Along the Colorado Trail, profound change

An environmental scientist reports on the effects of climate change on Rocky Mountain ecosystems

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In his book, *The Colorado Trail in Crisis*, Karl Ford has written about his second trip along the 500-mile trail that reaches from Denver to Durango, Colorado, providing an intimate look at the state’s mountain landscapes, forests and watersheds, and in the process wrapping “the science into the story,” examining the effects of climate change on the state’s ecosystems.

Ford is a retired environmental scientist with the Department of the Interior who has studied climate change for decades. He is also a naturalist who has put on a backpack and explored hundreds of miles of trails throughout the country, completing the Appalachian, Pacific Crest, Continental Divide and Colorado Trails.



Karl Ford

Ford’s deep respect for the landscape drives this book which is a trail journal with observations and details only a seasoned naturalist would see, intertwined with scientific studies and descriptions of Colorado’s forests in the past and present, and a peek at what the future holds.

The author writes of his admiration for Aldo Leopold, an American environmentalist whose book, *A Sand Country Almanac,* published in 1948, sparked the modern environmental movement.

In the spirit of Leopold, Ford sets forth to write about the relationship between people and nature, with his narrative providing a glimpse into the history of Colorado’s and the West’s environmental challenges and specific examples of what is being done to meet those challenges—from prescribed fire thinning and mitigation to changes in logging operations which often remove older, larger trees that store more carbon and are more resistant to wildfire.

Those logging methods, along with beetle kill, diminishing snowpack, drought and wildfires all are having an effect that might not be apparent to many who spend time in the outdoors.

“One of the penalties of an ecological education is that one lives alone in a world of wounds,” Leopold wrote. “Much of the damage inflicted on land is quite invisible to laymen.”

Ford has years of experience with the wounds described by Leopold, writing that his experience is different than most. “People hike the Colorado Trail to experience the mountains, wildlife, and forests, many unaware of the ecological systems around them,” he writes. The author spent years conducting ecological assessments featuring threats of climate change, development, invasive species and fire on natural biological systems.

The specter of climate change looms over the forests of Colorado and the West, Ford writes, and it is resulting in changes happening much faster than ever before.

“To us, it is a gradual, insidious change, that not enough Coloradans notice nor understand,” he writes. “To the forest, the change is occurring far more rapidly than older changes in climate such as ice age melting that took place over a thousand years. Forests now have only decades to adapt to warming, wildfire, insects and drought, and adaptation will be beyond the capability of most tree species.”

*The Colorado Trail in Crisis* serves as a reminder of some of the events that have already irrevocably changed the landscape along the Colorado Trail and throughout the rest of the state’s wild areas.

Ford reminds readers that all of Colorado’s largest fires have taken place in the 21st century. The destructive 2021 Marshall fire near Boulder burned 6,000 acres and destroyed more than 1,000 homes. The megafires of 2020—Cameron Peak in Larimer County, Pine Gulch near Grand Junction, and East Troublesome in Grand and Larimer County—burned an astonishing 700,000 acres. They followed a quartet of fires that burned more than 170,000 more acres: Spring Creek in 2018, Black Forest in 2013, Waldo Canyon in 2012 and Hayman in 2002.

The acceleration of megafires, expected to triple in frequency by the middle of the century, means that today’s children will see a transformation of forests that evolved over 10,000 years, Ford writes. That transformation is visible to anyone who has explored the Colorado Trail.

As Ford travels the section of the trail near Buffalo Creek, the site of the Hayman fire which torched the forest more than 20 years earlier, he reaches a high point and writes: “The light-colored barren burn scar of the Hayman Fire dominated the view south for as far as I could see.” The next morning, he traveled through the site of another nearby fire, the 1996 Buffalo Creek that left a scorched landscape that has never recovered. Nearly 30 years later, Ford writes, “There were few, if any conifers growing in the burn scar.” Instead, the trail was bordered by wildflowers and shrubs such as mountain mahogany, raspberries, and young aspen.

Further west, as Ford nears the end of the Colorado Trail, he writes, “We traversed nearly 100 miles of dead or dying forest.” He offers many other examples of the effects of climate change. In the San Juans, the spruce beetle has devastated nearly 1 million acres of the Rio Grande and San Juan national forests. The mountain West has already lost 20 percent of its snowpack— vital for healthy forests—since the 1950s and could lose another 50 percent by the end of the century. The snowpack is also vital to the people who live in the West.

But not all news is bad, Ford writes. “Ecosystems of the future may be different from those we are accustomed to, but life will go on.” He calls for land managers to be more proactive in building forest resilience: “Our forests and our planet deserve our best efforts to slow or stop warming, to improve forest management, and to promote resilience in our forest ecosystems.”

Ford ends his book with a wish. “I hope the forest and the trail will be there for my grandchildren and that they can find beauty, peace and renewal like I did … and that we acted in time to save most of our forests and wildlife.”

About Deb Acord