

# 2023-2024 AP Environmental Science Book Report

## 1<sup>st</sup>/3<sup>rd</sup> Quarter Project (optional summer)

This project may be completed over the summer to decrease students' workload during the school year. If the project is not completed over the summer, students will be required to complete it during the 1<sup>st</sup> quarter (for fall semester students) or the 3<sup>rd</sup> quarter (for spring semester students).

Choose **one** of the following books. If you are unsure of which book would interest you, they can be easily researched at [www.amazon.com](http://www.amazon.com). There are a limited number of books available from the APES room (316) and the school and public libraries also have several copies of these books. However, it may be necessary for you to purchase one.

The Product: Write a short paragraph (usually five to ten sentences) summarizing each chapter. Number each chapter clearly at the beginning of each paragraph. The entire report should be **2,000 words minimum** regardless of the number of chapters (ie. **books with more chapters should have smaller chapter summaries while books with less chapters will have larger summaries**). This should be typed, since you will be submitting the paper to google classroom. A culminating activity will also be completed in class.

Final thoughts: A few of these books bring up the topics of spirituality or minor instances of human sensuality or foul language within the context of Environmental Science. This is a college level class and the maturity to handle this is assumed.

### APES BOOK REPORT OPTIONS

Barker, Rodney. *And the Waters Turned to Blood: The Ultimate Biological Threat*. 1997.

ISBN#978-0684838458

(this book has 23 chapters including a Forward & Afterward)

Carroll, Sean. *The Serengeti Rules: The Quest to Discover How Life Works and Why It Matters*. 2017.

ISBN#978-0691175683

(this book has 12 chapters including an Introduction & Afterward)

Carson, Rachel. *Silent Spring*. 1962. ISBN#978-0618249060

(this book has 18 chapters including an Introduction)

Figueres, Christina. *The Future We Choose: Surviving the Climate Crisis*. 2020. ISBN# 978-1786580368

(this book has 20 chapters including an Introduction, 10 Actions & a Conclusion)

Kolbert, Elizabeth. *The Sixth Extinction: An Unnatural History*. 2014. ISBN#978-0805092998

(this book has 14 chapters including a Prologue)

Quinn, Daniel. *Ishmael: An Adventure of the Mind and Spirit*. 1995. ISBN#978-0553375404

(this book has 13 chapters)

Shiffman, David. *Why Sharks Matter: A Deep Dive with the World's Most Misunderstood Predator*. 2022.

ISBN#978-1421443645

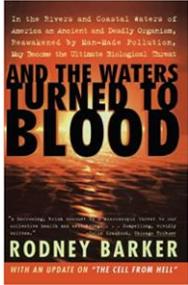
(this book has 12 chapters including an Introduction & Afterword)

Weisman, Alan. *The World Without Us*. 2007. ISBN#978-0312427900

(this book has 21 chapters including a Prologue & Conclusion)

Choosing a book you will enjoy...

**Barker, Rodney. *And the Waters Turned to Blood: The Ultimate Biological Threat*. 1997. ISBN#978-0684838458**



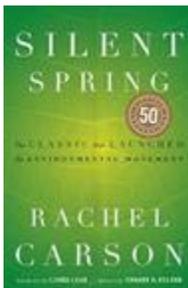
**What Amazon says**

Don't drink the water. Don't swim in it, fish in it, or even bathe in it. Rodney Barker's book, *And the Waters Turned to Blood* details the latest plague to visit our shores: *Pfiesteria piscicida*, the "cell from hell," an aquatic microorganism that causes sufferers to exhibit symptoms similar to Alzheimers or multiple sclerosis. As it follows the fortunes of Dr. JoAnn Burkholder, one of the first scientists to recognize the danger of *Pfiesteria*, Barker's book reads like a cross between science fiction and conspiracy theory: Dr. Burkholder discovers that excessive pollution in the rivers and coastal waters of the Southeastern United States causes a deadly microorganism to breed like crazy; state and federal government attempts to suppress the report. An investigative reporter by training, Mr. Barker writes *And the Waters Turned to Blood* like a thriller, revealing pieces of the puzzle judiciously as he builds tension. Unlike in a literary thriller, however, there is no tidy ending to this story. Readers will be left with the disturbing knowledge that fish are still dying, fishermen are still getting sick, and the potential for disaster in this latest scourge is still unmeasured.

