

Maracaibo Lake, Venezuela. Image by Wilfredor, 2012. Wikimedia Commons.

Alarm Calls and Echoes of a Once and Future World

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Works discussed:

Under a White Sky: The Nature of the Future by Elizabeth Kolbert. New York: Crown/Penguin Random House Group, 2021. Hardcover, 256 pp., USD\$21.49. Paperback edition with afterword published 2022 by Crown Trade (New York). Page references are to the 2021 edition.

Falter: Has the Human Game Begun to Play Itself Out? by Bill McKibben. New York: Henry Holt and Company, 2019. Hardcover, 304 pp., USD\$12.19.

The Uninhabitable Earth: Life after Warming by David Wallace-Wells. New York: Tim Duggan Books/Crown Publishing Group/Penguin Random House LLC, 2019. Hardcover, 320 pp., USD\$22.14.

Fuzz: When Nature Breaks the Law by Mary Roach. New York: W.W. Norton and Company, 2021. Hardcover, 320 pp., USD\$21.49.

Trace: Memory, History, Race, and the American Landscape by Lauret Savoy. Berkeley, California: Counterpoint Press, 2016. Hardcover, 240 pp., USD\$25.

Plus, an antidote against despair:

The Nature of Desert Nature edited by Gary Paul Nabhan. Tucson: University of Arizona Press, 2020 (Southwest Center Series).

The present warning issues with no uncertain sound, because this great battle for preservation and conservation cannot be won by gentle tones, nor by appeals to the aesthetic instincts of those who have no sense of beauty, or enjoyment of Nature. It is necessary to sound a loud alarm, to present the facts in very strong language, backed up by irrefutable statistics and by photographs which tell no lies, to establish the law and enforce it if needs be with a bludgeon. . . . This book is such an alarm call.¹

The words above, penned for William T. Hornady's *Vanishing Wild Life* more than 100 years ago, were both a lament and a battle cry concerning the destruction of the nation's wildlife through "the selfishness, the ignorance, or the cruelty of [Nature's] destroyers."² A controversial and contradictory influence on early environmentalism, Hornaday was not the first U.S. citizen to raise an alarm about vanishing wildlife or the destruction of Nature. Nearly forty years earlier, philologist, linguist, and conservationist George P. Marsh delivered his own warning in a book titled, *Man and Nature; or, Physical Geography as Modified by Human Action*:

The object of the present volume is: to indicate the character and, approximately, the extent of the changes produced by human action in the physical conditions of the globe we inhabit; to point out the dangers of imprudence and the necessity of caution in all operations which, on a large scale, interfere with the spontaneous arrangements of the organic or the inorganic world; to suggest the possibility and the importance of the restoration of disturbed harmonies and the material improvement of waste and exhausted regions. . . .³

Authors, past and present, have repeatedly issued admonitions regarding degradation of the planet and extinction of its inhabitants.⁴

We have been warned-many times over.

How Did We Get Here?

In late September 2021, Dino Grandoni wrote in the *Washington Post* that the U.S. Fish and Wildlife Service had pronounced the extinction of the Ivory-billed wood-pecker, along with twenty-two other species.⁵ Hunted to near extinction in the 1800s by private collectors and hat makers, the woodpecker was removed from the endangered species list because it has been extirpated. Eager ornithologists had searched for decades for this avian holy grail. A few possible sightings in the twenty-first century gave hope to those who sought the rare woodpecker, but the bird is gone forever, say the authorities at U.S. Fish and Wildlife, and cannot sound an alarm.⁶

As I sit at my computer, I hear news of an oil spill off the coast of Southern California. Dead fish and birds coated in oil washed onto the shore near Huntington Beach, reported CNN. An "ecological disaster," noted the anchor. "Significant damage" to nearby wetlands, announced an unnamed official.⁷ Those responsible will clean up the beach, we're told. Will we heed this alarm, or will the years pass until, once again, our shores, our wetlands, and the creatures that inhabit them are covered with oil?⁸

How have we as inhabitants of this Earth, many of whom profess to love Nature, gotten ourselves into this predicament? I read *Silent Spring* and conducted an admittedly amateurish study examining the biology of DDT deposition in fatty tissues for

a high school science fair. I volunteered throughout the 1970s at one of the first organized recycling centers in Eugene, Oregon. I lived for a time in a rough cabin with only a wood stove to heat the place. I supported the Zero Population Growth movement in thought and deed.⁹ I was doing my part to fend off the consequences of what we called "the greenhouse effect"—or so I thought.¹⁰ Now, however, my efforts seem like dust in the wind. How did so much time pass with so little progress? Must we, yet again, be confronted with catastrophe before we are willing to change our behavior?¹¹

