

# *Chasing the Biggest Story on Earth*



Elizabeth Kolbert in the Hall of Biodiversity at the American Museum of Natural History.  
Credit... Suzanne DeChillo/The New York Times

**By Claudia Dreifus Feb. 10, 2014**

When Elizabeth Kolbert joined *The New Yorker* in 1999, after more than a decade covering New York politics as a reporter and columnist for *The New York Times*, she began gravitating to environmental issues.

“The magazine has a history in this area,” she told me in one of two recent conversations. “They’d published Rachel Carson. It was unoccupied territory at the time.”

This week Ms. Kolbert, 52, published her second major book on the environment, “[The Sixth Extinction: An Unnatural History](#)” (Henry Holt), which asks science-based questions about whether humans might be causing mass extinction. (Her first, “[Field Notes From a Catastrophe](#),” was about climate change.)

What follows is an edited and condensed version of our conversations.

**Q. How does a journalist take on a topic this big — mass extinction?**

**A.** I wrote a book almost 10 years ago on climate change, and I was looking for the next project. And my thought was, “Climate change is a huge story — there can’t be a bigger one.” As I looked for a new book, what I kept bumping into was the reality that climate change was actually part of an even bigger phenomenon: the many ways humans are changing the planet.

It’s not something we’re doing because our species is greedy or evil. It’s happening because humans are human. Many of the qualities that made us successful — we are smart, creative, mobile, cooperative — can be destructive to the natural world.

When we use fossil fuels, we are reversing geological history by taking organisms that were buried millions of years ago and pumping their carbon back into the atmosphere at a very fast rate. If I go to Antarctica, an organism I bring on my shoe could be devastating to a life form that has evolved there without any defense against it.

Humans have sped up the rate by which we change the world, while the rate at which evolution adapts is much slower. There’s a mismatch between what we can do and what nature can sustain.

## **Why do you say this could lead to an extinction event?**

It's not what *I* say. It's what many respected scientists are writing. If you read the scientific literature, you see frequent allusions to a current mass extinction event.

So in my book, I take the readers to places where signs of this are visible. We go to the Great Barrier Reef. Coral reefs may well be the first entire ecosystem that fails because of human impacts, mainly acidifying the oceans and changes in the water temperatures.

We also go to the Amazon, which is being cut down and divided. There you see how fragmenting the landscape impacts what lives in the forest. We go to the Andes, which are warming up very quickly. I go with scientists tracking plants as they seed themselves and grow at higher elevations. We see species that were not at this elevation a decade ago, moving upslope to keep up with change.

### **Man-Made Extinction**

Elizabeth Kolbert talks about her new book, "The Sixth Extinction."

## **How much do we know about past extinctions, events that occurred hundreds of millions of years ago?**

Some of the events we know little about. In the last 500 million years, there have been five major extinction events. The third, about 250 million years ago, was the worst. Approximately 90 percent of species disappeared. The theory on the third and its lessons are very relevant to us now.

It was caused by a massive volcanic eruption which went on quite a long time and released a lot of carbon dioxide. It caused tremendous global warming and the acidification of the oceans on a very dramatic scale.

The fifth extinction, the one that did in the dinosaurs, was caused by an asteroid. Interestingly, today, you hear knowledgeable scientists say, “*We are the asteroid.*”

### **Did you find writing about extinction depressing?**

I’ve tried to transcend my own feelings. Yes, it’s depressing, but you have to look it in the face. That’s true of a lot of topics. People say, “Don’t look at the photographs from Syria; they are too depressing.” But it’s required that we overcome those barriers.

The other side of it was that in writing a book about extinction, I went to some of the most amazing places on Earth. I walked across the Great Barrier Reef at night!

I went snorkeling in the Bay of Naples, where Jason Hall-Spencer was looking at an unusual natural experiment: The water in one specific place is naturally acidified because of volcanic vents that spew out CO<sub>2</sub>. In a very concentrated area, you can see what the normal Mediterranean looks like: vivid and full of life. But by the vents, you see what the acidified ocean of the future might look like: an underwater moonscape. Very little could live there.

Now, I had an absolutely great time going into the field. I always came home and said, “That was incredibly interesting.” It wasn’t like I came home and curled into a little ball.

### **You profile Kinohi, a Hawaiian crow in the San Diego zoo. Why him?**

He’s one of about 100 of his kind left. [Kinohi](#) is being kept there so that his sperm can be collected by a very, very devoted specialist. She spends a lot of time stroking him and trying to get him to ejaculate.

Spending time with them showed me the amazing lengths people are willing to go through to preserve species. That's the other side of the extinction story. With Kinohi, one felt the shadow of his impending death — he's very old in bird years — and that of his species.

Extinction hangs over the whole enterprise. His tissue will be frozen when he dies, and they will take a cell line from him. And they will keep those cells alive. So there you have people being ingenious and devoted, and meanwhile all these things are going on that are having these tragic effects. His story brought together a lot of the strands of our relationships to other species.

**You posit that if there is a sixth extinction, it won't be cockroaches who inherit the planet, as many New Yorkers predict, but rats. Why rats?**

My guess is that the roaches will do fine. This is the conjecture of one of the key characters in the book, Jan Zalasiewicz. He's a British geologist, who has imagined the planet of the future and has wondered who will survive. He thinks rats have gone with people everywhere and done very well in the new places. They eat everything, and they reproduce like crazy. His provocative idea is that one of our human legacies is going to be rats everywhere, including on islands and places where they weren't before, and that they'll change in size, get bigger.

He jokingly speculates that rats will eventually evolve to make tools, live in caves and sit around in the skin of other mammals — just like a certain primate we know about.