

ENVIRONMENTAL HISTORY

IN THE AGE OF THE ANTHROPOCENE

*creating systems we've never seen before,
ones that work with HUMANS AND NATURE to
overcome the old HUMAN VERSUS NATURE norm*

by *Katie Coyne*

David Todd and Jonathan Ogren, authors of *The Texas Landscape Project*, fit an incredible amount of information and unparalleled insight into their book's nearly 500 pages, which deliver a nostalgic but factual account of Texas landscape change over the last couple of centuries. The authors do not attempt to romanticize natural spaces—the book is not Aldo Leopold's *A Sand County Almanac*. It's also not a direct call to action, though Todd has worked as an environmental attorney, environmental donor, cattle rancher, and board member of numerous environmental organizations. What it does is

spell out how environmental, social, and economic systems have shaped our state, making *The Texas Landscape Project* required reading for anyone who cares about Texas.

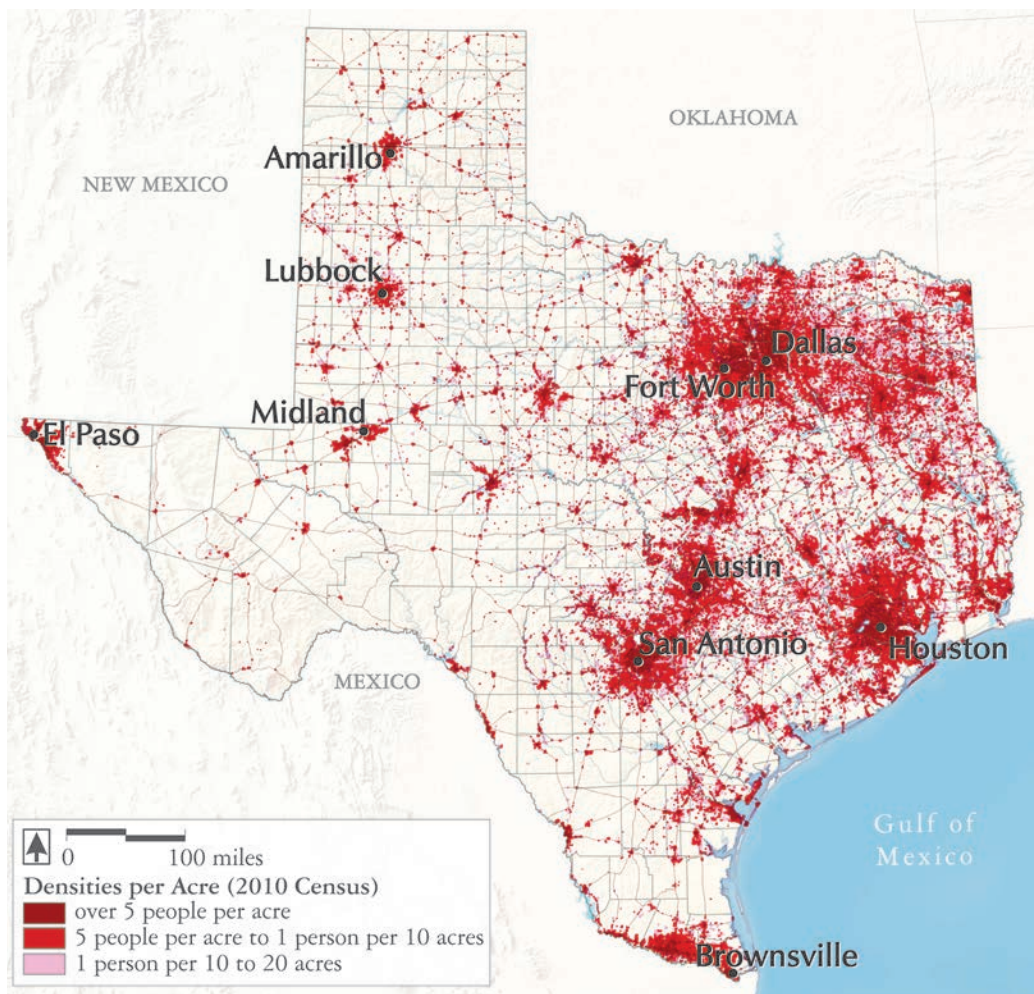
The book is broken into five sections—land, water, air, energy, and the built world. In each, the authors have mined information to reveal stories of place hidden in the data. They address notable issues such as the declining extent, diversity, and integrity of grasslands, while allowing a glimmer of hope for the revival of Texas prairie systems as they describe the devotion of statewide groups like the Native Prairie Association of Texas and

the Texas Land Conservancy, among others, as well as regional groups like the Katy Prairie Conservancy in Houston.