**What Mr. Rush says**

The coolest thing about this book is that it is a true story that takes place in North Carolina. It can drag a little in some places, but ultimately is an easy-to-read page-turner featuring actual researchers from NC State. This has even been enjoyed by non-science people as a casual summer read.

**Carson, Rachel. *Silent Spring*. 1962. ISBN#978-0618249060**



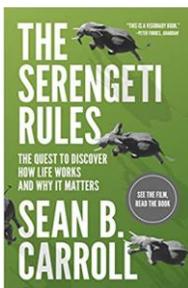
**What Amazon says**

Rachel Carson's *Silent Spring* is now 35 years old. Written over the years 1958 to 1962, it took a hard look at the effects of insecticides and pesticides on songbird populations throughout the United States, whose declining numbers yielded the silence to which her title attests. "What happens in nature is not allowed to happen in the modern, chemical-drenched world," she writes, "where spraying destroys not only the insects but also their principal enemy, the birds. When later there is a resurgence of the insect population, as almost always happens, the birds are not there to keep their numbers in check." The publication of her impeccably reported text helped change that trend by setting off a wave of environmental legislation and galvanizing the nascent ecological movement. It is justly considered a classic, and it is well worth rereading today.

**What Ms. Magee says**

This is often considered the most important environmental book of all time and a "must read" for environmentalists. It can be dry and repetitive, but the things you learn from this book will help you throughout the course. It is always a good book to refer back to when taking the AP Exam.

**Carroll, Sean. *The Serengeti Rules: The Quest to Discover How Life Works and Why It Matters*. 2017. ISBN#978-0691175683**



**What Amazon says**

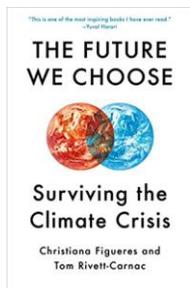
How does life work? How does nature produce the right numbers of zebras and lions on the African savanna, or fish in the ocean? How do our bodies produce the right numbers of cells in our organs and bloodstream? In *The Serengeti Rules*, award-winning biologist and author Sean Carroll tells the stories of the pioneering scientists who sought the answers to

such simple yet profoundly important questions, and shows how their discoveries matter for our health and the health of the planet we depend upon. One of the most important revelations about the natural world is that everything is regulated—there are rules that regulate the amount of every molecule in our bodies and rules that govern the numbers of every animal and plant in the wild. And the most surprising revelation about the rules that regulate life at such different scales is that they are remarkably similar—there is a common underlying logic of life. Carroll recounts how our deep knowledge of the rules and logic of the human body has spurred the advent of revolutionary life-saving medicines, and makes the compelling case that it is now time to use the Serengeti Rules to heal our ailing planet.

**What Ms. Magee says**

This book does a great job of relating regulation in the human body to regulation of ecosystems. It is an easy to read interpretation of some very complex systems.

**Figueres, Christina. *The Future We Choose: Surviving the Climate Crisis*. 2020. ISBN# 978-1786580368**



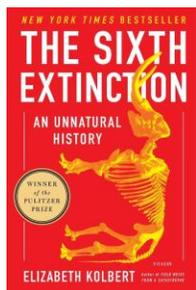
**What Amazon says**

The book takes a hard look at the frightening realities of climate change, but concludes that humanity can still deal with this threat. Moreover, the book presents the existential challenge of climate change as a unique opportunity to build a more just world and to make ourselves better people. Most importantly, the book adopts a very practical approach, and suggests 10 concrete actions that each of us can take in order to create a better future for all the residents of planet earth.

**What Mr. Rush says**

This is a good summary of climate change issues with a more optimistic view than most books on the subject. The book makes you feel like the actions are doable and the goals obtainable.

**Kolbert, Elizabeth. *The Sixth Extinction: An Unnatural History*. 2014. ISBN#978-0805092998**



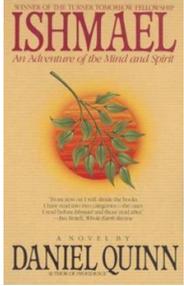
**What Amazon says**

Five watershed events in the deep past decimated life on earth, hence the designation “Sixth Extinction” for today’s -human-propelled crisis. To lay the groundwork for understanding this massive die-off, Kolbert crisply tells the stories of such earlier losses as the American mastodon and the great auk and provides an orienting overview of evolutionary and ecological science. She then chronicles her adventures in the field with biologists, botanists, and geologists investigating the threats against amphibians, bats, coral, and rhinos. Intrepid and astute, Kolbert combines vivid, informed, and awestruck descriptions of natural wonders, from rain forests to the Great Barrier Reef, and wryly amusing tales about such dicey situations as nearly grabbing onto a tree branch harboring a fist-sized tarantula, swimming among poisonous jellyfish, and venturing into a bat cave; each dispatch is laced with running explanations of urgent scientific inquiries and disquieting findings. Rendered with rare, resolute, and resounding clarity, Kolbert’s compelling and enlightening report forthrightly addresses the most significant topic of our lives.

