African Lessons for Saving America's Prairie

By Richard Edwards

"Everywhere, as far as the eye could reach, there was nothing but rough,

shaggy, red grass, most of it as tall as I. ... As I looked about me I felt that

the grass was the country, as the water is the sea."

– Willa Cather, My Ántonia

America's central grassland, originally stretching from Illinois to the Rockies and from north Texas to mid-Manitoba, astonished early travelers. Many could not get comfortable in its vastness and lack of visible landmarks, and few could resist using the "sea of grass" metaphor. They were amazed at the profusion of its wildlife. But even then it took the first true field botanists, among them Roscoe Pound of later Harvard Law fame, to discover that each small patch of prairie typically contained a hundred-and-fifty or more different species of grasses and forbs.

This prairie has now mostly disappeared. It was plowed under to seed fields of corn, soybeans, and wheat. Only the shortgrass prairie, beginning at roughly the 100th meridian and extending to the foothills of the Rockies, survives in large intact areas. But it is under terrible threat.

Why should we care about this grassland? After all, this is "the Big Empty," that mind-numbingly tedious region through which one has to drive to get to someplace interesting and noteworthy. Today of course it is fly-over country, an area conveniently forgotten during the in-flight movie. A recent (8/4/08) New York Times article noted that the Nebraska "sandhills [have been] good for little more than hunting and grazing since forever..."

Yet ignorance hardly justifies neglect. It turns out that the earth's great grasslands, such as the Mongolian high plain, the African savanna, and our Great Plains, are regions of great bio-diversity. As already noted, the American prairie displayed a highly complicated botany. North America's most endangered mammal, the black-footed ferret, is a grasslands denizen. The Nebraska Sandhills, dismissed by the Times writer, is a fragile and unique eco-system, the largest collection of stable dunes on the continent and home to some 230 species of birds and dozens of species of wildflowers. Dragonflies abound. When the sandhill cranes make their annual migration from the southwestern United States to their breeding grounds in the Arctic, they stop along a short stretch of the Platte River. Here they remain for a month or longer, convening in the hundreds of thousands to re-fuel for the rest of the trip. In March, 2008, Jane Goodall, on her fifth trip to witness the phenomenon, called it "one of the seven



Photo of American prairie by Dennis Lingohr

wonders of the natural world." It turns out "the Big Empty," even the depleted Platte, is critical to maintaining bio-diversity.

In 2005 four biologists reported a study in Ecology Letters of the world's 810 eco-regions (smaller-scale sub-categories nested within the 13 recognized biomes or large eco-systems); they ranked how endangered each eco-region is. Their conclusion: "temperate grasslands, savannas, and shrublands" are the most endangered environments on earth. There are certainly other regions – Madagascar, the Amazon basin, the coral reef off New Guinea – in urgent need of protection, but one of the most abused areas is out my back door.

Despite such evidence, the shortgrass prairie continues to be plowed up and "developed" at a great pace. Demand for corn for ethanol and other factors have sent corn, soybean, and wheat prices surging, so that land even recently deemed too marginal for crop production is planted to corn. One estimate suggests that South Dakota alone loses 250,000 acres of virgin prairie to row crops each year. Here as elsewhere, most threats to bio-diversity flow not from inadequate biological knowledge, but rather from failed political and economic institutions that persistently undervalue landscape and bio-diversity.

So if the remaining North American grasslands are worth saving, what can be done? One approach is to have federal or state governments purchase landscape-scale properties; but the political culture and chronically strained budgets make this outcome unlikely. A second approach is for private non-governmental organizations, like The Nature Conservancy or The Audubon Society, to purchase lands and remove them from production agriculture. Such purchases save small and highly critical parcels, but limited resources applied to a vast terrain render this effort inherently modest in scope. New strategies, complementary to the first two, seem needed.

