

has likely been felt for thousands of years in similar circumstances.”

It seemed like a valid question. Throughout history, floods, wildfires, earthquakes, and volcanoes—as well as expanding civilizations and conquering armies—have permanently altered treasured landscapes and disrupted societies. Native Americans experienced this as Europeans transformed North America. “This land belonged to our fathers,” Satanta, the 19th-century Kiowa leader, said. “But when I go up to the [Arkansas] river, I see camps of soldiers on its banks. These soldiers cut down my timber, they kill my buffalo; and when I see that, my heart feels like bursting.”

The industrial revolution brought more sweeping changes to landscapes with the

her lifelong love of biology and the sea. But in the 1950s, real estate development accelerated as wealthy visitors from the mainland bought land and built vacation homes. “I could sense immediately what was happening,” she says. “I was furious. I would go around pulling up the surveyors’ sticks.”

Her protests were motivated not simply by anger but also by a mixture of fear, powerlessness, anxiety, and sorrow that the defining character of her home was in peril. The construction continued, and within a few decades, the past was visible only in the osprey nests atop electrical poles that provided light in the homes that had replaced the wilderness.

Changes like these have always occurred. It is the nature of our dynamic species to reshape landscapes to meet our needs and desires, but the scale and pace of transformation in the 21st century are unprecedented. As our population rapidly approaches eight billion, humans are altering the planet more than at any other point in recorded history. We continue to raze forests, emit carbon, and flush chemicals and plastics into the land and water. As a result, we confront ruinous heat waves, wildfires, storm surges, melting glaciers, rising sea levels, and other forms of ecological destruction. All of this causes political, logistical, and financial disruption. It also creates often overlooked emotional challenges.

Only in recent years have scientists begun to devote significant resources to studying how altering the environment affects mental health. In the biggest empirical study to date, a team led by researchers from MIT and Harvard looked at the effects of changes in the climate on the mental health of nearly two million randomly selected U.S. residents from 2002 to 2012. Among other things, they found that exposure to heat and drought magnified the risk of suicide and raised the number of psychiatric hospital visits. In addition, victims of hurricanes and floods were more likely to suffer post-traumatic stress disorder and depression.

For those who endure the trauma of losing a landscape, the emotions can be wrenching to express. “The pain of losing a land is totally different than any other pain, because it is difficult to share,” Chantel Comardelle tells me when I



‘I CANNOT BUT EXPRESS MY SORROW THAT THE BEAUTY OF SUCH LANDSCAPES IS QUICKLY PASSING AWAY.’

THOMAS COLE, HUDSON RIVER SCHOOL PAINTER

spread of burgeoning metropolises, railroads, and factories. As New York’s Hudson Valley was cleared to make way for agriculture and feed a thriving tannery industry, the 19th-century painter Thomas Cole lamented the destruction of his beloved forests. “I cannot but express my sorrow that the beauty of such landscapes is quickly passing away,” he wrote. “The ravages of the axe are daily increasing—the most noble scenes are made desolate, and oftentimes with a wantonness and barbarism scarcely credible in a civilized nation.”

My mother experienced a less severe version of the feeling during the mid-20th century. She grew up on Long Beach Island, a narrow, isolated spit of sand off the coast of southern New Jersey. In its pristine marshes, she discovered

visit her community on the coast of Louisiana, where the sea is rising at an alarming rate and flooding the land. Comardelle lives on Isle de Jean Charles, a dwindling island that has lost 98 percent of its land since 1955. During her parents’ generation, the island’s mostly Native American inhabitants hunted and farmed. Now many families have left. The community has fractured. “It’s not like losing a loved one or something that other people easily understand,” she says.

But in the era of global climate change, more people do understand. As Isle de Jean Charles disintegrated, Comardelle and other local leaders decided to reach out to those facing similar challenges. “There’s a community in Alaska that’s going through the same thing,” she says, referring to the Yupik village of Newtok, also confronting acute subsidence and land loss. “We were able to sit down and talk... and it was almost exactly the same feelings, the same emotions,” she says. “It was like, OK, so I’m not alone. This isn’t just something that I’m making up in my mind. It was real.”

Photographer **Pete Muller**’s images of how boys become men around the world appeared in the January 2017 issue. This project was supported by a National Geographic Society Fellowship.

In “The Oxbow” (above), 19th-century painter Thomas Cole depicted a Massachusetts river valley stripped of trees.

In New York he would lament the loss of forests in the Hudson River Valley as farming spread there.

During the past few years I’ve traveled to several places—from the Arctic to the Andes—where the landscape has undergone a dramatic transformation. I wanted to better understand not only the physical changes to the land but also how those changes reverberate within the lives of their inhabitants. Only a handful of people I met had heard the word solastalgia, but a great many shared haunting descriptions of the experience the word aims to define. They grapple with both the daunting practical challenges of losing a landscape and the complex emotional strain of losing their sense of place in the world.

For now, solastalgia is buzzing at the edges of language—almost exclusively English—and Albrecht hopes it stays there. “It’s a word that shouldn’t exist but had to be created out of difficult circumstances,” he says. “It’s now become global. That’s terrible... Let’s get rid of it. Let’s get rid of the circumstances, the forces, that create solastalgia.” □