



“Pristine” Nature:

The Founding Falsehood

Why leaving “nature” alone means destruction of the wilderness. By Steven H. Rich

Brave Daniel Boone, the famous bear hunter, warrior and frontiersman, described some wilderness areas of the Southern Appalachians as “so wild and horrid that it is impossible to behold them without terror.” Why? Because the frontier of Daniel Boone’s experience was not a wilderness. Though made up of native organisms, it was a human-created landscape full of food and useful plants.

Native Americans had managed the

woodlands and grasslands to produce native game animals, native birds and fish, native seeds, berries, nuts, greens, fruits, bulbs, corms, mushrooms, roots, basketry and cordage materials, firewood, weapon-making and building materials, medicines and ceremonially important plants by processes collectively called “proto-agriculture.” They burned the brush to prevent catastrophic wildfire and to increase wildlife and visibility for military reasons. The very soils were

changed by their activities. Many “wild” native plants that exist today are in fact the products of ancient Native American genetic selection and propagation projects that favored better-tasting or more useful versions.

The sight of a wild, trackless, impenetrable, dense forest or barren, brushy tangle (both subject to huge devastating wildfires) with little animal life and nothing to eat repulsed Boone, as it did the Native Americans of his time. He was used to productive,



Still resilient after years of severe drought, this ranch land (left) in Houserock Valley, Ariz., beneath the Paria Plateau cliffs, still provides an abundance of grasses and forbs. Above: Grazed land behind the fence is a historic source of seeds, greens, basket materials and hunting opportunities for the Native Americans who left ruins nearby. The land in front of the fence is clearly dying from years of “rest.”

gentled native landscapes—humanized landscapes full of bears, deer, rabbits and squirrels.

Advocates for a return to “pristine” nature demand an end to ranching, claiming that ranchers “alter” what activists imagine to be “natural” ecosystems. Water holes, water troughs, erosion controls, irrigation, seeding, grazing, clearing brush, making a living on the land, hunting and fishing are all castigated as wrong and bad.

These angry activists want to “restore” what they suppose was the “pre-Columbian” or “pre-contact” condition where, they say, humans “had little influence” on ecosystems. Health and biodiversity with human assistance, in their minds, seems to be a distortion of the natural order. Anything that happens in nature without humans is sold by them as

desirable and good, no matter how destructive of ecosystem values, no matter how many species of native plants and animals are lost. This odd, irresponsible position has been adopted because after years of “ridding the land of human influences” the health and biodiversity they promised from “returning things to nature” never happened. They fundamentally misunderstood the causes of ecosystem health.

Very positive ecological effects of well-managed livestock—so valuable that experts recommend paying skilled, responsible ranchers for the ecosystem services they provide—are contemptuously rejected by doctrinaire “environmentalists” as more “alteration.” Stranger still, ranchers’ so-called “changes” generally cause the landscape to

look much more like the West their ancestors encountered in the early 1800s, with a mix of successional communities in a mosaic pattern.

With their lawsuits against ranchers, these activists destroy rural communities, then claim “environmental success” as defined by themselves as judges, juries, executioners and arbiters of all things environmental. Biodiversity and health, they claim, will show up in a few centuries or so.

Popular beliefs which imagine pre-Columbian America as a “pristine wilderness” (including the West) are false, and are based on racist stereotypes. The highly successful and extremely intelligent adaptations and achievements of Native American societies are reduced to the instinctual behavior of



Tufts of green grass (above) are as clear a sign as the deer droppings that this dry country welcomes animal life. Below: Managed ranch land like this was a rich larder for early Native Americans who planted part of their harvest to ensure a variety and abundance. It took an average of 10 to 20 times more unmanaged plants to serve a cultural need than those from productive, managed lands.



wildlife (“noble savages in a state of nature”).

The related notion that “protecting” land in the West from all human influences preserves biodiversity long-term is also false. It actually endangers and destroys the biodiversity, health, and stability of these lands.

