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FEATURES

A Howling Success T Gray wolves have made a remarkable recovery over the past few years, repopulating parks where they were once extirpated. The new challenge facing federal agencies: how many wolves are enough? By Elizabeth G. Daerr

Keying in to History Anyone looking to trace a relative who fought in the Civil War can now do so via the Internet thanks to a National Park Service database containing soldiers' names. Eventually the database will be offered through computer terminals at 42 parks. By Chris Fordney

Coming out of Cold Storage The newly established Minuteman Missile National Historic Site in South Dakota will be the first park site devoted entirely to the story of the Cold War. By Phyllis McIntosh

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COVER: Because of successful reintroduction, the U.S. Fish and Wildlife Service may alter the endangered species status of the gray wolf. Photo by Jim Brandenburg/Minden Pictures.



PAGE 34

DEPARTMENTS

4 Outlook

More money is needed to fund scientific research, far more than the Park Service has been able to attract. By Thomas C. Kiernan

- **Editor's Note**
- Letters
- 12 **NPCA Park News**

NPCA sues over air quality; California condors face new challenges; restoration of Crissy Field.

- **Photo Contest Winners** 38
- 42 **Excursions**

If Radio City Music Hall lures you to New York City during the holidays, be sure to save some time for history. More than six historic sites are within easy reach.

By Wendy Mitman Clarke

- Historic Highlights Carl Sandburg. By William A. Updike
- 48 Rare & Endangered American crocodile. By Elizabeth G. Daerr
- 50 **Forum** The question is not whether we must manage wild nature, but how we will go about it. By Daniel Janzen
- 52 Notes
- You Are Here 54

Wildlands as Gardens

The question is not whether we must manage wild nature, but how we will go about it.

BY DANIEL JANZEN

AM A tropical real estate developer. So are farmers, town planners, and national park staff. I do biodiversity development and ecosystem development—biodevelopment, for short. My goal is that large conserved wildlands survive into perpetuity. Nondamaging biodevelopment is the only chance that they have. This "gardenification of nature" is the recognition of nature as friend, as collaborator, rather than as an enemy to be feared or removed to make way for humanity.

The conserved wildland need not be feared and associated with evil things that go bump in the night. The conserved wildland is a garden, albeit the crops do not grow in orderly rows, and the produce does not come in square boxes. Yes, to garden it we need to understand it far better than we do, and the crops are multicropped, multitasked, and multiused. But a garden it is, nonetheless. And society wants gardens.

The question is not whether we must manage wild nature, but rather how shall we manage it—haphazardly or with the calculated goal of its survival forever? Most readers of this magazine opt for the latter. However, society's relationship to wildland nature is now

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almost entirely accidental. Think on it. We have 10,000 years-plus of making the agroscape work. In the wildland garden, we are not even in kindergarten. We still think that the right thing to do with the wildland resource is to put it in a cage and march around the cage with park guards. How many gardens would survive if all we did was protect them? We set out millennia ago to make the agroscape into high quality, each society in its own way, each with varying degrees of success. When are

we going to do the same for the conserved wildland?

There is no pristine nature to conserve. Only those unaware of the past can imagine that any ecosystem is unaffected by humanity. The New World? Those hunters 11,500 years ago, with their magnificent fluted spear points, took the continent's largest animals and, with that action, any illusions of pristine nature. The hidden glassy spring buried in an old-growth rainforest hundreds of kilometers from a road? Do a test for the airborne organochlorines dripped out of the fog and stored in the mayfly fat bodies. Show me a place that is immune to the global climate change parching our west, pushing the cloud bank up the sides of our tropical mountains, and melting our permafrost. All conserved wildlands are ecological islands in an agroscape, an urbanscape, and will be forever. Even if they are permitted to survive as self-sustaining wild lumps, which is what we lobby for, these lumps will melt, shrink, homogenize, evolve, and be washed over, inexorably, inevitably, mercilessly.

So, folks, do we fiddle while humanity extends its domain over the wildlands? Or are we going to leave some self-sustaining lumps of the library of life to be enjoyed, used, felt, known?

