

Unnatural Companions Reading Reflection

Instructor Background: The following excerpt is taken from Chapter 10 of Peter Christie's book *Unnatural Companions: Rethinking Our Love of Pets in an Age of Wildlife*. Christie looks at our love of pets from the lens of E.O. Wilson's concept of biophilia and suggests in some cases our love of pets can be damaging to wild creatures and the environment in general. As he mentions in the accompanying <u>video interview</u>, pet owners can make some changes that are healthier for biodiversity and that we should love BOTH our pets and wild creatures. The excerpted passage and the reflection questions that follow are intended to help students think critically about the pros and cons of pet ownership and its relationship to conservation.

Below you will find a PDF of pages 195-199 of Chapter 10, the reading reflection questions for students, an instructors guide and additional resources. After students have read and annotated the excerpt, they can answer the reflection questions independently or in discussion with their classmates. This is meant to spark a unique conversation about conservation.

CHAPTER 10

The Pet-Keeper Conservationist

Edward O. Wilson wasn't yet a conservation hero and giant among biologists when he met Methuselah in the Sierra de Trinidad near Cuba's southern coast. The year was 1953, and the future author of the concept of biophilia was still a Harvard graduate student. The trip to Cuba was his first to the tropics. It was, he recalls, a childhood dream fulfilled. He had grown up in various towns across Alabama, tracking insects, snakes, and frogs through lush, local marshes. But from his boyhood and beyond, Wilson longed to witness the diversity of tropical life. There, myriad creatures and plants promised a banquet of new species, complexity, and enchantment. His yearning was fed by exhilarating accounts he'd read by equatorial biologist-writers, like explorer and naturalist William Beebe. "The tropics I nurtured in my heart were the untamed centers of Creation," Wilson writes in his memoir Naturalist. The journey to Cuba—the first of Wilson's many to the globe's teeming and sultry midlatitudes—turned up remarkable ant species for his graduate work and many other strange creatures besides. Methuselah was among them.1

Methuselah was a lizard brought to Wilson's attention while he tramped in the isolated mountains. It was captured by the plant scientists with whom he was traveling. The animal was almost a foot long—far larger than most of the local anole lizards around—with rough-looking, folded gray skin and sly, rotating eyes. A crescent-shaped ridge rose from the back of its head. The young biologist had never seen anything like it. It resembled, he thought, the chameleons of Africa. He later learned that the species, found only in Cuba, is actually an oversized member of the anole lizard group—it's now commonly known as the short-bearded anole—but it shares, astonishingly, many characteristics and habits of its far-distant chameleon relatives. "I named the lizard Methuselah for its craggy features and gray wrinkled skin," Wilson recounts, "and kept it as a pet for the rest of my summer's travels."²

Methuselah, the Biblical character, is best known as the oldest person in the scripture (969 when he died, says the book) and, ultimately, as the grandfather of Noah, another celebrated rescuer of life's diversity. Methuselah, the pet, accompanied Wilson from Cuba to Mexico's Yucatan Peninsula. Wilson continued on to Mexico City and to the pine woods of the surrounding plateau. He traveled beyond and down to the lush, rich rainforests near Veracruz and up the slopes of Pica de Orizaba, a volcanic mountain close to the city of Orizaba. Methuselah remained Wilson's companion throughout his season-long tropical expedition. The lizard was a coadventurer in the scientist's first exhilarating experience with exotic tropical diversity. In the end, the pair—Wilson in rapturous awe and the lizard likely just dazed—flew home together to Harvard. Methuselah stayed with the biologist into the school year in eastern Massachusetts. From the windows, as the ivy climbed their stately quarters, they watched autumn arrive. The leaves of maples turned crimson and then gold, and the cool of the temperate mornings grew sharper.

