

Reader's Corner

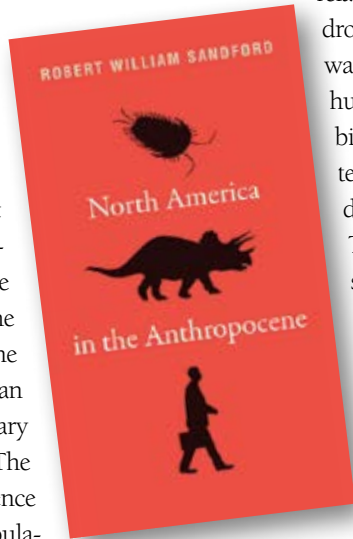
Robert William Sandford, North America in the Anthropocene

(Canmore: Rocky Mountain Books, 2016).

Reviewed by Heinz Unger

It seemed more than coincidence. The same day I started reading Robert Sandford's new book, I found the World Wildlife Fund's *Living Planet Report 2016* in my inbox. It introduced this new concept: the Anthropocene. It describes the current the geological era, one in which humans rather than natural forces are the primary drivers of planetary change. The WWF report presents evidence that worldwide wildlife populations have declined on average by 58 percent since 1970 and are likely to decline further to be only 67 percent of 1970's level by the end of the decade. We can see this close to home in Alberta where key wildlife species such as grizzly bear, woodland caribou, and greater sage-grouse numbers have decreased at an alarming rate. AWA's *Wild Lands Advocate* has documented that loss of habitat, caused by an ever-expanding human footprint (for energy, industry, agriculture or urban expansion), is the primary reason for declining wildlife numbers.

The term Anthropocene was only coined in the year 2000 and entered the Oxford English Dictionary in 2014 as "the era of geological time during which human activity is considered to be the dominant influence on the environment, climate, and ecology of the earth." Geological eras are often associated with mass extinctions, and the question arises whether the Anthropocene signals the beginning of the end of human and other life, or the uncertain and turbulent beginning of a new and better age. Sandford's new book explores this question in some detail and tries to provide answers.



He starts out with a strong focus on climate and water and draws on a 2015 United Nations report titled *Water in the World We Want*. That report is very concerned about how a warming climate has disrupted the relative stability of the globe's hydrological cycle. The increase in water shortages not only affects human needs but also erodes biodiversity-based earth system functions, contributing to declining wildlife populations. The agriculture and energy sectors are the largest water users and are therefore called upon to lower their demand through efficiencies and new ways of production.

Sandford then examines the UN's *Transforming Our World 2030* agenda. This is a new framework for global action that sets out 17 goals for sustainable development. While water is a development goal on its own, it also plays a role in 13 of the other 16 goals. It's vital to ending poverty and hunger, ensuring healthy lives, energy security, resilient infrastructure, and taking action on climate change. Water clearly plays a crucial role for human health and wellbeing and also for the health of the environment and the economy.

The book continues with a review of the *Global Risks Report 2016* presented by the World Economic Forum (WEF) at its annual conference in Davos. It ranked "the failure of climate change mitigation and adaption" as the highest risk; this was the first time an environmental risk received the top risk ranking by the WEF. Water crises and large-scale involuntary migrations were listed as other, interconnected, high risks. Global insurance companies, too, consider climate and environmental change among the highest risks they are trying to insure against.

Under the heading "Separating the hype from the hope in Paris" Sandford discusses the achievements of the 2015 UN Climate

Change Conference in Paris. He found that compared to what could have happened, it was a miracle; but compared to what should have been decided, it was a disaster. There was consensus among the 193 nations which attended on the need to act. But the commitments to act are modest and non-binding, as is Alberta's goal to cap greenhouse gas emissions from oilsands production at 150 percent of present levels by 2030. Moreover, since Paris 2015 the election of U.S President Donald Trump has added uncertainty and increased the risks associated with climate change.

The book continues with brief reviews of four recent books on climate change: *Reason in a Dark Time* by Dale Jamieson, *Learning to Die in the Anthropocene* by Roy Scranton, *Hot Topic – Cold Comfort* by Gudmund Hernes, and *Don't Even Think About It: Why We Are Wired to Ignore Climate Change* by George Marshall. As is evident from the titles, there isn't much optimism to be found in much of the current relevant literature. Nonetheless Sandford resists the rather gloomy perspectives and proposes that a new era, i.e. the Anthropocene, needs a new narrative and mythology.

Sandford dismisses techno-utopian and geo-engineering options, but concludes with an exhortation to make a choice between self-delusion and self-fulfillment. The latter option will enable us to create not a new but a better world around us. Relentless, informed, and courageous citizenship by many committed individuals is needed. Using the way water flows in a river as an example, he asserts that many small actions and changes over time can lead to sudden, huge and dramatic changes in the course of a river. Thinking of the Anthropocene in these terms could produce an epoch of positive change effected by humans and lead to a more equitable, just, and sustainable future for **all** life on this planet. This positive and hopeful outlook challenges all of us to take action, however small those actions might be.