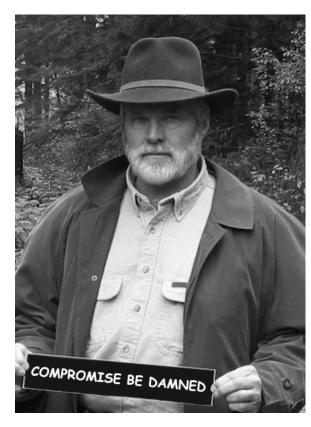


Defending Nature, Saving Life since 1988

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The Second American Revolution

We are engaged in a decisive war, though it is not the war which rages in the Middle East. And there is a force that cannot abide our appetite for resources, but it is not Islamic. There is also a very real possibility that many of us will suffer, but it will not be the result of bombs or bullets.

Our suffering will be a consequence of our inaction. The force which can no longer tolerate our appetites is nature. And the war which must of necessity engage us, is against those who — through ignorance, or greed, or love of power, or adherence to religious mythology — conspire to destroy our Democracy and to stall meaningful progress in the fight against environmental degradation.

Collectively, we have arrived at the 11th hour not because the earth will collapse tomorrow, but because the trajectory we have plotted and the speed with which we are moving toward disaster is seemingly irreversible. Our consumptive lifestyle is like a supertanker plowing ahead at full speed, and those enlightened beings who understand the need to slow it, are trying to do so with kayaks and paddles. To be clear: the earth is not fragile. Far from it. It has withstood ice ages, meteor strikes, volcanic eruptions, tornadoes, hurricanes, earthquakes, an industrial revolution, unfathomable amounts of pollution, and 6.5 billion of us. The earth will survive whether it is verdant and fertile or barren and lifeless; freezing cold or boiling hot; richly diverse or woefully impoverished. Either way, the planet doesn't care; the earth will endure. What is fragile — and may not endure — are the very narrow conditions that support human life.

We know that the systems which support life on this planet are in decline. We also know that the leadership of our nation is bankrupt and obstructionist; captive to an ideology that trumps any factual evidence which contradicts it.

In that regard, little has changed. With few shining exceptions, humanity has continuously fought against the corruption and ideological intransigence of its leaders. It is always the few who start the wars, and their surrogates who loot the commons. It takes but a handful to corrupt our electoral system, undermine the rule of law, and debase the Democratic process.



Likewise, we know that nature cannot be dominated. It simply reacts and evolves, sometimes in unpleasant directions. It can, however, be destroyed — at least in the form that makes the planet useful and tolerable to human beings. How rare is a living water planet, and how unenlightened is our continued destruction of it? Our environmental policy is driven by wilful ignorance and its servant, pseudoscience, used to intentionally cloud the public's ability to understand the truth. Our international and economic policies are increasingly reliant on exploitation, enforced through violence, and requiring massive deception.

We are being led into another Dark Age; hostile to reason, disdainful of science, and contemptuous of the rule of law. It is a world where survival is only assured to those who, by force or fraud, take what they want — a world of barbarians adjusted for inflation.

But that is not the world the rest of us envision. And if we are to save what we cherish — our precious Democracy, the Bill of Rights, justice and opportunity for all peoples, and a healthy and stable planet which can support a diversity of life — we must be the engine of our own enlightenment and the source of our own courage. We need "thoughtful and committed citizens" at every level of society determined to change the policies and practices that are driving us toward disaster.

"It is not necessary to change," said W. Edwards Deming, "survival is not mandatory." It is, however, a collective choice made one person at a time. Join the fight. Get active: speak, write, protest, educate, run for office, fund organizations and candidates you believe in, align your lifestyle with your values, be the change you want to see in the world. Every day, every decision is important now. Demand greatness from yourself. Inspire greatness in others. Be on the front lines of the Second American Revolution.

The Democracy needs you. The Earth needs you.

Blessings,

Tim



Forest Voice

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All those who feel it's OK to cut deals that leave us with less native forests, soil, air, and clean water.