The romantic notion of the Americas as pristine wilderness was created in a prior century by people who could not fathom the idea of Native Americans creating natural paradises through deep knowledge of nature and hard work.

Most people today have little experience with nature and have inherited what amounts to 15th through 19th century Eurocentric propaganda—the “pristine” myth. A scholarly paper, “The Pristine Myth: The Landscape of the Americas in 1492,” by William N.

Denevan of the University of Wisconsin (one of many works on the subject), begins with an abstract which sums up the facts:

“The myth persists that in 1492 the Americas were a sparsely populated wilderness—a world of hardly perceptible human disturbance. There is substantial evidence, however, that the Native American landscape of the sixteenth century was a humanized landscape almost everywhere. Populations were large. Forest composition had been modified, grasslands had been created, wildlife [populations modified], erosion was severe in places. Earthworks, roads, fields, and settlements were ubiquitous. With [Native American] depopulation in the wake of Old World disease, the environment had [fewer fields and villages and had become more

proto-agricultural than agricultural] in many areas. A good argument can be made that the human presence was less visible in 1750 than it was in 1492.”

The Native American depopulation was a tragedy believed to have killed up to 90 percent of Native Americans within 200 years of original exposure to European diseases, to which they had no immunity.

Millions still survived in North and South America. It pleased European consciences to imagine the land as free for the taking. According to Denevan: “The pristine view is to a large extent an invention of nineteenth century romanticist and primitivist writers such as Hudson, Cooper, Thoreau [who was terrified the one time he experienced actual wilderness], Longfellow and Parkman, and painters such as Catlin and Church.”

The notion that we can give up awareness, learning, work and discipline, and live by impulse and instinct, was fashionable with these writers and their friends. The allegedly “spontaneous” and “natural” abundance of allegedly “pristine” and “pagan” America was the ultimate proof of their philosophy and the ultimate reproof of strait-laced work and sacrifice-oriented Judeo/Christian civilization, which they saw as the enemy of pristineness and spontaneity. “Environmentalist” ideas of spontaneous land health exist in direct lineal descent from these romantic fallacies.

Denevan quotes John Bakeless as an example of confused writers who passed on the irrational myth in the 1950s: “There were not really very many of these redmen...the land seemed empty to invaders who came from settled Europe...that ancient, primeval, undisturbed wilderness...”

Bakeless recounted their observations of what we now know were the benefits of Native American proto-agricultural management practices. But the Europeans blindly and unknowingly gave random nature the credit: “The streams simply boiled with fish...so much game that one hunter counted a thousand animals near a single salt lick...the forested glory of primitive America... Indian prairie fires caused the often mentioned oak openings...great fields of [Native American planted] corn spread in all directions...the Barrens [mountaintop grasslands] without forest, and early Ohio settlers found that they could drive about through the forests with sleds and horses.”

Native Americans had cleared them of brush.

The glaring contradiction between his data and his beliefs was lost on Bakeless and



Leave the land alone and it will collapse. With lush ranch land all around, rested land submits a harvest of decay. Clockwise from top left: Grasses struggle to survive on bare, eroding ground. ☼ Turf-type grass and bunchgrass, rested to death. ☼ "Pristine" rice grass on rested land. ☼ Left to die, this sage is being crowded out by piñon and juniper, no longer controlled by prescribed burning. ☼ Only the cryptogams (flowerless, seedless fungi and algae) can live on this rested plot. ☼ Desolate gray is the color of "pristine"; note the grayish cryptogamic crust of algae and lichens. ☼ Soils lose nutrients and water-holding capacity as soil organics are used up faster than the roots of woody plants can replace them.

nearly everyone else, so cocksure and religiously enamored were they of the false but seductive idea that nature would reach a healthy, productive balance spontaneously if humans left it alone. Early settlers and their Native American contemporaries were not fond of living in places that were not altered by humans.

On the topic of intellectual inconsistency, Denevan continues: "Scholarship has shown that Indian populations in the Americas were substantial, that...landscape change was commonplace. This message, however, seems not to have reached the public through texts, essays or talks by both academics and popularizers who have a responsi-

bility to know better."

