, and therefore everything is relevant to them. He discussed his method of going around to people's houses and knocking on their doors, asking to look at the ants in their yard. These people, stunned by the obscure question, began to learn more about what is just outside their door. It seemed to me that Dr. Menke's favorite part of doing research that deals with organisms in urban environments is people's realization that there is wildlife in their own backyards. Dr. Menke's main goal is to get people to understand why he cares and why they should care about ecology and evolution. "I want my work to be transferable and relevant to their lives, I want people to know that they're actually a part of the system."

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