This review examines a number of books published between 2016 and 2021, books that explain how we got where we are climate-wise and warn us of the difficult ecological future facing us should we continue to dawdle. These books describe the disastrously ineffectual environmental stewardship that has contributed to today's climate crisis. Three of the books, those authored by Elizabeth Kolbert, Bill McKibben, and David Wallace-Wells, sound warnings loud enough to be heard as they ricochet off the walls and streets of our asphalt cities. They are narratives of anxiety—with only faint (if any) traces of hope. The fourth book is Mary Roach's *Fuzz: When Nature Breaks the Law.* It also sounds an alarm, but Roach delivers her warnings via humorous (albeit tragic) vignettes featuring charismatic creatures facing long environmental odds.

No review of recent environmental literature is complete without a discussion of the way in which racial injustice has shaped not only Earth and who is allowed to occupy which spaces, but also who is privileged to access the resources necessary to address environmental crises. A search of published environmental literature leads one to conclude that nature writing and environmental writing were chiefly the bastion of white male writers for the better part of the nineteenth and twentieth centuries. This is changing, but much slower than our climate, so there are fewer books and articles about the environment written by authors of color than a more equitable society would generate. Originally released in 2015, geologist/author Lauret Savoy's *Trace: Memory, History, Race, and the American Landscape* is a meditative reflection on the author's personal and cultural history, racial injustice, the American landscape, and the intersection of these themes.¹²

One final book is offered as a provisional antidote to the depressing predictions of catastrophic environmental, ecological disaster, and environmental injustice that dominate *Under a White Sky, Falter, The Uninhabitable Earth, Fuzz*, and *Trace*. I say "antidote" with the understanding that there is no real remedy for climate change other than for enough of us to heed the warnings we've received, take them seriously, and change our reckless course of action. The antidote I offer is a slim volume of interdisciplinary, multicultural essays edited by environmentalist, ethnobotanist, writer, and ethicist Gary Nabhan. *The Nature of Desert Nature* celebrates "everything that sticks, stinks, stings, sings, swings, springs, or clings in arid landscapes."¹³

Is U.S. Nature Writing Obsolete?

A comprehensive discussion of nature writing as either a viable genre or an antiquated remnant of an earlier era is saved for another time or place. However, a few preliminary thoughts on the topic are worth sharing. Proliferation of what this reviewer calls the literature of environmental catastrophe, which could be said to have commenced when Rachel Carson wrote *Silent Spring*, signaled to some that Thoreauvean nature writing was not what our modern era needed. Especially since the rise of ecocriticism in the last quarter of the twentieth century, writing that articulates the author's personal aesthetic experience of observing, classifying, and describing nature has been subjected to increasing criticism. Nature writing is considered by some scholars to represent an overly sentimental, romanticized version of a world facing environmental crises daily and a lighter, more frivolous cousin to the literature of environmental catastrophe.¹⁴ However, reports of the demise of nature writing have been exaggerated.

In addition to the arguments made by Daniel J. Philippon in his essay "Is American Nature Writing Dead?" in *The Oxford Handbook of Ecocriticism*, consideration of the nature writing genre's worth should include the fact that nature writing can provide readers with psychological respite from not only the world's impending ecological collapse, but the depressed state into which many of us who are concerned about the environment—especially the young—have fallen. What I suggest is that there is room for both the literature of catastrophe to inform and motivate us and a genre—such as nature writing—that can provide us with temporary relief from the fear of environmental disaster. Seeking an occasional reprieve from our environmental struggles is not the same as indulging in magical thinking about the natural world.

Mediating Our Relationship with the Environment

Despite all the books and articles written about the looming threats to our climate, some of us seem to be waiting for a miracle—even as the Colorado River dries up and our forests (and towns) burn to the ground. We appear to be waiting for a magician to either save us from our difficulties on Earth or lead us to an extraterrestrial location beyond the reach of catastrophic ecological devastation on our home planet.

