

We come to MSU study a wide array of subjects, however I think we leave with somewhat similar lessons learned. I would like to share with you a few of the lessons that entomology has taught me during these last four years like the importance of taking opportunities, staying the course, growing and changing and recognizing our power.

The first lesson came to me while riding on a bumpy South American bus, during a study abroad to Ecuador. A friend I made in Ecuador, who had grown up in the Amazon rainforest, was telling me about how his grandma ate live palm weevil grubs. My friend went onto say that no American would eat them. From a few feet down the crowded bus aisle I said, "nuh-uh, Voy a comerlas!" I would eat them! And this brings me to my first lesson, **TAKE OPPORTUNITIES**. When else would I have the chance? Over our time at MSU we took hold of the many opportunities presented to us, whether that was the Lazarus option on your orgo final, being part of sports team, talking to that cute guy or gal in your residence hall, or deciding to study abroad.

However, after taking those wonderful opportunities, we are often left in an interesting position. As I most certainly was after volunteering to eat a live grub, as I placed the squirming grub in my mouth and chomped down, liquid was squirting in all directions, I was fighting back the gag reflex, in that moment I learned to **STAY THE COURSE** even when times got tough. Maybe that guy you asked out, didn't know your name, maybe even though you had nearly pulled our hair out studying there was no way that another latin name or biochemical pathway was going to stay in your head, maybe it was the homesickness from freshman year or getting past those first cringing awkward moments with your freshman roommate. Maybe you kept pushing your physical limits or continued on with learning a language even after a few embarrassing fumbles. As Spartans we have to stick with our endeavors and not be afraid to try again. I will have you know cooked palm weevil tastes a little like bacon.

Now as we go forward in life there are insect traits that must be cognizant of. My third lesson is to **GROW AND CHANGE**, Insects are always growing, changing and transforming themselves. The butterfly has it pretty easy, it only has 4 stages, but other insects molt (dragonflies 17 number of times, or some beetles up to 60 times). As we

move forward into the world we must remain humbly aware of our own shortcomings. We should work to continue gaining knowledge. I often think the most important thing I learned in college was that there is infinitely more I do not yet know. This is true not only for one person, but also humanity as a whole, we still have massive uncharted waters in the scientific world. I challenge you to keep changing, growing and exploring new ideas.

An idea I would like you to consider comes from (some country proverb or Dalia Lama or just showed up on twitter) “One who believes they are too small to make a difference has never slept in a room with one mosquito.” If the annoyance of a mosquito is not enough to convince you of the power of one, think about the power in one malaria positive mosquito. No matter how small we view our actions each of us has an impact and we must **RECOGNIZE OUR POWER**.

Now a shout out to the farmers in the audience, what do you do if you send a scout into your field and you discover that there are two or three Japanese beetles? The answer is usually nothing, who cares if one beetle eats one leaf of one plant in a huge field? That is not going to significantly impact yields. However, we all know that fields full of pest insects, nematodes or plant pathogens can be absolutely devastating. I encourage you to recognize the **COLLECTIVE POWER** on the world we live in. While at times it seems we are just one bug doing something unimportant, our actions do add up.

Finally, I ask you to change gears and reflect on the importance of a single bee. One bee is not incredibly important; it pollinates only a few plants. However, without bees, we would have no honey, cherries, apples, kiwis, cashews, grapes or blue berries to name a few. Infact we would be missing out on 1/3 of the food we currently enjoy. Much like pollinators, each of us is capable of making a difference in the lives of our community and world.

We all have unique talents that help society to function, much like an ecosystem requires all types of organisms to be functional and healthy. As college students we have already had an impact, through volunteering and activism. Spartans are kind people, thanks to the person who gave me the last spot on the bus so I could get to my exam

on time, or to the Spartans who helped to jump a friend's car, or to the advisors and TAs who answer e-mails all day and night to help us learn, or to the Spartans who raise money for cancer research or clean water throughout the world.

Please, continue these acts of love as you go into the world as college graduates, teach a kid to read, help the elderly, practice compassion towards the people, animals and ecosystems you work with. Much like honey bees we have an enormous collective power. I challenge you to **bee** a Spartan.

Thank you, congratulations and Go Green!