Long before, Wilson had collected snakes, lizards, and insects throughout his boyhood. He filled cages and bottles. He begins his book-length account of his chronic fever for biology with a seaside remembrance from age seven. He recalls spotting jellyfish and rays at Florida's Paradise Beach and catching a toadfish and keeping it in a jar. The context of these experiences was the disintegration of his family. He, an only child, had been sent to the coast to stay with people whose names he can't recall while his mother and father navigated their divorce. Wilson turned to natural history, he admits later, for solace. "A nomadic existence made Nature my companion of choice," he explains, "because the outdoors was the one part of my world I perceived to hold rock steady. Animals and plants I could count on; human relationships were more difficult."³

The approach was apparently effective. While other hardships and tragedies continued to hammer him into early adulthood—blindness in one eye from a spiny fish, a partial loss of hearing as a teen, persistent poverty, relocations from town to town and school to school, frequent loneliness and brutal bullying, and his father's alcoholism and eventual suicide by gunshot at the side of the road—Wilson writes with enduring, almost unfathomable buoyancy. Heartbreak is one thing, but joy found in the fantastic insects, snakes, and amphibians along Florida's shore or at an Alabama pond edge is something else. You don't have to be familiar with natural life to find salvation in its company: "Hands-on experience at the critical time, not systematic knowledge, is what counts in the making of a naturalist," he declaims.

Although Wilson had previously kept wild animals at his home growing up, Methuselah is the first in his memoir to be described as "a pet." By this time, he is a young man. He declares his fondness for the lizard. It's a wholly human sentiment. The biologist in him is there too; as he spends time with Methuselah, his curiosity is piqued by the

animal's chameleonlike behavior closely, and he publishes a scientific paper about it in an academic journal. (He also reflects with certain self-recrimination that, considering Cuba's short-bearded anoles may be threatened with extinction, taking one from the wild probably wasn't the wisest thing he could have done.)

Yet, Wilson's relationship with Methuselah as a pet seems to me important. Keeping animals found in nature is something I did as a kid. I kept company with turtles, salamanders, and an American toad named Rudyard for years. I greeted them when I returned from classes. I fed them with mealworms and other larvae and watched, mesmerized. as they stalked the crawling food in terraria on my bookshelf. I wanted to be familiar with them in a way I couldn't be-or so I imagined-in the field. In this sense, they were pets; I was in it to increase my chances of a connection and of some more-intimate understanding. My father, who became a fisheries ecologist, kept snakes and other creatures in the same way when he was young. Other budding biologists going back centuries have done so as well. For some, it takes only catching the animal, holding it in hand, and releasing it again. The goal is a moment of closeness—however terrifying—and a glimpse of a latticework span bridging our species, one that might not otherwise come into view. A sense of a nature lover's rite of passage is in it—even as the motivation may seem paradoxical and difficult to make out.

"I have cast back, trying to retrieve my emotions to understand why I explored swamps and hunted snakes with such dedication and recklessness," Wilson writes after recounting his near-death effort to capture—unsuccessfully—a deadly, five-foot cottonmouth moccasin when he was 15. "The activities gave me little or no heightened status among my peers; I never told anyone most of what I did. Pearl [Wilson's stepmother] and my father were tolerant but not especially interested or encouraging; in any case I didn't say much to them either, for fear they would make me stay closer to home.

"My reasons were mixed. They were partly exhilaration at my entry into a beautiful and complex new world. And partly possessiveness; I had a place that no one else knew. And vanity; I believed that no one, anywhere, was better at exploring woods and finding snakes. And ambition; I dreamed I was training myself someday to be a professional field biologist. And finally, an undeciphered residue, a yearning remaining deep within me that I have never understood, nor wish to, for fear that if named it might vanish."

Conservationists want to get their hands on animals. They want, for some reason, to be close. They want to have pets. Not all of them, but many. The urge is there. Wilson kept Methuselah as his pet reptile, and years later—as he was gathering his ideas about biophilia into his 1984 book—he had a lively cocker spaniel to entertain him. (The dog interrupts him around page 127, launching into a territorial barking fit as a jogger runs past.) Undoubtedly, in his more than 90 years, the groundbreaking biologist had other pets as well. Many conservationists have them and love them. The flip side is perhaps less often true: not many pet owners think consciously of conservation. For many—as the research described in this book makes clear—the planet's shrinking diversity often doesn't warrant as much consideration as do animal companions. Yet, few among these same pet owners aren't moved by the sights and sounds of wildlife when they have a chance to encounter it. Appreciating other sentient life—as something, perhaps, essential to human meaning and spirit—is common to both pet people and the devoted defenders of nature. The groups are not two; they belong to the same tribe.