Charles C. Mann, a U.S. journalist and author who specializes in scientific topics, divides environmentalists into two categories in his book, *The Wizard and the Prophet: Two Remarkable Scientists and Their Dueling Visions to Shape Tomorrow's World* (New York: Knopf, 2018). Mann argues that prophets believe we are exceeding or have already exceeded nature's capacity to support us and that we must cut back on consumerism or the planet—and our species—might not survive. Wizards, on the other hand, believe in our capacity to deal with environmental problems through scientific ingenuity. Although this binary sorting of environmentalists has been critiqued by none other than Bill McKibben, Mann's framework provides a useful vantage point from which to examine the books considered in this essay.¹⁵

The original wizard (according to Mann) was twentieth-century scientist Norman Borlaug, the driving force behind a collaborative project of the Rockefeller Foundation and the Cooperative Wheat Research and Production Program in Mexico that dramatically increased wheat yield through genetics, plant breeding, soil science, entomology, and other applied scientific disciplines. In 1970, Borlaug was awarded the 1970 Peace Prize "for having given a well-founded hope—the Green Revolution."¹⁶

William Vogt, whom Mann designated a "prophet," maintained that the human

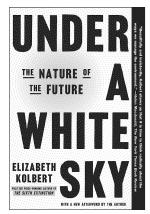
population was taking more from Earth than the planet had to give. Vogt, who espoused limiting population growth—asserting that this was necessary for Earth and our species to survive—was responsible for a revival in Malthusian thought in the 1960s.¹⁷ Norman Borlaug died in 2009 at the age of 95. William Vogt died in 1968 at the age of 66—by suicide, according to Bill McKibben.¹⁸

Mann hints of an unusual meeting between these two forces of nature (Vogt and Borlaug). According to Mann, they met only once—in an encounter that ended in irreparable disagreement.¹⁹ Borlaug won the Peace Prize for an agricultural achievement that led to increases in global food production, but Vogt is said to be the founder of the modern or apocalyptic environmental movement—a description that fits the tone of at least three of the six books examined here. The tension between anxiety and optimism Mann described has been baked into our relationship with the natural world for almost two centuries. Anxious prophets query, "Is it too late for [bison, Nature, the planet] to be saved?" while wizards respond with assurance, "This is how we will do it!"

Three of the books examined here were chosen after an email exchange with Alan Weisman, author of the 2007 best seller, *The World without Us*, a decidedly surreal vision of the healing course corrections Earth might embrace should we meet with our demise as a species. Weisman argues the top choices for recent environmental books should include Bill McKibben's *Falter*, David Wallace-Wells's *Uninhabitable Earth*, and Elizabeth Kolbert's "magnum opus," *The Sixth Extinction*. While Weisman prefers Kolbert's last book, here we will consider her newest, *Under a White Sky*.²⁰ Although each of these books occupies the apocalyptic end of the environmental writing spectrum, Weisman noted (cheerfully) that he believes McKibben's *Falter*²¹ holds out realistic hope to which an anxious reader might cling. Whether that is true is a matter of opinion.

Wizards Gone Wrong

Elizabeth Kolbert's Under a White Sky: The Nature of the Future follows the same formula that made her previous books so successful: a deeply researched narrative, extraordinary interviews with remarkable sources, and shocking-yet-enlightening anecdotes. Kolbert's work on Under a White Sky was disrupted by the SARS-CoV-2 pandemic of 2020.²² Despite the interruption, Kolbert collected enough material to write a substantial sequel to The Sixth Extinction. At every turn Under a White Sky reveals yet another species, place, or environment that humankind has manipulated badly or attempted to improve upon—with questionable if not disastrous results. Under the White Sky reveals a series of wizards-gone-wrong catastrophes. The Asian carp story is the saga of bad management on one of Chicago's essential waterways.



The introduction of Asian carp to U.S. waterways was, ironically, motivated by environmentalists trying to reduce the use of the chemicals condemned by Carson in *Silent Spring*. Importing carp as a biological control to eliminate aquatic weeds instead of using herbicides was a disaster. According to Kolbert, the imported carp reproduced all too successfully, edging out native species of all kinds.²³ The wizards in this story came up with the idea of electrifying the Chicago Sanitary and Ship Canal to keep the carp from reaching the Great Lakes and colonizing them. Despite a clever environmental DNA assay scientists developed to determine whether carp were or were not present in forbidden locations, the experts couldn't tell when living carp had crossed a critical electric barrier. Did a positive DNA test mean there were live carp where they didn't belong or that a deteriorating carp corpse had settled to the bottom of the waterway? As with much cutting-edge science, none of the experts could answer this question with certainty.