Well-established facts have been purposefully left out of the textbooks, journals and discussions. Academics and the media are participating in this deception either through active suppression of the truth or by an inexcusable ignorance. Land health and native diversity suffer seriously from this widespread



Fire and flourishing grasses in harmony. After piñon/juniper thinning with chain saws, and a cool, fall burn on the grazed site, soil organics are intact and encourage a rich growth of native grasses. Native Americans who retain ancient knowledge about fire are critical of modern burning and fire-suppression practices which often damage soil and plant communities and cause erosion and floods.

misunderstanding.

Respected Native American elders remember better times. “The white man sure ruined this country,” said Southern Sierra Miwok (from California) elder Jim Rust. “It’s turned back to wilderness. In the old days there used to be lots more game: deer, quail, gray squirrels and rabbits.”

Natives of Payson, Ariz., an area under Apache tribal stewardship for many hundreds of years, have documented that over 1,000 miles of former trout streams have dried up in the last 70 years, along with many large and small springs within a 50-mile radius of Payson. This is due to brush and tree encroachment on former chaparral and ponderosa pine zone grasslands created and maintained by Apache and earlier tribes’ use of prescribed fire and the resultant impact by elk, bison, deer, and wild sheep.

Native Americans were consciously aware of many sophisticated elements of landscape hydrology, even to the extent of affecting snowpack densities. They managed to main-

tain and increase stable stream flows by such means as creating the grasslands which rapidly build absorbent soil organics, stabilize soils and use vastly less water than the woody species now dominating most of the West. The problems are due to policies corrupted by “pristine” mythology.

Consider these statements about shrinking biodiversity under politically correct management by environmentalist Bill Bryson, author of “A Walk in the Woods”:

“The National Park Service actually has something of a tradition of making things extinct. Bryce Canyon National Park is the most striking example. It was founded in 1923 and in less than half a century...lost seven species of mammal—the white-tailed jackrabbit, prairie dog [grassland species], pronghorn antelope, flying [Abert] squirrel, beaver, red fox, and spotted skunk.... Altogether 42 species of mammals have disappeared from America’s National Parks this [20th] Century.”

All of these animals mentioned as extinct

in Bryce Canyon National Park still live on nearby ranches. Why have the park habitats lost species? The answer lies in how hard, raw, random nature functions.

Contrary to popular belief, rangeland ecosystems do not self-organize into biodiverse, productive, stable communities without appropriate disturbance. Ecosystems can go on collapsing for hundreds of years. Below certain thresholds, recovery is not possible without human intervention. “Survival of the fittest” left to itself, works out in practice to mean landscapes under the pitiless rule of the aggressive bullies among adapted species and abiotic (nonliving) forces such as wildfire, drought and floods. After a few decades, rangelands end up with a very few plant species covering vast areas (each valuable as a part of a broader community), sad remnants of a possible hundred or more. These survivors are the tallest, meanest, and often most toxic plants that can live there. The ground between them is bare. The soil erodes. Soils also degrade in place (lose nutrients and

