Humans and nature: how the un-wilding of both may lead to our demise

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Dunn, Rob. 2011. The wild life of our bodies: predators, parasites, and partners that shape who we are today. HarperCollins Publishers, New York, New York. ix + 262 p. \$26.99, ISBN: 978-0-0-06-180648-3.

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The impact humanity has made on the planet Earth is a wellstudied topic. Pictures of global warming and deforestation provide clear evidence and a broad acceptance of our effect on nature. Nature's affect on us is just as significant, yet far less studied and harder to prove. Rob Dunn tackles this later relationship in his book The Wild Life of our Bodies: Predators, Parasites, and Partners that Shape Who We Are Today. Dunn is an inquisitive ecologist who passionately attempts to provoke others to question the world around them through science journalism and higher education teaching. He has written more than 80 magazine articles for National Geographic, Natural History, Scientific American, BBC Wildlife, and Seed, as well as a previous book, Every Living Thing. Dunn is a professor in the Department of Biology at North Carolina State University book, he (www.robrdunn.com). In his most recent convincingly supports the theory that the extermination of the "wildness" that Homo sapiens closely co-evolved with for hundreds of thousands of years has resulted in the weakening of the individual human system.

The book provides countless fascinating stories from various times and places. Dunn links the stories together in an effort to make the reader realize his underlying message: each part of the global system, humans included, will never be truly separate from the wild. In 1942, Wheeler B. Lipes became a hero after performing his first emergency appendix removal in a submarine with no prior training. However, Dunn shows that the appendix itself was at one time a hero that would come through for the human body in the wake of disaster. Randal Bollinger and Bill Parker discovered the purpose of the appendix, an appendage which revealed a mutual relationship between humans and bacteria. The appendix provides a living space for bacteria and this bacteria restores the necessary bacteria in the intestine when it is wiped out by a severe pathogen. Dunn hypothesizes that appendicitis is the result of an under-stimulated appendix which, no longer challenged by pathogens, turns on its host. Appendicitis is more common in developed countries, along with Crohn's disease and other modern autoimmune diseases. Humans who have access to modern medicines and urban living leave their appendixes with no purpose, eliminating the threat of pathogens and parasites. Dunn uses John and Karen Byerses' case study of the pronghorn to connect humans to nature. pronghorn, an unusually fast and enduring small mammal native to North America, runs faster than a plane going 72 km per hour even though there is no predator that can run even half as fast in its habitat. Pronghorns' speed now seems unnecessary because the predators that forced the creation of this defense mechanism no longer exist. Similarly, human guts run from parasitic worms that are no longer a threat in developed countries. Joel Weinstock intentionally introduced hookworms into the guts of patients with Crohn's disease. Dunn uses the positive results of this experiment and the personal accounts of people who swear by worms to contradict the common belief that any foreign object inside the body is bad and must be gotten rid of. Dunn sheds light on a long, co-dependent past through the exploration of remaining relics, whether they be a crippling disease, or a subconscious aversion to the morbidly obese.

The book is aimed at an educated individual interested in increasing his or her awareness of life processes and potentially conducting further cooperative interdisciplinary ecological research as an undergraduate student, graduate student, or hobby. Dunn clearly describes every concept and provides multiple views. He recognizes that the pursuit of truth is an infinite journey, and encourages readers to make their own experiments to further the field of science. James Arthur Reyneirs spent 50 years planning the creation of a device to completely rid every germ from an organism's body. Such radical and obsessive dedication to scientific discovery is championed by Dunn, who encourages the reader to do the same if he or she has an internal yearning to do so. Dunn uses the biblical tale of the Tower of Babel to warn his young readers of the difficulty they will experience communicating with experts in other fields as they divide up into different, yet connected, fields of science. In order to see the broad picture, cooperation between scientific fields is mandatory. Dunn uses his carefully laid out lesson plan to motivate and fascinate the impressionable and curious minds of the intellectual youth.

Dunn's unique style and plethora of knowledge make his book on the often-feared topic of science quite enjoyable for his intended audience. The intricate blending of people's personal life accounts with scientific lab reports dilutes the heftiness of typical scientific journalism. Before describing the significance or anatomy of Ardipithecus ramidus, Dunn provides the intense relationship Tim White developed with this reconstructed skeleton. Dunn creates an intimate portrayal of the devotion, time, and money such scientists have invested into their greatest findings. The reader develops an understanding and respect for each scientist, making each chapter feel like a tale of heroic discovery ending with the rewarding conclusion. Dunn also uses a plethora of information to provoke further thought within the reader. One footnote briefly mentions that within each successful fig is a dead wasp (Dunn, 10). Such casually presented information shocks the reader while prompting further research. Describing the life inside a human's body connects personally to every reader. As selfish creatures, humans would love to read a book in which the main character is the human body.

The Wild Life of Our Bodies connects significantly to not only Bio 220, but also three of the four classes I am taking the first semester of my sophomore year. Dunn touches on almost all of the topics discussed in Bio 220: Ecology and Evolution. Evolution and the various relationships between animals are two of the main ones. The professor of Bio 220, Sean Menke, shares many of the same views as the author. As co-workers in the same lab, perhaps they developed similar ideas. Another class this book relates to is Phil 210: Environmental Ethics, in which the professor. Rui Zhu, has spent many classes stressing the deep relationship humanity has with nature. supports this idea by showing the negative consequences of destroying this connection. My Psych 215 class, Environmental Psychology, took a field trip to a protected prairie to study biophilia, the prospect refuge theory, and our

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pre-disposed preference for savannas. Dunn describes multiple times our intrinsic preference for places or objects that once helped our ancestors survive, such as plants that grow in caves or protected defensible areas.

This book is a must read for any individual who is at all interested in getting to know his or herself and the world better. It is a fascinatingly useful read because it not only educates the reader on past and current research, but also motivates the further prodding by the curious investigators it creates. Dunn's work instills a self-awareness of the dependence humanity has on the foreign objects we have spent billions of dollars and thousands of years trying to rid ourselves from. It presents an alternate theory that pits itself against modern medicine and conventional thought. Regardless of the side ultimately chosen by the reader, it forces him or her to think for his or herself. **References**

Dunn, Rob. "About." Robb Dunn: all species strange and small. http://www.robrdunn.com, November 10, 2011.

Dunn, R (2011) The Wild Life of Our Bodies: Predators, Parasites, and Partners That Shape Who We Are Today. New York: HarperCollins.

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