In short order, someone came up with a marketing scheme that would re-brand the invasive carp as "silverfin" in the hope of reducing their numbers by selling them as food. Unconvinced that re-branding carp as an appetizing finger food would convince U.S. citizens to eat them, Kolbert decided to try a couple. The author popped two silverfin fishcakes into her mouth and pronounced them "quite tasty."²⁴ What has become of this re-branding scheme is unclear.

Another of Kolbert's narratives involved an attempt to preserve the Devil's Hole pupfish (an endangered species of fish found only in a rare water-filled cavern in what is, for administrative purposes, considered part of Death Valley National Park). To protect the pupfish, the U.S. Fish and Wildlife Service constructed a fake, look-alike water hole that scientists stocked with relocated fish. With tongue in cheek, Kolbert labeled the mock water hole a "fishy Westworld."²⁵

Kolbert directed her skeptical gaze to other examples of uncertain environmental wizardry—from managing a flourishing rodent population with genetic engineering and attempting to breed coral resistant to ocean warming, to reducing the impact of the sun's warming rays by spraying reflective particles into the stratosphere—geoengineering at its most experimental and most terrifying—the wizards explored impractical technical answers to difficult environmental problems. The solutions to problems Kolbert described, especially seeding the stratosphere with sun-dimming particles, often seem worse than the problem. The wizards, however, keep pushing their solutions.

As one of Kolbert's geoengineering sources noted, "We live in a world... where deliberately dimming the f----g sun might be less risky than not doing it."²⁶ Is this brilliant science or sheer recklessness?

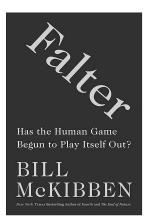
But to imagine that "dimming the f-----g sun" could be less dangerous than not dimming it, you have to imagine not only that the technology will work according to plan but also that it will be deployed according to plan. And that's a lot of imagining. . . . [L]et's just say the record here isn't strong. (See, for example, climate change.)²⁷

The Human Game

Bill McKibben's newest book, *Falter: Has the Human Game Begun to Play Itself Out?* is nothing if not grim. As the author wrote in his ironically titled "An Opening Note on Hope,"

Put simply, between ecological destruction and technological hubris, the human experiment is now in question. The stakes feel very high, and the odds very long, and the trends very ominous. So, I have no doubt that there are other books that would offer readers a merrier literary experience.²⁸

Falter is a wide-ranging book that not only features new illustrations of McKibben's end-of-nature premise but also examines the political and economic forces



bringing us to the brink of failure as a culture, a nation, and a species. According to McKibben, libertarian thinkers, high-rolling financiers, fossil fuel moguls, Rupert Murdoch's communications empire, and other modern "robber baron" types are all part of an empire that has poisoned our social and political sphere as well as our environment, and locked in inequality.

Unlike the Gilded Age robber barons, however, the current crop of self-interested rich has too much leverage over too many domains. According to McKibben, the likelihood of the pendulum swinging back toward a new progressive era is slight because the rich control too many aspects of the culture. The tech billionaires in Silicon Valley might, hypothetically, have the leverage to oppose the libertarian billionaires, noted McKibben. However, the techie rich are also somewhat enamored of Randian libertarian thought, so don't count on the techies to resist anyone else's leverage. Recall Facebook CEO Mark Zuckerberg's recent Senate hearings that exposed Facebook's lack of transparency.

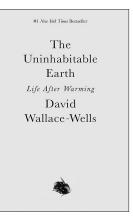
Part Three of *Falter*, titled The Name of the Game, is about artificial intelligence, genetic engineering, life extension, and other unregulated, cutting-edge technologies that sound like weird science. Part Four of *Falter* is titled An Outside Chance, that is, the outside chance that we might be able to change our environmental trajectory. Of that "outside chance" McKibben wrote the following:

Climate change is far advanced, and the march of some of these new technologies seems as rapid as it is unregulated. But no one knows that it is impossible, either, and so the last section of this book will be about resistance, about the tools and ideas that might help us keep global warming and technological mania within some limits and, in the process, keep the human game recognizable, even robust.²⁹