Each section of the book also chronicles the history and current status of iconic or keystone wildlife species. The desert bighorn sheep (*Ovis canadensis nelsoni*), for example, has ties to Native American culture and a complicated relationship with settlers who, through subsistence and trophy hunting, habitat intrusion, and competition, caused sheep populations to dwindle in the early 1900s.

An introductory map in the “Air” section shows that Houston and Dallas continue to fail to meet federal standards for ground-level ozone, El Paso fails to meet particulate matter standards, and Frisco violates standards for lead contamination. The chapter goes on to talk about issues like the ozone hole, tobacco, lead, and what the authors call “upsets” (emission events).

The “Energy” section addresses the overwhelming presence of oil and gas extraction in this state and investigate the undeniable impact of this industry, as well as the burgeoning economy in wind energy and natural gas, on Texas life. Even faced with the evidence in this book, it remains hard to comprehend the huge extent of oil and gas activity within the state, both historically and today.



Texas is now an urban state—largely because of our success in oil and gas extraction—which is why any book on Texas landscapes would be incomplete without a substantive piece on “The Built World.” Populations are growing and shifting, and cities are sprawling. But what readers will also discover is how this influences light pollution, roads, highway billboards, and waste. In a time when many scientists claim we have entered a geologic epoch, called the Anthropocene, where human activity has become the dominant influence on our planet, this book offers an unromanticized account of our own environmental impact on our state.

Because of how the book is segmented, the authors struggle with how to illustrate the dynamic and interconnected nature of our landscape. Environmentalists as a rule have a hard time breaking away from a human versus nature dialogue—a binary that posits land, nature, the environment, etc., in ways that only allow the human-nature interaction to be negative: humans degrade, humans destroy, humans disturb. For its part, *The Texas Landscape Project* sets the mostly rural context of its land, water, and air sections—or the way life used to be—against the more urban context of its built world and energy extraction sections. This somewhat

similar binary, rural versus urban, is a big part of why the book does not provide a clear vision for designers. While the book discusses collaborations between humans and nature in sections about wildlife co-ops, land and taxes, and the Ogallala Aquifer, in my view, the human-nature binary remains intact.

We have passed a tipping point globally in regard to climate change, a consequence of today’s huge population concentrations in cities worldwide. Locally in Texas, as of the 2010 census, almost 85 percent of our population are urban dwellers, with that number continuing to grow. Without expanding our environmentalist framework beyond that contentious human or nature dichotomy, rural or urban, we will not be successful in envisioning and innovating for a resilient future. Though the book contains individual vignettes about humans and nature, the limitation in the book’s framework is perhaps why the book does not sustain a clear overarching theme about inequity and the resulting vulnerability of certain people.

A section on informal communities (also known as “colonias”) is one of the important environmental justice vignettes. The account details how a very complicated product of unethical real estate practices and poor policy

has led to approximately 500,000 Texans living in colonias—many of which do not have electricity, running water, paved roads, or other infrastructure we now expect to find in U.S. towns. Other coverage includes lead in Smelertown and private wells in west Austin. However, the authors still frame these problems as environmental hazards, without delving into the social implications for why these scenarios are environmental injustices. With seven pages dedicated to monarch butterflies, I would hope for more on the social inequity of the number of environmental hazards outlined throughout the book.

Environmentalism needs a paradigm shift. We need ecologists to work with designers and planners to provide the scientific insight needed to nurture functional ecosystems in both rural and urban spaces. We then need designers and planners to see beyond the ecology and to include social, cultural, and economic considerations in their work. They need to be visionary. I don’t say “visionary” lightly: these interdisciplinary teams are going to be tasked with creating systems we’ve never seen before, ones that work with humans and nature to overcome the old human versus nature norm.

An example of this kind of vision is Waller Creek—Austin’s latest novel, or what I like to call cyborg, system. A bypass tunnel channeling the creek provides consistent flow, eliminates flood risk to Austin’s downtown, and turns Waller Creek into an ever-present resource, one promoting human-nature interaction, economic growth, and opportunity (with its reduction of the floodplain). This is a novel kind of ecological system, which cannot really be labeled “restoration” despite the undeniable gain in ecological function when compared to the creek’s pre-project urban form.

Though a direct call to action is missing, the hope is that the targeted readership of *The Texas Landscape Project* is the next generation of conservation leaders, those who will be far more ready to take action armed with knowledge of the last centuries of environmental change, thanks to this book.

The authors have also made their maps, some text, and even a few audio files available online through <http://texaslandscape.org/>—an effort that should be applauded in the spirit of open data and equitable access to knowledge. I hope they will consider making raw data available to the public so that those tasked with the future of conservation have easily accessible tools necessary for action. C99