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But the opposite is true as well. "Never doubt," Margaret Mead advised, "that a small group of thoughtful and committed citizens can change the world. Indeed, it's the only thing that ever has."

Up until now, we have had the luxury of time to overcome injustice, overthrow oppression, and to elevate reason and science above superstition and fear. But our best scientific minds are telling us that we are running out of time. We no longer have the luxury of commissioning more studies, engaging in more debates, investing more effort to change those who are determined to dominate the world while stripping it of its resources. If they could be touched by reason or compassion their behavior would already reflect it.

But domination is a fool's pursuit. We already know that domination, whether of people or nations, is doomed to fail because the human spirit is indomitable and any attempt to subjugate it generates potent antibodies. But although history is littered with failed subjugations, we cannot afford to live another decade, much less a century under ignorant and rapacious leadership.



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The Native Forest Council is a nonprofit, tax-deductible organization founded by business and professional people alarmed by the wanton destruction of our national forests. We believe a sound economy and a sound environment must not be incompatible and that current public-land management practices are probably catastrophic to both.

The mission of the Native Forest Council is to protect and preserve every acre of publicly owned land in the United States.

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News and Views

Climate Change Models Predicted Southern California Fires

The wildfires that have been sweeping Southern California are consistent with what climate change models have been predicting for years, experts say, and they may be just a prelude to many more such events in the future.

"This is exactly what we've been projecting to happen, both in short-term fire forecasts for this year and the longer-term patterns that can be linked to global climate change," said Ronald Neilson, a professor at Oregon State University and bioclimatologist with the U.S. Forest Service. "In the future, catastrophic fires such as those going on now in California may simply be a normal part of the landscape."

Ground Broken on the First U.S. Celluosic Ethanol (Trees to Fuel) Plant in Treutlen County, Georgia

Colorado-based Range Fuels plans to complete construction of the plant's first phase by the end of 2008 and to start producing 20,000,000 gallons of tree-based ethanol a year in 2009.

Forest Service Doesn't Have Enough Money to Draw Up Timber Sales

Bush adminstration plans to boost logging in Northwest national forests have collided with low timber prices blamed on the housing slump. The U.S. Forest Service is running short of money to draw up new timber sales.

Reduced home construction, which consumes about 40 percent of Northwest lumber, depressed demand and prices.

70% of Forest Stewardship Council Logging is in Native Forests

The Forest Stewardship Council may strengthen its rules after a member was accused of destroying a vast swath of tropical forest on the Indonesian island of Sumatra. Environmentalists have accused Singapose-based timber firm Asia Pulp & Paper of logging an area the size of Delaware in a part of Sumatra that provides critical habitat for endangered orangutans, tigers and elephants.

Nature Conservancy Buys Wild Adirondack Forest So They Can Log It

The last remaining large privately owned parcel in New York State's Adirondack Park - considered an "ecological marvel" containing 144 miles of river, 70 lakes and ponds, and more than 80 mountains — has been purchased by the Nature Conservancy for \$110 as part of a deal to "continue logging" to supply wood to the Finch Paper mill in Glens Falls, N.Y., for the next 20 years."

Nature Hates Fish Farms

Northern Ireland's only salmon farm was completely wiped out by a freak jellyfish attack. More than 100,000 fish worth more than one million pounds (2.1 million dollars) were killed in the invasion.

"It's a disaster," said John Russell, managing director of Northern Salmon Co. Ltd. "The sea was red with these jellyfish, and there was nothing we could do about it, absolutely nothing. The vastness was unbelievable."

The seven-hour attack saw the jellyfish covering a sea area of up to 10 square miles (26 square kilometres) and 35 feet (11 metres) deep.

Not Much Left of Robin Hood's Sherwood Forest

Robin Hood might have a hard time hiding out in the Sherwood Forest of today. The forest once covered about 100,000 acres, a big chunk of present-day Nottinghamshire County. Today its core is about 450 acres, with patches spread out through the rest of the county.

The forest is beloved for its connection to Robin Hood, the legendary 13th century bandit who hid there from his nemesis, the Sheriff of Nottingham, in between stealing from the rich and giving to the poor.