To some extent, science bears this out. Several years ago, Norwegian psychologist Tore Bjerke and his colleagues found what they considered a link between owning pets and a more general interest in wildlife. They surveyed more than 680 residents of Trondheim, Norway, and found





Reading Reflection Questions

- 1. In the 1950's E.O. Wilson was traveling to various tropical locations observing biodiversity, focusing on studying and collection ants. Wilson also met Methuselah, a foot-long lizard very large for its group. What group of lizard did Methuselah belong to? (For more lessons on these amazing lizards, check out the resource list in the blogpost!)
- 2. The Short-Bearded Anole is found only in Cuba. What's another term for a species that's found in a small limited area?
- 3. Methuselah was Dr. Wilson's pet for the rest of his journey traveling away from Cuba to Mexico and eventually back to Massachusetts with him. Do you think a biodiversity researcher today would take on a pet and move them around? Why or why not? Are there ways in which keeping pets might work against biodiversity and conservation? Use evidence to support your response in complete sentences.

4. Do you like seeing, touching and collecting things in nature? Do you think there's a connection between liking nature and liking pets? Explain your answer using what you have learned from the reading, data play, and video from Peter Christie.





5. Many people, including conservationists, have pets. Are there any downsides to owning pets? List at least 2 good things, and 3 bad things. (Check out the "Data Play" activity in this blog post for a deeper dive into this question!)

6. How does Ed's mindset about taking the lizard from its natural environment in Cuba change? Why do you think his mindset changed? What are the implications of removing an organism from its natural environment?





Instructor Guide - Reading Reflection Questions

- 1. In the 1950's E.O. Wilson was traveling to various tropical locations observing biodiversity, focusing on studying and collection ants. Wilson also met Methuselah, a foot-long lizard very large for its group. What group of lizard did Methuselah belong to? (For more lessons on these amazing lizards, check out the resource list in the blogpost!) *Methuselah belongs to the group of lizard called the anoles*.
- 2. The Short-Bearded Anole is found only in Cuba. What's another term for a species that's found in a small limited area? *Another term for a species that's found in a small limited area is an endemic, rare, range-restricted or range-limited species.*
- 3. Methuselah was Dr. Wilson's pet for the rest of his journey traveling away from Cuba to Mexico and eventually back to Massachusetts with him. Do you think a biodiversity researcher today would take on a pet and move them around? Why or why not? Use evidence to support your response in complete sentences. Note: Students should be thinking about the idea of removing the animal from its natural habitat and the ecological implications of that on its native environment (think food webs, ecosystem functions) as well as the ecological impact of owning a pet referenced in the article.
- 4. Do you like seeing, touching and collecting things in nature? Do you think there's a connection between liking nature and liking pets? Explain your answer using what you have learned from the reading, data play, and video from Peter Christie. *Student responses may vary*.
- 5. Many people, including conservationists, have pets. Are there any downsides to owning pets? List at least 2 good things, and 3 bad things. (Check out the "Data Play" activity in this blog post for a deeper dive into this question!) Positive student responses may include the companionship, fun, exercise, safety. Negative student responses may include expensive vet bills, requires a lot of food, requires a lot of attention, picking up feces and cleaning up after pet. Encourage students to consider the ecological impacts discussed in the various resources. For example, consuming other animals is a huge environmental impact as is impinging on local habitats and water sources. Removing some animals from their natural environment is
- 6. How does Ed's mindset about taking the lizard from its natural environment in Cuba change? Why do you think his mindset changed? What are the implications of removing an organism from its natural environment? Students should note that upon reflection, Ed did not think he should have taken the lizard out of its natural environment. They can consider the native environment of the organism, its role in the larger ecosystem, and how that ecosystem would be affected without it.





Additional Resources:

- "Pet Owners Spending More on Time-Saving, Specialty Pet Care Services" from the US
 Census Bureau
 - Over the decade ending in 2017, sales of pet care services doubled, to a total of \$5.8 billion, according to the latest Economic Census statistics.
- "Reducing your Dog's Carbon Pawprint" from AKC Pet Insurance With approximately 89.7 million dogs owned in the United States, the environmental impact of pet ownership can be substantial.
- "Economic Impact of U.S Pet Industry All 50 States, DC & National" from the Pet Industry
 Joint Advisory Council The American pet industry supports over 1.3 million U.S. jobs and
 pays more than \$60 billion in salaries, wages, and benefits. The industry generates over
 \$221 billion in direct, indirect, and induced economic impact annually.
- <u>HHMI Lizard Evolution Virtual Lab</u> This interactive, modular lab explores the evolution of the anole lizards in the Caribbean through data collection and analysis.