One possible third approach, highly promising with some

novel, even counter-intuitive elements, is just now emerging. This approach starts by recognizing two hard realities: 1) most of the surviving Great Plains grasslands are privately owned; in Nebraska, for example, approximately ninety-seven percent of the land is private; and 2) most current landowners, especially ranchers, adhere to a tough western culture that is cattle-based and harshly opposed to "tree-huggers" and other perceived outsiders; however, they also see themselves as the inheritors and stewards of beautiful land that has often been in their families for several generations. This third approach seeks to turn these realities into positives by establishing private-market incentives for landowners to

undertake conservation themselves. Rather than excluding ranchers from conservation (as the first two approaches do), this approach seeks to enlist them as the active agents in saving the bio-diversity of the grasslands.

The origins of this new approach lie far away, in Namibia. This African country – unlike nearly all of its sub-Saharan neighbors – has experienced a tremendous increase in the numbers of all its wildlife species: more elephants, more kudu, more ostrich, more giraffe, more leopard, even more cheetahs. It achieved this result by making wildlife pay for local landowners. The changes were simple but fundamental: 1) ownership of wildlife was privatized, so the local landowner

rather than the state now owns and can benefit from wildlife on his or her property; and 2) the state encouraged and in some cases required the establishment of nature conservancies, that is, multi-farmer (or communal) associations that manage wildlife jointly across their properties; conservancies forced an increase in the scale over which private wildlife is managed. These new rights were first granted to white farmers by the apartheid regime in 1967 and were extended to communal (tribal) lands by the black-majority government in 1996.

The Namibian farmer got a new source of income, in trophy-hunting fees, meat sales, and increasingly in revenues from wildlife viewing, photographic safaris, and lodges. Instead of being pests and competitors with livestock for valuable grass, wildlife became an asset to farmers. Poaching has been nearly eliminated (wildlife is too valuable in attracting tourists to poach), and animal numbers have soared. Cattle (or goat) farming typically continues alongside the increasing wildlife, even co-existing with predators. Most importantly, a country dominated by cattle and goat farmers who once despised wildlife has been transformed into a society highly conscious of the value of protecting its wildlife.

Can these ideas, suitably tailored for our context, work to

save American grasslands? There are many obstacles in applying them here: the so-called "North American model" of wildlife; entrenched bureaucracies, both private and public, which feel threatened; federal policies that subsidize commodity agriculture and provide little support for conservation; and most important, the culture of American ranching, which like its (former) Namibian counterpart, sees eliminating wildlife as necessary to raising cattle.

But there are highly encouraging signs as well: I work with some crusty old Sandhills ranchers who suffer the stresses of rising land taxes and high feed (corn) prices and so are at-

> tracted to having their land provide a new revenue source. They like the idea – it feels less like they are betraying their forebears – that they could do conservation and eco-tourism in combination with traditional cattle ranching.

> The Namibian approach deserves skeptical assessment: although some aspects (game counts, for example) have received rigorous scientific scrutiny, its economics have not. Other questions remain as well: Does this approach result in disfavored as well as favored species? Can it stimulate sufficient scale in private wildlife management to be biologically beneficial? Could it protect endangered

flora as well as charismatic fauna? In

the Great Plains, would it promote high-value, low-impact eco-tourism as in Namibia, or would it simply propagate a new environmental threat, namely, a lot of low-value, high-impact tourism? (Aldo Leopold, in A Sand County Almanac, warned that "the very scarcity of wild places, reacting with the mores of advertising and promotion, tends to defeat any deliberate effort to prevent their growing still more scarce.")

Will the emerging Calamus Conservancy near Burwell, NE, and a second one now taking form near Crescent Lake Wildlife Refuge north of Oshkosh, NE prove to be models to test out and illustrate these ideas? Can these on-the-ground projects, featuring virgin-prairie landscapes with myriad species of birds and wildflowers, prairie dogs, elk, pronghorn, deer, potentially bison and black-footed ferrets, even the elusive mountain lion, an unpolluted night sky, and much more, become high-value eco-tourism destinations? We can hope they will become not only successful enterprises applying the Namibian model but success stories other landowners will emulate.

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