**What Ms. Magee says**

An engaging look at a series of case studies that show how biodiversity is being lost in what can be called the Sixth Extinction.

**Quinn, Daniel. *Ishmael: An Adventure of the Mind and Spirit*. 1995. ISBN#978-0553375404**



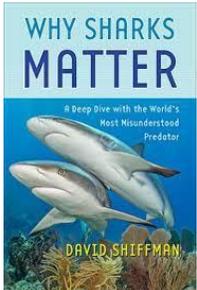
**What Amazon says**

Quinn won the Turner Tomorrow Award's half-million-dollar first prize for this fascinating and odd book. The unnamed narrator is a disillusioned modern writer who answers a personal ad ("Teacher seeks pupil. . . . Apply in person.") and thereby meets a wise, learned gorilla named Ishmael that can communicate telepathically. The bulk of the book consists entirely of philosophical dialogues between gorilla and man, on the model of Plato's Republic. Through Ishmael, Quinn offers a wide-ranging if highly general examination of the history of our civilization, illuminating the assumptions and philosophies at the heart of many global problems. Despite some gross oversimplifications, Quinn's ideas are fairly convincing; it's hard not to agree that unrestrained population growth and an obsession with conquest and control of the environment are among the key issues of our times.

**What Mr. Rush says**

It's about a gorilla who telepathically teaches a guy about global issues of consumption. Most people either love or hate his book, based on whether they can get past the idea of a telepathic gorilla.

**Shiffman, David. *Why Sharks Matter: A Deep Dive with the World's Most Misunderstood Predator*. 2022. ISBN#978-1421443645**



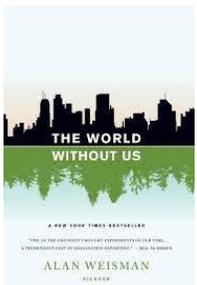
**What Amazon says**

Get submerged in the amazing world of sharks! Your expert host, award-winning marine biologist Dr. David Shiffman, will show you how—and why—we should protect these mysterious, misunderstood guardians of the ocean. Sharks are some of the most fascinating, most ecologically important, most threatened, and most misunderstood animals on Earth. More often feared than revered, their role as predators of the deep have earned them a reputation as a major threat to humans. But the truth is that sharks are not a danger to us—they're in danger from us. In *Why Sharks Matter*, marine conservation biologist Dr. David Shiffman explains why it's crucial that we overcome our misconceptions and rise above cinematic jump scares to embrace sharks as the imperiled and elegant ocean guardians they really are.

**What Mr. Rush says**

Who doesn't like sharks? This is a book about sharks and the efforts to conserve them. The first third is about shark ecology. The middle third gets a little slow with political policies, but then it picks up again with solutions. The book also references many topics in APES and will help you understand material covered in class.

**Weisman, Alan. *The World Without Us*. 2007. ISBN#978-0312427900**



**What Amazon says**

Because of the scientific terminology and the interlinked data amassed bit by bit, this is not an easy read for narrator or lay listener. But it's a fascinating book, and Grupper handles it well. Grupper's careful narration brings to life Weisman's judicious organization, unambiguous grammatical structure and vivid descriptions of what would become of land, sea, fish, flora and fauna should humans disappear from the face of the earth. Weisman explains the earth's capacity for self-healing. Unchecked by human intervention, a city like New York would flood within days, its buildings and infrastructure would collapse, and

soon the city would revert to its original ecosystem. But the message of the book is our legacy to the universe: Every bit of plastic manufactured over the last 80 years or so still remains somewhere in the environment. Weisman and Grupper convert abstract environmental concepts into concrete ideas. Broadly and meticulously researched, finely interwoven journalism and imaginative projection, the book is an utterly convincing call to action.

**What Ms. Magee says**

Amazing look at what would happen if humans simply disappeared. It includes descriptions of not only how nature takes over, but also how our infrastructure holds up (or doesn't).