

Edward O. Wilson on **THE FUTURE OF LIFE**.

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Review-Article by Don Eulert, rev 2020

In this book's Prologue, *A LETTER TO THOREAU*, author E.O. Wilson addresses "Henry! May I call you by your Christian name? Your words invite familiarity and make little sense otherwise" and the book signs off, "Affectionately yours, Edward."

This delightful monologue/lecture, rich with familiarity and anecdote, serves our common interest "to address accurately the human condition" and to place the study of natural history in context and continuity. Wilson explains to Thoreau the meanings of (even the reasons for) his solitary sojourn ("your spirit craved an epiphany"), and links him straight toward contemporary issues of ecological science and ethics.

Wilson's knowledge-store is voluminous and encompassing. As a researcher in entomology he also chides Thoreau for not attending to the miraculous and numerous members of the food chain underfoot (the "more encompassing wisdom" that science and technology have advanced).

Wilson has contributed significantly to discoveries--and describes others sleuthing in unlikely places--that prove our biodiverse world far richer than previously guessed. As a naturalist he abhors how rapidly it is disappearing, "cut to pieces, mowed down, plowed under, gobbled up, replaced by human artifacts."

When Thoreau wrote, little more than a billion people lived on Earth; now [2020] we number nearly eight billion. Wilson in 2002 suggested that humans may peak out at between eight and ten billion by century's end, which he terms "the bottleneck" through which we might pass, "but just barely." Although the situation is desperate, there are signs that the battle--for a decent standard of living, and shelter for most of the vulnerable plant and animal species--can be won.

In order to pass through this bottleneck, "a global land ethic is urgently needed. Not just any [agreeable sentiment], but one based on the best understanding of ourselves and the world around us that science and technology can provide." A sobering statistic: four more planet earths would be required for every person to reach present U.S. levels of consumption. Worldwide stress on the natural world will lead not only to habitat destruction, but also to diminished per-capita fresh water and unbalance of carbon dioxide in the life cycle.

The chapter *Nature's Last Stand* introduces one after another graceful rare and beautiful habitat and species, with narratives of their extinction via lethal erosion of the biosphere. Wilson ends with a scenario from the year 2100. Gone are the biodiversity hotspots (which have yielded the compounds for most of our medicines), gone are half or more of the Earth's plant and animal species. What remains the same: *homo sapiens'* nature to "multiply and expand heedlessly until the environment bites back . . . [in] feedback loops--disease, famine, war, and competition for scarce resources." If present trends continue, "the most memorable heritage of the twenty-first century will be the Age of Loneliness that lies before humanity." Wilson imagines a testament we will have left

behind, beginning with “*We bequeath to you the synthetic jungles of Hawaii and a scrubland where once thrived the prodigious Amazon forest . . .*”

In the next chapter, *The Planetary Killer*, “the trail of *homo sapiens*, serial killer of the biosphere, reaches to the farthest corners of the world.” Wilson’s postmortem specifics make fascinating reading, like catching your breath going by the scene of a fatal car accident, as he ranges across continents and species like a Crime Scene Investigator. Leaving out the devastation of the past, The World Conservation Union Red List estimates that one in four of the world’s present mammal species and one in eight bird species may not survive the next 100 years. Wilson imagines patting one of the last surviving Sumatran rhinos, “a reassuring touch of my hand. *We know more about the problem, Emi; it is not too late.*”

For E.O. Wilson, the answer is to be found--as he explains to Thoreau--in science. First, numbers can convince us. The value that ecosystems provide yearly to humanity, free of charge, equals \$33 trillion, twice the GNP of all countries in the world. Fact: “the more species that live together, the more stable and productive the ecosystems they compose.” And, “all the quarter-million plant species--in fact, all species of organism--are potential donors of genes that can be transferred by genetic engineering . . . [to produce] cold-hardy, pest-proofed, perennial, fast-growing, highly nutritious crops more easily sowed and harvested.” Here Wilson pauses to evaluate sound reasons for anxiety over genetic engineering, but comes near to my rancher brother’s answer when I chide him for growing “patented” wheat: *How else you gonna feed everybody?*

Nine of the ten leading prescription drugs originally came from organisms. For drugs to control bacterial diseases, only 2 percent of ascomycete fungi have been studied, and Wilson estimates that “probably fewer than 10 percent . . . have even been discovered.” A story about a medical breakthrough using secretion from the poison dart frog reads like edgy science fiction. Likewise the breakthrough drug that “can stop cold the development of disease symptoms in HIV-positive patients” found in a specific tree species in Borneo. In each case the donors are rare, and “It is no exaggeration to say that the search for natural medicine is a race between science and extinction.”