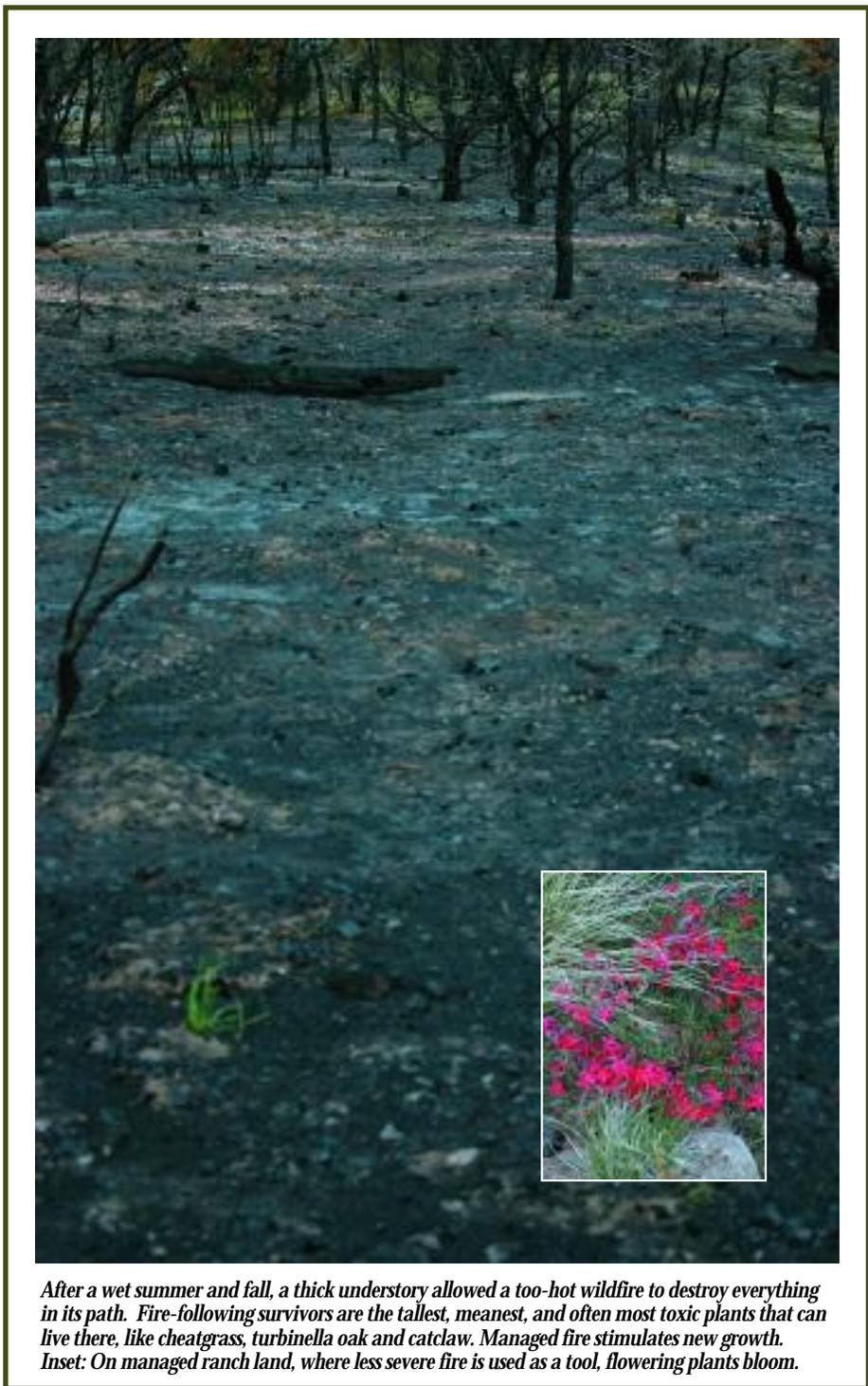
water-holding capacity) as soil organics are used up faster than the roots of woody plants can replace them. Soils are dried by rapid drainage of resulting rills and gullies and the heavier water uses of trees and shrubs. Springs and streams dry up. Often, insects like ants make up the bulk of animal biomass. All these factors would be obvious to any organic gardening expert.

Sagebrush, piñon and juniper, chaparral species and salt desert shrub species force out the grass and flower understories over time causing serious degradation. So do many other conifers and woody plants.

Biodiverse communities of aspen trees with nontoxic, nourishing leaves and bark, nurturing nontoxic grasses and flowers have declined by 60 to 90 percent since European settlement, according to research quoted by Charles Kay in "Is Aspen Doomed?" from the *Journal of Forestry*, May 1997. Aspens have been replaced by conifers which have foliage containing high toxin levels. The former large aspen populations were a result of management by Native Americans who used a tamed, gentled and controlled version of fire to control the conifers that use bullying tactics like overshading, competition for water and nutrients, and exuding root and leaf toxins to kill other plants or prevent their germination.