If you opt for the latter, you better get cracking. The one little wrinkle is that you have to do it without trashing the basic resource. And that is not so strange as you may think. Sustainable agriculture has been around a long time. Let's have sustainable wildlands. They need market development, crop rotation, experiment stations, subsidies, insurance, innovation, entrepreneurism—and they need to pay their bills, be a producer, be open around the clock, and be welcomed at society's table.

The conserved wildland has one mission: survive into perpetuity. That means produce whatever goods and services it can produce for whatever community it can reach. And produce them without damaging it. Impossible? All farmers' fields have footprints. "Without damaging" a conserved wildland means that the footprints are within the range of the day-to-day, week-to-week, year-toyear impacts that all wild nature inflicts on all wild nature. The dry forests, cloud forests, and rainforests where I live in Costa Rica absorbed Hurricane Mitch without a blink, just as they do a visit by 2,500 schoolchildren a year, just as they absorb biodiversity prospecting, just as they absorb you on your bird-watching honeymoon. I will pay 5 percent of biodiversity to make the rest welcome in humanity's living room. Every farm has roads, houses, ditches, and fallow. There is no free lunch.

Am I talking one set of rules for the conserved wildland and one set for the agroscape? Yes. The biodiversity in the wildland garden lives and lets live. Where there is life, there is death. The wild ecosystems rip and rage at each other. What I work for is letting them turmoil in peace. That generally means big. That generally means complex. That generally means restoring some large areas already heavily impacted by humanity. That generally means deciding what big areas will be conserved, and what won't. And that means a highly professional staff fully in charge of doing the right thing by its wildland, a staff who knows its wild things, and how those wild things react to change, just like a university hospital knows its patients.

Humanity is not going to give the entire globe back to wildland nature, and the more you try to force humanity to dance by nature's tune in the agroscape and the urbanscape, the more humanity is going to rise up and squash you. We cannot beat 'em, so let's join 'em. And if that snail in that marsh is something that some of us desperately want to see survive, then play real estate developer, cut the deal, and meld its newly purchased home into some wildland lump big enough for survival.

It is imperative that we come to recognize conserved wildlands for the gardens that they are. They are water factories, amusement centers, grocery stores. They are the globe's finest research, entertainment, and aesthetic living libraries. They are carbon deposits, biodegraders, recyclers, buffers, ameliorators. They are sandboxes and swing sets. And they have shoplifters, vandals, drunks, speeders, and stupidities. But they are not gold under the bed to be protected with a machine gun; someone always figures out how to get into Fort Knox. Just how much interest income comes from a farmer's gorgeous field that lies unplanted? They are gold to be put out on the marketplace to work, under the watchful eye of society's self-interest.

We will always have universities, hospitals, highways, the Internet—because they offer something unique. If we want conserved wildlands, then we

have to put great big labels on the front, back, and side doors that say: "Welcome. Biodevelopment here. Come walk in this garden. Take some home." Treat the wildland garden with the respect you would give your neighbors' gardens. Pay your bill when you leave the restaurant.

Can too many people trash a wild-land? Of course they can, and too many cattle can trash a pasture. And too much cotton can bleed the soil red. And too much irrigation can salt your flat. Humanity knows how to take care of a piece of real estate.

Think: "protect through knowledgeable use." Train how to multicrop, multitask, multiuse. Does a library exist to protect thin sheets of wood? No. A library is there to be used. Yes, there is a rare book room with a fierce librarian. And there are open stacks. And there is a room where frantic school kids razorblade pages out of books because they will not use the copy machine. And yes the staff goes on vacation, and even home at night. But more and more, the insomniac can browse that library on the Internet. There is even a planned price, called taxes, for the fact that libraries are not turned into hotels when there is a room shortage and their thin sheets of wood are not burned when gas prices rise.

Act: give your conserved wildland to a staff that lives, breathes, and understands that it is allowed one mission—integrate the conserved wildland into society for its survival into perpetuity. Guided use of conserved wildland real estate is calculable, knowable, and sustainable. It is gardening.

Additional Reading

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"Costa Rica's Area de Conservacion Guanacaste: a long march to survival through non-damaging biodevelopment." Biodiversity 1, no. 2 (2000): 7-20.

"How to grow a wildland: the gardenification of nature," *Nature and Human Society*, P. H. Raven and T. Williams, eds. Washington, D.C.: National Academy Press, 2000, pp. 521-29.