The vindication of Ecology, looking backwards to guide us forward

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A book review on Rob Dunn's "*The Wild Life of Our Bodies*"
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Rob Dunn is a member of the Department of Biology at North Carolina State University. He is a well-known biologist and prominent writer in the field of ecology and evolution. In his studies, he tries to understand the stories of individual species and how they could evolve in the future. He has studied ants and their societies, mosquitoes and their transfer of diseases, and parasites in carnivores. Rob Dunn currently lives in Raleigh, North Carolina, with his two children and wife, Monica. His first book, Every Living Thing, highlights the complications of biology for the everyday reader. It also examines the history and drive of individual scientists to solve the mysteries of biology. The book won the National Outdoor Book Award for Natural History writing in 2009. *The Wild Life of Our Bodies* examines the that have evolved from these interactions.

The Wild Life of Our Bodies highlights the consequences of removing evolutionarily stable parasites out of the human body. Medicine has removed the worms of our gastrointestinal tract. As a result, Crohns disease has risen in the population as the worms were getting removed. Dunn mentioned a study that used 26 patients of Crohns disease and had them ingest worm eggs to add the worms back into their gastrointestinal tract. Initially, the majority of the patients experienced exacerbated symptoms of Crohns. At the end of the study, 25 of the 26 test subjects reported that their symptoms significantly reduced. Dunn uses this example to suggest that trying to remove our evolutionary traits, for the sake of being disgusted, is just going to hurt us in the end, as our bodies have inherited these worms.

Dunn also talks about the embedding of feelings through evolution. Humans developed it through being hunted, which is the reason our heart starts pumping when we get scared. On the other hand, we have domesticated animals like sheep and cow by removing their sense of fear. If farmers had to chase the animals constantly, most of the time would be spent catching the animal rather than packaging them and sending products to the markets. This tie between economics and evolution suggests that there are other ways that humans can manipulate organisms to benefit from them.

Another interesting topic that Dunn hints is looking back at our evolutionary path to find treatments in medicine. He mentions that humans have evolved to lose their hair because of ectoparisitism (parasitism on the skin). Through evolutionary time, some humans lack a dark complexion because their climate doesn't have sufficient sunlight, which causes the body to cut back on melanin to absorb more sunlight. Both of these examples suggest that humans can manipulate medicine, and use our evolutionary past to develop different treatments for the diseases we have today. More specifically, humans can use the theories to possibly develop macro-scale procedures to remove certain diseases from the human inhabitants of the world. That sounds a bit far-fetched, but with technology improving day by day, anything is possible. Likewise, new findings in human evolution can change the current tools of medicine and make them more effective. It is obvious that this book not only raises many interesting questions, but also sparks interest in finding the answers to these questions.

This book is directed towards anyone interested in reading about the amazing interactions between humans and organisms. More specifically, this book can educate individuals who want to get a simple summary of the concept of symbioses between humans and other species. If Dunn mentions a concept that is generally unknown to the human population, a quick insight and summary follows it. Essentially, anyone who reads this book will be astonished by the connection that the author creates with you, and the information he endows will keep you reading.

The Wild Life of Our Bodies has recently become one of my favorite books. Every chapter was a different adventure for me and I enjoyed every page of the book. Before reading this I was not a fan of books that were science-related because the ones that I have read have been poorly written or just boring. After reading this book, I will be sure to open up my horizon in reading other scientific literature, starting with Dunn's first book. His book was not filled with jargon, but rather it was extremely easy to comprehend. I was expecting it to be off topic and disconnected from our class, but I was proven wrong after starting the first chapter on the origins of humans and Ardi.

This book was a great tie to my Biology 220 course, Ecology and Evolution. The basis of this book examined the interactions between humans and other organisms. That is a major part of the study of ecology and evolution, with many researchers looking at the symbioses of many organisms in the world. In our class, we looked at interactions between species and studied the positive and negative interactions between them. This helped us determine what kind of interaction was being discussed, and allowed us to suggest how this was developed through time. For example, humans looked at worms as a parasite interaction, when it is actually a mutualism (Referring back to example in ¶ two). As a result, the removing of these worms had negative effects on the population, and was a powerful example to highlight these interactions. It is clear that *The Wild Life of Our Bodies* is a necessary book to read because it parallels the class with real life examples of symbioses. This book taught us that we don't have to read texts to understand theories, but we can rather just look around and understand the interactions that take place, on our own. It truly made me appreciate the concepts we learned in Bio 220 more, and proved to me that assigning books to students in scientific classes can have a positive effect on the student's outlook and understanding.

Anyone who wants to experience the field of evolution through literature needs to read this book. After starting this book, I was always looking forward to finding time in the day to read a part of it. When I finished the book, it was as fulfilling as a cherry pie on Thanksgiving, but the disappointment of concluding it

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crept in. Like many people, I used to shy away from scientific books, but after reading this book, my view on the genre has changed completely. If you have the same mindset, maybe it's time for you to read this book, and like me, become dumfounded.

References

Dunn, Rob R. *The Wild Life of Our Bodies*. ; Predators, Parasites, and Partners That Shape Who We Are Today. Smithsonian Institution, 2011. Print.