The loss of these vast human-created aspen areas is a huge blow to wildlife and watershed values. Conifers do produce small seasonal nuts and serve wildlife as cover and nesting habitat, but very few animal species can eat much of the foliage. Dense conifer forests have barren understories. Also, deciduous aspens use far less water because most transpiration stops when the leaves fall.

Native Americans created very large areas of pine savannah in places such as Arizona's Mogollon Rim country. Ponderosa pines and other conifers now number in the hundreds and thousands per acre where once 25 trees per acre stood. These very productive, biodiverse, high-altitude grasslands were a paradise for many species and produced deep, rich, water-absorbent soils. These human-created pine savannah conditions were found from California, Nevada, Arizona and New Mexico to Idaho, Montana and the Pacific Northwest in ponderosa forests. They were the result of low-severity, prescribed-fire frequencies as often as three years between fires, according to Dr. Wallace Covington's studies at Northern Arizona University. Native Americans who still retain ancient knowledge about fire use are very critical of modern prescribed-fire practices which often damage soils and plant



After a wet summer and fall, a thick understory allowed a too-hot wildfire to destroy everything in its path. Fire-following survivors are the tallest, meanest, and often most toxic plants that can live there, like cheatgrass, turbinella oak and catclaw. Managed fire stimulates new growth. Inset: On managed ranch land, where less severe fire is used as a tool, flowering plants bloom.

communities and cause erosion and floods.

"My great aunt and mother talked about how the land was burned," said Nellie Williams, a North Creek Mono tribal elder. "If there was brush they'd burn the ponderosa pine and sugar pine areas. I remember there wasn't the tall brush there is now. It's hopeless now the [government] let it go so long. So when it does burn it goes and kills the big trees. When they'd [Native Americans] burn, it wouldn't hurt the trees." Tree numbers were kept low by burning seedlings and saplings.

"They would burn in the fall after rains...but it wouldn't burn way down through the duff like it does with the controlled burning today."

Researchers now realize that most "dry" (without saturated soils) mountain meadows which recreationists so enjoy were created and maintained or enlarged by Native Americans in late prehistory or before. Native Americans created large biodiverse forb and grasslands in the West both in mountain and valley locations for roots and greens, seed har-



Native Americans thinned trees by building fires at their bases. Thinning increased grassland, improved watershed, and promoted greater nut production from remaining trees. The explosive growth of grass (above) is the result of tree thinning and active soils maintained by livestock and subsequent burning.

vest, to attract game, and for shelter; basketry and cordage materials which they required in tremendous amounts. A 40-foot deer net made by the Sierra Miwok would require 7,000 feet of string or 35,000 plant stalks.

Managed lands were more productive by orders of magnitude. It took an average 10 to 20 times as many unmanaged plants to serve a cultural need as it did managed ones.

In the prehistoric and late-historic West, researchers are certain that very large areas were burned regularly for fire protection and wildlife management. Grazing and the required management practices these days do much of what Native Americans accomplished with prescribed fire, and connect ranchers' land stewardship with their predecessors. Also, fire is almost always a "fire and animal impact treatment." Wild grazers are strongly attracted to ashes and regrowth after fire. Their hoofprints, dung, urine, bacterial and fungal inoculations are important to recovery after fires.

To modify plant growth and for other productive purposes, broad additional lands were burned, irrigated, pruned, selectively harvested, sowed (often with native seeds), tilled, weeded, or transplanted with plants and cuttings from other areas. Where they wanted wildlife they often had it in abundance.

Early trapper Osborne Russell, in "Journal of a Trapper," reported large herds of bighorn sheep in Idaho, Utah and Montana; bison from horizon to horizon in Wyoming, Montana and elsewhere; elk, deer and bighorns in Utah; and a herd of mule deer three miles long in the Black Hills in the 1840s.