Resistance may be the key to keeping the game going, according to McKibben; for example, resistance to the oil companies and tech barons whom McKibben labels "deeply radical."³⁰ McKibben considers solar panels for every roof and the nonviolent movement to be forms of resistance that might help us find a way forward. McKibben's personal mode of resistance is his engagement with activism in the form of 350.org, his "planetwide climate campaign."³¹ But if the human game is really ending, McKibben has written its obituary: "Even—especially—in its twilight, the human game [was] graceful and compelling."³²

Life after Warming

⁶⁶ It is worse, much worse, than you think," writes David Wallace-Wells.³³ His book, *The Uninhabitable Earth: Life after Warming*, resembles Weismann's *The World without Us* in some respects. However, where *The World without Us* is a speculative narrative regarding what *might* happen as Earth heals itself after we are gone, Wallace-Wells's book places us at the center of the catastrophic maelstrom he believes is coming soon. Using Timothy Morton's theory about climate change as an object lesson, Wallace explains why we don't understand the fact that catastrophic change is imminent. Climate change, says Morton, is a "hyperobject"—a concept so vast and complicated that it is incomprehensible.³⁴



We are beginning, however, to get some sense of

the crisis bearing down on us: unbreathable air; fires; depletion of water in aquifers, rivers, and reservoirs; a pandemic sweeping the globe; migrants fleeing the terrors at home and being turned away at our merciless borders; collapse of our economic system; and more. How does one avoid despair? One way to do so, Wallace-Wells writes (with what might either be irony or a veiled condemnation of past cruelty) is:

to normalize climate suffering at the same pace we accelerate it, as we have so much human pain over centuries, so that we are always coming to terms with what is just ahead of us, decrying what lies beyond that, and forgetting all that we had ever said about the absolute moral unacceptability of the conditions of the world we are passing through in the present tense, and blithely.³⁵

Memory, History, Race, and the U.S. Landscape

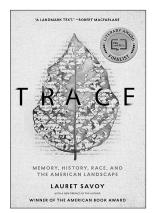
Why so few people of color are visible environmentalists—whether as writers or in some other capacity—is a puzzle author and academic Carolyn Finney addresses in *Black Faces, White Spaces: Reimagining the Relationship of African Americans to the Great Outdoors* (2014):

[Certain] assumptions, beliefs, and perceptions are at the very foundation of our environmental thinking, how we define the "environment," and how we think of ourselves in relationship with the environment. Who do we see, what do we see? In *Outside* magazine, Eddy Harris, a black writer and self-described outdoorsman, says that we see black people on television as lawyers or doctors, but we balk at imagining African Americans in the great outdoors.³⁶

In *Trace: Memory, History, Race, and the American Landscape*, Lauret Savoy recalls her own cultural and personal history in relation to outdoor spaces. Savoy, a geologist, described her approach to environmentalism, which she called "a poetics of geology":

Human history on this continent owes much to the history of the Earth itself, to the land's structure, materials, and texture. Geology as a science has given me one elemental foundation of place. Yet geo-logo also offers metaphors for considering the deposition and erosion of human memory, the fragmentation and displacement of human experience. To write as a belated witness to the past, I've reached toward a poetics of geology—of trying to understand Earth and our place on it by seeking connections across different levels of meaning.³⁷

Savoy, a woman of African American, Euro-American, and Native American heritage as well as a professor of geology and environmental studies at Mount Holyoke College, begins *Trace* with her recol-



lection of a trip to Grand Canyon National Park she made with her family when she was seven—a journey that "seeded all that followed."³⁸ Recalling her experience viewing the canyon from a North Rim vantage point called "Point Sublime"—Savoy then contemplates the history of Euro-American exploration that led to the discovery of the canyon. Prompted by the name, Point Sublime, Savoy's thoughts wander to Emmanuel Kant and his philosophy of the sublime which, Savoy noted, would not have included her.

In Kant's view, neither I nor my dark ancestors could ever reach the sublime, so debased were our origins. In Kant's view neither would W. E. B. Du Bois, for whom this "sudden void in the bosom of the earth," which he visited half a century before us, would "live eternal in [his] soul."³⁹

As her reverie continues, Savoy reveals childhood experiences that sharpened her understanding of racism. She also reveals hidden truths behind U.S. myths about the land and its people. Of Hiawatha, Savoy notes, for example, "Longfellow might have viewed *The Song of Hiawatha* as a poetic restating of tribal voices and traditions, but he borrowed, distorted, and invented."⁴⁰

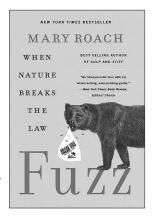
Savoy's adult peregrinations took her from Arizona to Oklahoma and beyond. As she wandered, she imagined which roads her people might have traveled and which towns they might have inhabited. She examined graveyards across the country, looking for familiar surnames. Disconnected from much of her ancestors' past, she was drawn from an early age to the study of geology—the science of Earth's history.

