

Testimony of Judith D. Schwartz
Author/Journalist from Vermont
Committee on Oversight and Government Reform
Subcommittee on the Interior, Hearing on
“21st Century Conservation Practices”
September 13, 2016

Thank you to Chairman Lummis, Ranking Member Lawrence, and members of the Interior Subcommittee for this opportunity.

I am before you today as an author of two books that explore animal/land dynamics, particularly the potential for holistic livestock management to regenerate landscapes. *Cows Save the Planet and Other Improbable Ways of Restoring Soil to Heal the Earth* (Chelsea Green Publishing, 2013) looks at soil as a hub for our environmental, economic and social challenges—and for solutions. *Water In Plain Sight: Hope for a Thirsty World* (St. Martin’s Press, 2016) explores how water intersects with climate, biodiversity, food security and peace and conflict. And how understanding how water works—how it moves across the landscape—helps us address such concerns. Understand that I never expected to be on this “beat”: Rather, as a journalist driven to explore solutions I was drawn to the elegant complexity of flourishing ecosystems and the promise of drawing on nature’s models to restore balance and vitality to our lands, including through holistic managed grazing.

Basically, whenever there are animals on the land those animals are having an impact, which can be positive or negative, depending on how they are managed. The paradigm for “conservation” has changed, in that land is not static but requires biological activity. In nature, plants are to a large extent managed by herbivores, and those plant-eating animals are managed by predators. The alteration of the landscape and the absence of natural predators have left a management void. With what we now understand about rangeland systems, this void can be filled in a way that at once bolsters ecological function and economic opportunity.

In my reporting I’ve encountered numerous examples of land transformed by restorative grazing. In Zimbabwe, at the Africa Centre for Holistic Management, the Dimbangombe River flows a kilometer farther than it has in living memory and now runs throughout the year. Despite a continuing drought in Southern Africa, this land remains productive and supports abundant wildlife, including elephants and lions. In the Chihuahuan Desert, which spans several states and part of Mexico, I visited an area where holistic ranchers are working with bird conservation organizations to create a corridor for endangered migratory grassland birds. These ranches are “islands of grass” for the birds, whose numbers have steeply declined due to desertification throughout the region. In Australia, a rancher I interviewed uses cattle to control excess vegetation and thus minimize the extent of wildfires. In each instance, management entails inquiring how nature maintained healthy conditions and finding ways to mimic or ally with those processes.

Agriculture, including ranching, need not be an “extractive” industry; it can be regenerative, too. As well as consistent with conservation goals. This was noted at COP21, the global climate conference in Paris last December, with the advent of

the 4 per 1000 Initiative, introduced by the French Agricultural Ministry. This initiative, signed by 30-plus nations and several dozen NGOs, calls attention to agricultural means of bolstering carbon levels in the soil. Even at a modest annual rate, increasing soil carbon stocks has important implications for drawing down atmospheric CO₂, bolstering fertility and biodiversity, and enhancing land's ability to retain water—which means added resilience amid the threat of drought, floods and wildfires. Every one percent increase in soil organic matter (which is mainly carbon) represents an additional 20,000 gallons of water per acre that can be held on the land. The loss of this capacity is a story that has been written across much of the U.S., leading to many of the challenges we face today.

My recommendation is that we do not leave land bare and hope that it will somehow improve. Rather, we should explore strategies that work with natural processes, including holistic planned grazing, restoring the predator-prey relationship, and reviving populations of keystone species such as beaver. One way to ascertain progress is through monitoring basic factors such as water infiltration and soil carbon levels.

Additional information:

--Article on Wildfires (Judith D. Schwartz)

<http://www.commondreams.org/views/2016/08/16/wildfires-are-getting-worse-time-rehydrate-our-landscapes>

--Soil as Carbon Storehouse (Judith D. Schwartz)

http://e360.yale.edu/feature/soil_as_carbon_storehouse_new_weapon_in_climate_fight/2744/

--Cows and Conservation in Zimbabwe (Judith D. Schwartz)

<https://thefern.org/2016/04/conservation-age-climate-change-saving-cows-grasslands-rural-zimbabwe/>

--Restorative Grazing and Biodiversity in the Chihuahuan Desert Grasslands: Video by Bird Conservancy of the Rockies

<https://www.youtube.com/watch?v=XsmoJsRWK0Q>

--The Soil Carbon Coalition has been a leader in promoting monitoring of soil carbon levels. This is an interactive map of the United States that measures changes in soil carbon.

<http://soilcarboncoalition.org/changemap.htm>

--The Healthy Soils Initiative has just received funding in the State of California. This is a possible model for measurement and incentives.

<http://calclimateag.org/healthy-soils-initiative-funded/>

--Congressional hearing, June 25, 2014, by the Subcommittee on Public Lands and Environmental Regulation on the topic of "Increasing Soil Carbon on Public Lands". The material in the testimonies are relevant to today's discussion.

<http://naturalresources.house.gov/calendar/eventsingle.aspx?EventID=384738>
(Testimony starts at 30.00.)

Individual testimonies:

http://naturalresources.house.gov/uploadedfiles/testimony_martinpler6.25.pdf

http://naturalresources.house.gov/uploadedfiles/testimony_richpler6.25.pdf

http://naturalresources.house.gov/uploadedfiles/testimony_teaguepler6.25.pdf

<http://naturalresources.house.gov/uploadedfiles/wicktestimony-6-25-14.pdf>

--This document explains the 4 per 1000 Initiative that is referenced above:

<http://4p1000.org/understand>

Biographical Summary

Judith D. Schwartz is a journalist whose recent work looks at ecological restoration as a way to address environmental, economic, and social challenges. She writes on this theme for numerous publications and speaks in venues around the world. She has written for a variety of newspapers and magazines including *Scientific American*, *Discover*, *Time*, *The New York Times*, *The New York Times Book Review*, *Pacific Standard* and *The Christian Science Monitor*. Her 2013 book *Cows Save the Planet* was awarded a Nautilus Book Award Silver Prize for Sustainability and is among Booklist's Top 10 Books On Sustainability. A new book, *Water In Plain Sight: Hope for a Thirsty World* has just been published by St. Martin's Press. A graduate of the Columbia Journalism School and Brown University, she lives in Vermont.

Judith's professional website is: <http://judithschwartz.com/>

Committee on Oversight and Government Reform
Witness Disclosure Requirement – “Truth in Testimony”
Required by House Rule XI, Clause 2(g)(5)

Name: JUDITH D. SCHWARTZ

1. Please list any federal grants or contracts (including subgrants or subcontracts) you have received since October 1, 2012. Include the source and amount of each grant or contract.

None

2. Please list any entity you are testifying on behalf of and briefly describe your relationship with these entities.

None - I am testifying on my own behalf

3. Please list any federal grants or contracts (including subgrants or subcontracts) received since October 1, 2012, by the entity(ies) you listed above. Include the source and amount of each grant or contract.

None

I certify that the above information is true and correct.

Signature:

J.D. Schwartz

Date: September 10, 2016