Ethnologists Anderson and Moratto concisely state for Sierra Nevada lands what was true for much of the West: "Until recently, vegetation types in the Sierra Nevada were viewed as 'natural' and their productivity maintained through natural disturbances in the complete absence of human influence. It is now recognized that

many ecosystems...evolved through significant human intervention. The ability of Native Americans to meet their economic needs was sustained not only through hunting, fishing and gathering," it was also maintained through the activities listed above. "Native American relationships to land were highly interactive. Areas were manipulated annually, biannually, triennially or quadrennially to augment wild plant populations and create shifting mosaics of different vegetation types."

Critical information is condensed in the above mention of how "ecosystem productivity is maintained through...disturbance." Almost all ecosystems are disturbance-dependant. Without moderate disturbance they grow old and collapse, unable to come back from fire, etc., and lose potential. On rangelands few species, plant or animal, survive after just a few decades of confused "environmentalists" getting their way. Raw, random nature moves from one catastrophe to the

next. Prehistoric humans didn't like that. They softened nature. They made mistakes, but their results were often far superior to those from modern notions in terms of biodiversity, productivity and health.

The message of "humanized landscapes" is best understood in the original sense of the word "human" which was similar to present day "humane." Human was something you called someone to honor his or her kindness and intelligence. Humanized landscapes had rules, courtesy and land ownership. Tribespeople saw themselves as stewards and guardians. Their land ethic required respect for nature and the right of all life forms to survive. So they tamed fire, knocked back the aggressive plants and animals and gave the cooperative, edible and useful ones a big edge. Where there were few Indians, white explorers starved.

Restoration biologists have had to adopt native practices from the Sonoran desert to the Great Lakes. Scientists now realize that many wild plants and communities require human-caused disturbance to persist.

Ancient Native Americans of the West are best understood by modern people as country folks. They were sophisticated in their way of life and loved their land and animals. Their world view resembles that of ranchers and farmers far more than that of advocates for ridding nature of human influences.

Under no circumstances would they accept the radical "get the human influences out" viewpoint, because they wouldn't want to starve, burn to death, or see their land destroyed. They would refuse to give up a life surrounded by freedom and beauty.

Their core philosophies centered on harmony and balance and they saw themselves as agents and guardians of that balance. Farmers and ranchers, many of whom are Native Americans, are the inheritors of the ancient management legacy. The natural world actually requires careful nurturing, not self-righteous neglect. As one researcher put it, there were no "spontaneous Edens" on earth. The New World paradises were created by the sweat of millions of Native



This fence separates land rested for 50 years from land that's been grazed for 130 years. In the foreground, the rested land shows too clearly why people who survived on the bounty of the land didn't like "pristine" land. Behind the fence, grazing and good management have created an oasis of abundance in a land with little rain.

Americans caring for their land. Nowadays, ranchers who have received this responsibility must be great stewards.

A growth industry of "preservation" fundraisers with a selfish, narrow, monetary interest is pushing the pristine myth for profit. If they don't know they're lying, they ought to. Congress and the American people have charged land management agencies, including the National Park Service and U.S. Fish & Wildlife Service, with a duty to preserve nature. The pristine myth cannot continue as the theoretical basis of any government policy. The human-free, pre-Columbian condition never existed. Trying to re-create this fictional, imaginary state is not some sort of cheerful, happy little fantasy. It grossly distorts the public perceptions of natural functioning and by its effect on funding choices, perverts the legal and scientific record, and public and private policy.

By replacing the truth about the endless labor which created the bounty of pre-contact America, it promotes demeaning carica-

tures of early Native Americans as lazy, violent layabouts who spent their time hunting and fishing and scalping people. It destroys recognition of Native Americans' true, deeply deserved heritage as intelligent, hardworking, often superbly adapted agriculturalists, proto-agriculturalists, proto-pastoralists—a lifestyle requiring tremendous skill and work ethic—and land stewards.

People who love nature must soon enter into an honest exchange of ideas in good faith. Millions of Americans still trust environmental groups to save nature. If environmentalists relationship to rangeland issues is going to be anything more than a vast cynical confidence scam, they've got to give up the pristine myth, no matter how much money it brings in, and accept actual scientific reality.

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