Savoy's book contains fascinating moments of discovery, as when she finds, serendipitously, that in the mid-twentieth century her father wrote and published a book—a semiautobiographical account of his own childhood experiences as a lightskinned person of color. *Alien Land* by Willard Savoy⁴¹ is currently in print, a trace of Lauret Savoy's history once lost, now found. Lauret Savoy's voice reveals how race and culture impacted her life's work and relationship to the landscape. *Trace* also suggests that nature writing—including memoirs and environmental reveries like Savoy's can still have meaning in the midst of ecological catastrophe.

What Our Relationship with Nature Says

Released after my email exchange with Alan Weisman, *Fuzz: When Nature Breaks the Law*, concerns itself with animal miscreants and other quirky characters: moose on the highway, bears stealing food, rats in the Vatican, animal-attack investigators, and human/elephant conflict managers. Beneath the humor, however, is a serious appraisal of the state of our relationship with Nature's creatures. "Who exactly are the trespassers here?" Roach seems to ask in a light-yetheartfelt voice.

Roach, the author of *Stiff: The Curious Lives of Human Cadavers*, has an uncanny ability to deliver bad news with humor. For example, she begins one chapter



with an amusing discussion of penguin decorum—or the lack thereof—followed by a depiction of the environmental threats to the penguin's well-being. "To live in a penguin colony is to know no modesty. Anything you do—mate, preen, throw up fish for your young to eat—you do in plain sight of the neighbors."⁴²

The yellow-eyed penguin of New Zealand's Otago Peninsula, however, pairs and nests in isolation, which makes the bird more vulnerable to predation than penguins living in colonies. Roach walks us through the penguin lifestyle in her characteristic gross-yet-amusing style. While exploring the penguin's territory with an employee of a wildlife tour company, for example, Roach examines a clump of sea lion vomit for signs of penguin tissue and remarks: "We happily note the absence of penguin solids."⁴³

Roach's description of the yellow-eyed Otago species rivals some of Tom Wolfe's most original prose: "candy red beak, the pink go-go boots, the yellow mask angling back from the eyes. They're the Flash, they're 1970s Bowie. I don't mean to imply that adorable, showy species are of more value or somehow deserving of more concern. It's just . . . *damn.*"44

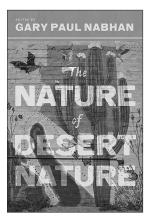
Kandy-Kolored Yellow-Eyed Streamline Penguin—RAHGHHHH!⁴⁵

Otago's gaudy favorites are threatened by stoats and ferrets—and feral cats. Introduced to control the descendants of rabbits introduced by homesick Europeans, the stoats, ferrets, and cats eat the prey they were imported to control, but they also consume the eggs and chicks of the yellow-eyed penguin and other desirable avian species.

The killing of favored beasts by invasive species (introduced accidentally or purposely by humans) compels development of traps and/or poison designed to kill the unwanted imports as humanely as possible. With her unfailing sense of humor and without offending her readers, Roach describes the methods one might use to kill invasive animal species. Roach never lets her readers forget, however, that she thinks we humans are the ones responsible for our so-called problems with Nature.

The Nature of Desert Nature

The Nature of Desert Nature is a compendium of essays: a "multicultural collection of essays and art on desert life," edited by Gary Paul Nabhan, an ecologist, ethnobotanist, nature writer, and Franciscan Brother, that is a breath of fresh air in a world of environmental doom and gloom. Nabhan is a superfan of the desert and its assorted, and sometimes unpleasant, creatures. "[T]here have been many prejudices—or at least, presumptions—about what a desert is and what it cannot possibly be," wrote Nabhan in his essay, "The Nature of Desert Nature: A Deep History of Everything that Sticks, Stinks, Stings, Sings, Swings, Springs or Clings in Arid Landscapes."⁴⁶



