

AP Environmental Science
Summer Assignment & Summer Reading List
Mr. Gongaware
Mrs. Volkmann

Welcome to AP Environmental Science, commonly known as APES. For this summer, here are some ways to “GO APES.” None are required; all are fun. Continue reading for the suggested summer reading list.

- Instead of driving, ride a bike or take a walk
- Get wet in a downpour (not in a thunderstorm)
- Follow a stream to its headwaters
- Follow a stream to its mouth
- Speaking of water, where does yours come from?
- Watch an ant colony
- Study the waves at the beach
- Go into the marsh and smell decomposition at work
- Solve the local deer overpopulation problem
- Visit the Montgomery County recycling facility (sadly, superior to Fairfax County’s)
- Watch the Discovery Channel
- Figure out why dew forms on the grass at night, but not every night
- Research what “Code Red” days mean
- Compare star counts in Vienna vs. your vacation spot (required: lay on your back)
- Climb Old Rag Mountain or another metamorphic stalwart
- Look up what “metamorphic” means
- Play around with Google Earth
- Grow your favorite vegetable
- Look at a big tree and determine where all that mass came from
- Go fishing – catch a snakehead
- Follow the path of your favorite gem or precious metal from mine to your ring finger
- Pretend that you have no electricity for an evening
- Where does your electricity come from, and why does it matter?
- Camp out, even if it’s in your back yard
- Pick berries
- Use sunscreen regularly
- Change your light bulbs to CFC’s
- Compare your car’s interior to the greenhouse effect
- Watch some birds or bats
- Compare the color and ‘blinking’ patterns of different fireflies
- Visit a farm, or at least the farmer’s market (every Saturday, 8-12, at the Vienna Caboose)
- Have a septic tank? How does it work?
- Read the Wall Street Journal
- Tired of the phrase “going green?” Come up with another term.
- Buying organic food? Not buying organic food? Does it matter?
- At the pool? Figure out how many gallons of water it takes to fill.

Suggested summer reading – nothing required

Environmental science has a problem. That “problem” is that it’s an immense field of study. Not only is it a science in the traditional sense, but it’s complicated by societies, opinions, government, beliefs, economics, laws, and ethics. If you want to succeed in APES, you’ll need to constantly embrace this inter-disciplinary perspective. The list of books below is by no means presenting an agenda of any kind. It’s nothing more than a mix of books demonstrating the variety of environmental topics. Agree, disagree, like, or dislike, it’s up to you. By the way, go to the library and borrow these books. Save some paper, save some cash.

[A Sand County Almanac](#), by Aldo Leopold

A collection of essays written in a similar style to Thoreau. A bit on the philosophical side, read this as a collection over time, not as a cover-to-cover read in a few sittings. Leopold’s prose can be as beautiful and majestic as the landscapes he describes.

[Ishmael](#), by Daniel Quinn

From Amazon.com: *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.*

This is an odd but fascinating book that draws you in once you get beyond the premise.

[Maiden Voyage](#), by Tania Aebi

This is just a great personal account that has little to do with environmental science (the sailing U weather stuff is relevant), but everything to do with growing up as a teenager. From the book’s cover: *Tania Aebi was an eighteen-year-old dropout, a bicycle messenger in New York City by day, a Lower East Side barfly at night. In short, she was going nowhere-until her father offered her a challenge: Tania could choose either a college education or a twenty-six foot sloop. The only catch was that if she chose the sailboat, she’d have to sail around the world-alone.*

[The Omnivore’s Dilemma](#), by Michael Pollan

Like to eat? Wonder about what you’re eating? The author dissects food in what he describes as “a natural history of four meals.” From McDonald’s to foraging and hunting, it’s a thoughtful look at not only where food comes from, but how it affects the planet. This is not a vegetarian’s manifesto; it’s a very balanced attempt by the author to retrace the steps of the food supply chain. Part of the book focuses on a farm in Staunton, Virginia, Polyface Farms, that you can visit.

[Silent Spring](#), by Rachel Carson

As the cover of the book declares, this is “the classic that launched the environmental movement.” Frankly, it’s a little hard to read, because the author is trying to make her case about the role of DDT in our environment in an indisputable way. You have to read this book in context; imagine a woman in the early 1960’s confronting a government and industries that were clearly opposed to her viewpoints. It’s a work of courage as much as a work of science.

[The World Without Us](#), by Alan Weisman

Einstein used to conduct what was termed *gedanken*, or thought experiments. Weisman considers a large-scale *gedanken*: What would the Earth be like if people suddenly vanished? Although it’s a disturbing thought at first, Weisman uses this premise to apply his “thought experiment” in amazing ways. It’s another approach to answering the question, “What effect does humanity have on the planet?” From New York subways to nuclear waste, he addresses some very interesting “what-if” scenarios.