

## Experiments in Ecology & Economics

*I recently gave talks on a related topic at law schools in the Boston area and NYC. I was overly optimistic, a common libertarian trait, about the law students' knowledge of parks and wild-lands, especially those of the West. Thus I'll show a few photos of FREE's setting to place my comments in an environmental context.*

My goal today is to interest people who value parks and wild lands to consider changes in the institutions governing their management. One attractive option is to transfer ownership to fiduciary trusts. These institutions can build upon over 400 years of experience to help conserve parks and wild lands.

The intellectual arguments for this change come primarily from public choice and Austrian economics. (The duties of a fiduciary include loyalty and reasonable care of the assets within custody. All of the fiduciary's actions are performed for the advantage of the beneficiary.) MSU colleagues and I introduced this idea several decades ago. Economists considered it a mere interesting intellectual curiosity. Conventional environmentalists feared and hated it; they felt more comfortable in the political arena.

We were merely ahead of our time. Today governments are broke and broken. Trust is low and going down. Alternatives to federal ownership and political management are more promising. Some are underway. None is perfect but the logic of political economy helps us anticipate pathologies and guide reforms.

I have had the great good fortune to teach and work in this arena, a field I love. I've taught in two forestry departments, created environmental programs at MSU and U Washington, and founded two think tanks focused on environmental economics, PERC and FREE. Ramona and I have also built a ranch between Bozeman, MT and Yellowstone Park, made it productive, and placed it in a conservation easement with the Gallatin Valley Land Trust. In an earlier life, I was a timber buyer and contract logger.

Given this practical and intellectual background, I am quite comfortable sharing my perspectives. First I'll define the scope of my interests.

It is helpful to divide environmental studies into two general and sometimes overlapping fields. First, and most important to health and wellbeing, are noxious byproducts of productive activities. The category includes slurry and mining run off, nuclear waste, dioxin, sewage, and algae blooms. When they spill over and impose costs on unwilling others these are negative externalities. The category is **sludge**.

The second set includes forests, parks, wild lands, wildlife, fisheries, and rangelands. These places attract artists, tourists, photographers, and scientists among others. Increasingly, they are also magnets for mobile people with high human capital. Consider this part of environmental studies **romance**. That is where I have spent my career.

North Carolina is a good place to talk about the romance side of environmental economics and policy. It is the birthplace of American forestry. (The Cradle of Forestry in America is a 6,500-acre historical site in the Pisgah National Forest. America's first forestry school was at the Biltmore forest. Gifford Pinchot, the father of the U. S. Forest Service was its first forester.) Further, the National Park Service lists ten national parks in NC. NC created its state park system in the same year Congress created the NPS, in 1916. NC has several score state parks.

Bozeman, Montana is another excellent place to study the **romance** arena. It is the major gateway town to Yellowstone Park. Created in 1872, Yellowstone is the world's first national park. Montana State University is in Bozeman and is "The University of the Yellowstone". National forests and rangelands surround the town.

Under existing arrangements, America's most prominent romance lands, our parks and wild lands, are likely to soon be at great risk. But not from climate change. Rather, the danger is arising from the simple arithmetic of demography and entitlements.

The actuarial deficit of the federal government is something beyond, and probably far over \$20 trillion. Stanley Druckenmiller of Duquesne Capital Management claims it is over \$200 trillion. He anticipates a collapse due to entitlement transfer payments.<sup>1</sup>

In brief, the management of our romance lands comes from the discretionary portions of federal and state budgets. That is the portion being squeezed. When severe cuts occur, problems must follow.

According to the Center for American Progress, since 2010, Congress has cut the parks budget by 13%, leading to the seasonal closure of national parks including the Great Smoky Mountains and the Grand Canyon.

The Sierra Club told Salon that the national parks need \$11.5 billion worth of maintenance. Half of this is reportedly needed for roads and bridges, whose disrepair poses serious public safety threats. The amount allocated in the 2012 budget? \$2.2 billion.