Introduced to desert life by Indigenous people who

became his mentors and friends, Nabhan brings good news to those hungry for a bit of something lovely amidst environmental catastrophe and pandemic panic. What Nabhan shows us is a way of seeing deserts "that echoes and enhances an older way of imagining the desert found in the spiritual traditions of many ancient desert cultures. The shimmer is recognized and the cacophonous chorus [at sunrise] is heard once again."⁴⁷

The chorus Nabhan speaks of is the chorus I hear every summer morning: cicadas, quail, Cactus wrens, Gila woodpeckers, ravens, and others. Those of us who live in the Sonoran Desert have experienced firsthand the drought and fire and loss that drift like smoke over our arid lands. We can, however, still find beauty in the red head of a female spiny lizard; in the bravado of a young scorpion, spiked tail held aloft as the creature glows under a blacklight; or the rapacious nature of a hungry roadrunner. Yes, the desert sticks, stinks, and stings, but it also sings. This edited collection shimmers and glows. With more than twenty-five authors contributing, there is refreshment for all. *The Nature of Desert Nature* will soothe frayed nerves and ease one's fear of desert places.

Where Do We Go from Here?

In 2017, *The Atlantic* magazine asked a group of environmental historians, writers, and others a big question: "What Was the Most Significant Environmental Catastrophe of All Time?"⁴⁸ There was no consensus. Several environmentalists, including Bill McKibben and Elizabeth Kolbert, responded that the asteroid that killed an estimated seventy to ninety percent of all then-existing species was the biggest environmental catastrophe. McKibben added, "Of course with climate change we're on the path to accomplishing something on the same scale, and this time it's entirely voluntary."⁴⁹

In the dissertation, *Nature Writing of the Anthropocene*, Christian Hummelsund Voie noted that "[t]he narrative of warning that characterizes [some] nature writing derives its force from the author's awareness of the changed nature of nature."⁵⁰ The

answers given by Kolbert, McKibben, Wallace-Wells, and Roach all, in one way or another, could be called "narratives of warning." Will these narratives of warning motivate the right people to do the right thing—to take the lead and make the changes necessary to avert our climate crisis? Can we still enjoy a more Thoreauvian nature writing, that is, the celebration or contemplation of Nature's beauty, or is enjoying nature writing irresponsible in the face of climate change?

Kolbert, McKibben, and Wallace-Wells's style of writing certainly draws attention to the climate crisis. However, there are other styles that are also effective. Humor, which Mary Roach uses so effectively, did not diminish the impact of her narrative. Savoy's *Trace* illustrates perfectly how environmental reverie can foster a deeper understanding of the way in which culture, race, and our own difficult histories impact our relationship with science and the environment.

Voie writes that "[a] general challenge for nature writing in the Anthropocene is to find ways of providing a sense of empowerment in the face of environmental challenges that often are of a magnitude that seems scaled beyond the scope of meaningful individual action."⁵¹ Voie is right. The challenges are beyond the scope of individual action. So, what are we to do? Perhaps resistance, as McKibben defines it, is the only thing left to do—by installing solar panels, by taking collective action, by continuing to recycle, by writing works that celebrate nature while *also* sounding an alarm. And there should be no shame—when exhaustion and discouragement overwhelm one—in picking up a volume of essays that describe both poetically and aesthetically a world that might soon vanish.⁵²

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Notes

¹ Osborn, foreword to *Our Vanishing Wild Life* by William T. Hornady, vii. A dedicated conservationist, Hornaday was also a seriously flawed man. In 1906, when Hornady was director of the Bronx Zoo, he put Ota Benga, a Mbuti man, on display in a cage. Hornady was also a friend and colleague of Madison Grant, author of *The Passing of the Great Race*, a book that espoused "scientific" racism. For a revealing biography of Hornady, see Dehler's *The Most Defiant Devil: William Temple Hornaday and His Controversial Crusade to Save American Wildlife*. See also Jedidiah Purdy, "Environmentalism's Racist History," *New Yorker*, August 13, 2015, to learn more about the bigoted undercurrents flowing through nineteenth and twentieth century conservationist thought.

² Osborn, foreword to Our Vanishing Wild Life, viii.

³ Marsh, preface to *Man and Nature*, vii.

⁴ Marsh, *Man and Nature*; Hornady, *Our Vanishing Wild Life*; Carson, *Silent Spring*; McKibben, *The End of Nature*; Weisman, *The World without Us*, and others.