All this makes Wilson sound like a social ecologist of the Murray Bookchin school--we must preserve biodiversity for social benefit (oversimplified). While he’s no Dave Foreman of the deep ecology school, in the chapter *For the Love of Life* Wilson seems to endorse its biocentrism ethic: “all kinds of organisms have an intrinsic right to exist.” Wilson’s conservation ethic aims “to pass on to future generations the best part of the nonhuman world.” The issue, “like all great decisions, is moral.” We might call Wilson’s a heartfelt pragmatic ecology. “To know this world is to gain a proprietary attachment to it. To know it well is to love and take responsibility for it.”

This science of the heart “appears to arise from emotions programmed in the very genes of human social behavior. Because all organisms have descended from a common ancestor, it is correct to say that the biosphere as a whole began to think when humanity was born.” Wilson then presents a “must-read” summary of research in environmental psychology and biophilia (the innate tendency of humans to affiliate emotionally with

natural terrains), and its implications for mental health and preventive medicine.

The concluding chapter includes stories of Wilson's own laudatory personal engagement with key organizations (Conservation International, World Conservation International, World Wildlife Foundation, Nature Conservancy, and others you could support). Just as he has used many voices and points of view to make lively writing throughout, here he includes a "stereotype skirmish with imaginary opponents engaging in typical denunciations."

I started this book skeptical, even though E.O. Wilson is a two-time Pulitzer-Prize author. I had read a reductionist scientism into Wilson's stubborn views against the pluralism of postmodernism: "a rebel crew milling beneath the black flag of anarchy" (*Consilience*, p 40). And I had taken Huston Smith's side (*Why Religion Matters*)--in a dualistic dialogue of science and soul, genetic biodeterminism vs transcendence. But finally Wilson's book has been a conversion experience, as his eloquent anecdotes of transcendent experiences in the natural world dismiss dualism (we're "fitted by evolution, by God, if you prefer").

Wilson's *Consilience* also says, "transcendentalism is fundamentally the same whether God is invoked or not." Huston Smith and other followers of wisdom traditions might bristle at Wilson's position that "Causal explanations of brain activity and evolution, while imperfect, already cover the most facts known about moral behavior with the greatest accuracy and the smallest number of free-standing assumptions." But Wilson in the concluding chapter *The Solution* expresses "cautious optimism" that science and spirituality can be joined. All religions view nature as God's holy handiwork. "These epistemological distinctions, so important in other spheres . . . can be safely put aside in the case of the environment."

Therefore, "The convergence in opinion is strong enough that the problem is no longer the reasons for conservation but the best method to achieve it."

Wilson's twelve methods in *The Solution* chapter reiterate science and technology's role in political action and nature management, although he notes "it will be the ethics and desires of the people, not their leaders" which will decide our future.

How do we arrive at the "ethics and desires" of public consciousness that Wilson evokes to save us? How are we to find a culture's living myth regained, or the evolution of *Homo noeticus* consciousness schema of Willis Harmon's **Global Mind Change**? Or Ken Wilber's promise of the tipping point once enough people inhabit the Integral level. Those necessary changes in perception, those means? He offers no panacea.

Then I get it. *This book means to evoke those ethics and desires!* If read widely enough as a wake-up source-book, it could be the **Silent Spring** for this century, in provoking action. (Mail a copy to your congressional representative?).

In the beginning address to Thoreau, Wilson describes, "Humanity is the species forced by its basic nature to make moral choices and seek fulfillment in a changing world by any means it can devise." He discourses with Thoreau on *Right Means*: "You

searched for essence at Walden . . . and you hit upon an ethic with a solid feel to it: nature is ours to explore forever; it is our crucible and refuge; it is our natural home; it is all these things. *Save it*, you said: *'in wilderness is the preservation of the world.'*”

The biodiverse membrane that covers Earth “is the miracle we have been given.” E.O. Wilson dramatizes how the miracle becomes tragedy when large parts of it will be lost forever. Psychologists who accept moral agency in their work for healthy human behavior will find it a provocative text.

Wilson’s book elicits admiration and reading pleasure. His intelligence, scientific acuity -- and familiarity of talk-- will challenge your ways of addressing the human condition, just as he challenged and teased Thoreau’s--and my own.

The book ends, “I believe we will choose wisely. A civilization able to envision God and to embark on the colonization of space will surely find the way to save the integrity of this planet and the magnificent life it harbors.”