For Congress, though, it's not enough just to defund our parks so they slowly fall into total, unusable ruin. In this country, it's also important that we "Drill, baby, drill," not to mention, "Log, baby, log" and "Mine, baby, mine."

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<sup>1</sup> <http://www.businessinsider.com/stan-druckenmiller-on-generational-theft-2013-9?op=1>

Another set of problems involves a large and rapidly growing dependency class. As their opportunities for productive work declines, especially for males, all manner of pathologies follow. This is a prominent theme in David Brooks and Charles Murray's recent work. It's ideal material for new work in economic anthropology.

Maintenance of roads and physical facilities will fall ever further behind. Recreational opportunities will diminish and visitation will become increasingly dangerous. In efforts to recoup diminished funds from taxpayers, parks will predictably shift toward the entertainment that sells.

A few economists again advocate selling Yellowstone to the high bidder, perhaps MGM or Disney. I have always opposed this for a simple reason, the switch to for-profit management would change the Park's ambiance and hence the visitor's experience. The immense goodwill people feel for America's natural icons would gradually erode. However professional and competent she be, people distinguish courtesans from sweethearts.

Most land in government ownership is for multiple use. This includes energy production of oil, gas, coal and wind. Some is primarily for agriculture, grazing, and logging along with recreation and research. If government budgets become more stressed, pressures to increase commodity production will increase. As a result, the noncommercial features of multiple use, recreation, wildlife, science and ecosystem services, will become relatively less important to agency decision makers.

Here is my suggestion to those interested in preserving the future flow of values from parks, wild, and multiple use government lands: consider public fiduciary trusts for their ownership and management.

## **ECOLOGY, LIBERTY AND PROSPERITY**

Americans have always sought some combination of liberty and prosperity in a safe and pleasing ecological setting. Legal and economic arrangements, our institutions, vary greatly in the weight given to each of these three values.

This difference makes it difficult to craft and implement constructive, sustainable policies. When one is proposed the first question should be “and then what?” What are the predictable second and higher order consequences of its adoption? Here is an example from the politically sensitive management of Yellowstone National Park.

The national parks were created as the “pleasuring grounds” of the citizens and for scientific study. Their wild animals became divided into two types, good ones and bad ones. Bad one such as wolves ate the good one, herbivores such as elk.

The policy that naturally followed was for employees in the Dept. of Interior, mainly Park Service employees, to kill the wolves. The last Yellowstone wolf was killed in 1926. As a result, the elk population exploded.

As the elk population exceeded Yellowstone's carrying capacity, vegetation degenerated and beaver became extinct in the Park. This eliminated new beaver ponds and affected ground water and the riparian vegetation that supported birds and mammals. A team of scientists visiting Yellowstone in 1929 and 1933 reported, “The range was in deplorable conditions when we first saw it, and its deterioration has been progressing steadily since then.” It is hard to do just one thing.

The grey wolf was reintroduced in 1995. Its return changed the population numbers and feeding behavior of elk. Ecologically and economically, this has been beneficial on net. However, it is the most controversial, antagonizing, faction-generating event I've seen.

The wolf is an icon celebrated by the Greens, loved by tourists, celebrated by scientists, and legitimately loathed by rancher--and those who identify with them culturally. (**Account here of elk wolves and horses on our ranch last winter.**) One sees "Smoke a Pack a Day" or "Shoot Them at the Border" bumper stickers on pickups not Subarus or Priuses. Costs of the wolf are concentrated, benefits diffused, and political power displayed.

Experiences with the Yellowstone wolf offer many lessons. This is a key one: environmental issues are scientifically complex and carry heavy emotional baggage. These are ingredients for error and acrimony. This is compounded by a stubborn fact; in neither *eco* (**economics** or **ecology**) is it easy to do only one thing. Subtle linkages and interdependencies are pervasive in both arenas.