⁵ Grandoni, "Ivory-billed Woodpecker Officially Declared Extinct," para. 1, 2.

⁶ Allen and Kellog, "Call of the Ivory-billed Woodpecker."

⁷ Spells, "An Oil Spill off the California Coast . . ."

⁸ Hamilton, "How California's Worst Oil Spill Turned Beaches Black and the Nation Green"; Thurin, "How an Oil Spill Inspired the First Earth Day."

⁹ Bailey, "What Is Zero Population Growth, or ZPG?"

¹⁰ Shaftel, "What is the Greenhouse Effect?"

¹¹ Swanberg, " 'The Way of the Rain,' " 67–96.

¹² Savoy, Trace: Memory, History, Race, and the American Landscape.

¹³ Nabhan, The Nature of Desert Nature, 1, 42.

¹⁴ Philippon, "Is American Nature Writing Dead?" 392.

¹⁵ McKibben, "To Respect the Earth's Limits—or Push Them?" Review of *The Wizard and the Prophet*, para. 4.

16 Borlaug, Nobel Peace Prize 1970; Norman Borlaug: Biographical. https://www.nobelprize.org/prizes/peace/1970/borlaug/biographical/.

¹⁷ Thomas Robert Malthus's 1798 book, *An Essay on the Principle of Population*, warned of a disjunction between arithmetic increases in food production and geometric growth of the human population. Malthus warned that what we now call the carrying capacity of Earth could not sustain predicted increases in the human population.

¹⁸ McKibben, "To Respect the Earth's Limits—or Push Them?" Review of *The Wizard and the Prophet*, para. 4.

¹⁹ Mann, "Prologue," The Wizard and the Prophet, 6-7.

²⁰ Kolbert, *Under a White Sky*.

²¹ Alan Weisman in an email exchange with the author, August 2021; McKibben, *Falter: Has the Human Game Begun to Play Itself Out?*

²² Kolbert, *Under a White Sky*, part 1, Down the River; see also part 3, Up in the Air, chapter 3, 197.

²³ Kolbert, part 1, Down the River, chapter 1, 13–29.

²⁴ Kolbert, 28–29.

²⁵ Kolbert, part 2, Into the Wild, chapter 2, 62; 62n26.

²⁶ Kolbert, part 3, Up in the Air, chapter 3, 200.

- ²⁷ Kolbert, 200–201.
- ²⁸ McKibben, *Falter*, 1.
- ²⁹ McKibben, 191.
- ³⁰ McKibben, 192.

³¹ McKibben, 2.

³² McKibben, 256.

³³ Wallace-Wells, *The Uninhabitable Earth*, 3.

³⁴ Wallace-Wells, 15.

³⁵ Wallace-Wells, 240.

³⁶ Finney, Black Faces, White Spaces, xii.

³⁷ Savoy, New Preface, in *Trace*, Penguin Random House, 2016, xviii–xix. See also Spenser Stevens, "Read an Excerpt from Lauret Savoy's Trace." https://penguinrandomhouse-highereducation.com/2021/12/14/read-an-excerpt-from-lauret-savoys-trace/#:~:text=To%20 write%20as%20a%20belated,of%20a%20body%20back%20together. December 14, 2021.

³⁸ Savoy, *Trace*, 2015, 5.

³⁹ W. E. B. Du Bois, "Of Beauty and Death," quoted in Savoy, *Trace*, 10.

⁴⁰ Savoy, Trace, 56.

⁴¹ Willard Savoy, *Alien Land*.

42 Roach, Fuzz, 251.

⁴³ Roach, 252.

44 Roach, 253.

⁴⁵ With apologies to Tom Wolfe, "There Goes (Varoom! Varoom!) That Kandy-Kolored (Thphhhhh!) Tangerine- Flake Streamline Baby (Rahghhhh!) Around the Bend (Brummmmmmmmmmm) . . . ," *Esquire*, November 1, 1963.

⁴⁶ Nabhan, *The Nature of Desert Nature*, 1.

⁴⁷ Nabhan, 2.

⁴⁸ Roumieu, "The Big Question: What Was the Most Significant Environmental Catastrophe of All Time?" *The Atlantic*, May 2017.

⁴⁹ Roumieu, quoting Bill McKibben, para. 2. Emphasis in original.

⁵⁰ Voie, "Nature Writing of the Anthropocene," 3. Comment in original.

⁵¹ Voie, 170.

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