Here are two true, empirical, universal, statistical generalizations about environmental and natural resource policy. First, poverty and ecological concern are inversely related. Poor people sacrifice their environment to enhance wealth creation. This was America in the 19<sup>th</sup> century and China today. Alternatively, ecology as the term is commonly used, is a highly superior good. It is the same category as gourmet food, foreign travel, and BMWs.

To their great disadvantage, the second generalization has been widely ignored or heavily discounted by Republicans and conservatives. Simply stated, when people become well educated and wealthy they usually become Greener.

Although Republicans were prominent in America's original conservation movement, they became estranged from modern environmentalism. This disenchantment is a consequence of the close association of Green with leftist causes.

Unfortunately, the first Earth Day was April 22, 1970, Vladimir Lenin's birthday. Some took that as a sign, a leading indicator of philosophical orientation. And they were largely correct. Most of those active in environmental causes self identify as left/liberal/progressives.

Kim Holmes has been a senior fellow at the Heritage Foundation for over two decades. Writing in 2013 about the late 1960s and 70s he said, "The counterculture's penchant to romanticize nature also meshed nicely with the New Left's war on capitalism."

Today's Greens are usually hostile to or don't understand the market process, don't appreciate the positive functions of secure property rights, and over value the potential of regulations. They mix good intentions with economic naiveté. A little understanding of public choice and Austrian economics would be immensely helpful in fostering liberty and prosperity in a safe and pleasing ecological setting. This implies changed institutional design.

Every new institution designed for environmental control is an experiment in coordination. The Progressive Era reforms of the 1900 era included major efforts to control and manage

America's parks, forests, rangelands and wildlife. Together with the Bureau of Land Management these agencies manage nearly one third of America's land. This implies coordinating ecological, economic, and ethical considerations, all in a political context.

Congress created federal agencies to meet this challenge. They include the US Forest Service in 1905 and National Park Service in 1916. The FS handles 155 national forests (and grasslands) totaling about 192,000,000 acres. This area exceeds that of Texas and Louisiana combined. The NPS and the Fish and Wildlife Service are each responsible, in the loose sense, for about 80,000,000 acres each. There are 59 national parks. Yellowstone, FREE's back yard, was the world's first. It was created in 1872.<sup>2</sup>

### **PROGRESSIVE ERA FORMULA for Public Land Management**

The central creed of the Progressive Era land managers was "wise use" of natural resources. For whom were they to be managed? Gifford Pinchot, the first manager of the Biltmore Forest in North Carolina and then first head of the U. S. Forest Service in 1905, wrote:

Without natural resources life itself is impossible. From birth to death, natural resources, transformed for human use, feed, clothe, shelter, and transport us. Upon them we depend for every material necessity, comfort, convenience, and protection in our lives. Without abundant resources prosperity is out of reach.

These resources were to be managed "for the greatest good for the long run". Who could determine and implement this goal? Professionally trained resource managers. In their ideal world these individuals can act as Green Platonic despots.

This system failed to work as intended and promised. It was supposed to generate economically efficient and ecologically sustainable outcomes. Two major problems disrupted this result: lack of scientific understanding, and political pressures. When management occurs in a political environment decisions will be influenced by apolitical calculus.<sup>3</sup>

I suggest environmentalists welcome the exploration of alternative institutional arrangements to protect and manage national parks and wild lands. This implies institutional entrepreneurship.

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<sup>2</sup> *One third of the Nation's Lands*, U. S. Government Printing Office, Jan., 1970  
*Federal Lands Policy*, Phillip Foss, ed., Greenwood Press, 1987.

<sup>3</sup> For an overview of the outcomes of scientific management across federal agencies see my 1979 University of Michigan Press book with Rick Stroup, *Bureaucracy vs. Environment: The Environmental Costs of Bureaucratic Governance*. There dozens of books and thousands of articles explicating this theme. While there is great variety among them, many of the state agencies perform better, especially on economic dimensions.

Fiduciary trusts have several advantages over management by politically dependent agencies. Three major ones are: greater sustainability, more transparency, and higher burden of proof.<sup>4</sup>

Perpetual trusts are ideologically equal to but legally stronger than the sustained yield laws that were supposed to govern national forests. They are obligated to preserve the corpus of the trust.

Trusts are ideologically equal to but legally stronger than freedom of information laws. They are legally obligated to open their books to the beneficiaries.

When challenging governmental agencies, the burden is on those arguing that they aren't doing a good job. In contrast, trustees bear the burden of proof that they are doing a good job.<sup>5</sup>

For decades I've argued that fiduciary trusts<sup>6</sup> may be attractive arrangements for managing parks and wild lands.<sup>7</sup> The federal shutdown of October 1 illustrates and amplifies the advantages of this system. The recent closing of national parks and monuments was political theater, but that theater foreshadows genuine threats that we can expect later. Consider an observation in *The Economist*.

...[America's] long-term fiscal problem is immense: it taxes like a small-government country but spends like a big-government one. Eventually demography-and the huge

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<sup>4</sup> My thanks to Randal O'Toole, himself a national environmental and intellectual treasure, for sharing his insights and analysis of fiduciary trusts.

<sup>5</sup> *Chevron v NRDC*. Refer to:  
[http://en.wikipedia.org/wiki/Chevron\\_U.S.A.,\\_Inc.\\_v.\\_Natural\\_Resources\\_Defense\\_Council,\\_Inc.](http://en.wikipedia.org/wiki/Chevron_U.S.A.,_Inc._v._Natural_Resources_Defense_Council,_Inc)

<sup>6</sup> Not everything called a trust is a fiduciary trust (the social security and highway trust funds are not trusts). Not all fiduciary trusts are called trusts. To be a true fiduciary trust, there must be:

1. A settlor who creates the trust
2. A trustee who manages the trust on behalf of a beneficiary
3. A property that is the corpus of the trust
4. A beneficiary
5. A trust instrument that defines how the trust is to be managed

See <http://ti.org/statetrusts.html> for an excellent discussion of both the requirements for and advantages of trusts.

<sup>7</sup> Baden, John. (1988, Nov 23). "Take Politics out of the National Parks." *The Wall Street Journal*.

tribe of retiring baby-boomers who expect pensions and health care-will bankrupt the country....<sup>8</sup>

When this occurs, the protection of our national parks and wild lands is at high risk. National parks are one of America's best innovations and federal management of them was probably optimal for their first century. Before America hits impending financial reality checks, let's explore alternative institutional arrangements for our wild lands.

If well meaning but naive Greens and modern "progressives" relinquish their affection for central controls over natural areas, the values of wild lands may be conserved, even when governments are broke and broken.

There are surely hundreds, perhaps thousands of existing and emerging trusts created for the management of wild lands and wild life. A relatively new example is the American Prairie Reserve (APR), an ambitious Bozeman based non-profit. Its goal is to create a protected reserve of well-managed wild lands in northeastern Montana, an area in economic and demographic decline since 1917.

## IMAGINE

a grassland reserve of THREE-MILLION acres – a wildlife spectacle that rivals the Serengeti and an AWE-INSPIRING place for you and your children to explore.

Imagine helping to  
build a national treasure

<http://www.americanprairie.org/>

This is an example of environmental entrepreneurship. It is becoming an "American Serengeti" nearly one million acres larger than Yellowstone. Complex on every dimension, it is an experiment worth monitoring--and probably replicating as threats to federal and state owned lands increase.

The General Director of APR is Pete Geddes. Pete was my colleague at FREE for over 14 years. When he was a forestry grad student at the U of Montana some 20 years ago, his advisor in economics told him to pay no attention to those guys over in Bozeman. They were just "nut case libertarians".

Fortunately, data and logic are powerful forces. And the force is with us.

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<sup>8</sup> The Economist. (2013, Oct 19). "The Fiscal Deal in Washington: Worse than Europe, really." Retrieved from: <http://www.economist.com/news/leaders/21588091-none-deeper-problems-american-government-was-solved-week-worse-europe>