Clearcutting the Climate

Native Forest Council, Cascadia's Ecosystem Advocates and GreenwashEugene.com present



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Burning fossil fuels — petroleum, coal and natural gas — is not the only cause of global warming. Clearcutting forests also disrupts the climate. Join expert scientists and environmental leaders for a groundbreaking one day conference to bring together citizens concerned about climate change and about forest protection.

Presentations from this conference will be posted for local, bioregional and global distribution. Background information on these connections will continue to be added to increase public awareness of the need to protect native forests and stop clearcutting to protect the climate.

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Swiss Army Knives

How Deforestation Changes the Climate

by Lance Olsen

Poetically lovely though a tree may be, it's also a multi-purpose tool including two kinds of umbrella, a mighty pump, and a storage closet.

Getting rid of lots of trees can be enough to redesign not only the scenery of a state, bioregion, or even a whole nation, but the loss of trees can also redesign regional climate, weather and the lives of children and adults for many decades to come. The basics are simple enough for kids to understand, and fun to teach them.

Everyone knows that we can use a tree as an umbrella when it rains. We've known it long enough and well enough that we've also learned how risky it can be to take shelter under a tree during a lightning storm, because lightning can target trees, including the ones under which people have run for shelter.

Aside from the risk of lightning, though, ducking the rain by running under a tree is sound advice when we are caught in rain that comes without lightning, because trees do act as umbrellas.

As it turns out, some species are better umbrellas than others — Russian scientists have reported that that a fir tree, for example, can catch about half the rain that falls on it, and any rain caught in the fir's many needles doesn't fall on the person standing under the limbs. That's all well and good for people caught outside in rain, but a major part of this living umbrella's story starts when the rain stops falling.

A forested region is a massive reservoir of water, and it's one that leaks away its captured booty slowly enough to feed mountain springs and streams

After a rain moves on past us, the water caught in a tree drips slowly off its leaves or needles. The net effect is the same as if the rain itself kept falling. To demonstrate the point, stand under a tree loaded with water, then shake the tree. What do you get? Drenched.

The lesson learned here is that a tree in the woods is a self-watering entity, because it captures water that might otherwise be free to rush away in a quick return to the oceans. Multiply this over an entire forest, and the result can amount to many millions of gallons of water kept in the forest by the forest's trees.



A tree becomes a second kind of umbrella after the rainclouds pass, the captured raindrops have stopped dripping, and the sun comes out from behind the clouds. After a tree's leaves and needles act as a rain umbrella, or water-catcher, a tree then does duty as a sun umbrella, or water-keeper. The keyword here is shade, because the cooler temperatures of shaded places stop the moisture under trees from evaporating as rapidly as it would in direct sunlight. We see the same thing with snow, because the snow that falls into the shade of a forest melts and runs away a lot more slowly than the snow lying in a sunny clearing or clearcut. Give a kid a trowel, have her start digging, and let her see for herself that soils under trees will generally be more moist than the soils of nearby clearcut slopes.

Whether we see a tree as a rain umbrella or a sun umbrella, its effect is magnified many times over when we ponder the practical impact of an entire forest. A forested region is a massive reservoir of water, and it's one that leaks away its captured booty slowly enough to feed mountain springs and streams all through a hot Montana summer. Forested regions are so very good at hanging onto water that scientists have lately been thinking that deforestation around the globe accounts for a "significant" portion of the planet's rising sea levels, because falling rain can rush back to the sea much more quickly when there's less forest left to catch it, and delay its escape.

Because a forested region lets water go slowly, it can feed water to everything and everyone (trout and beaver, fisherman and farmer) downstream, and for months on end. But there's selfishness here, too: the water a forest captures also satisfies the thirst of the trees themselves.

At this stage of the game, a tree shows itself as a pump. It starts when the roots of trees grab the water saved by its needles and its shade, and pull that water into the body of the trees just as effectively as a kid might sip a nice cold glass of iced tea. The water goes up the tree's trunk, into the limbs, progressing into its leaves and needles, and through little openings called stomata, where water vapor is expelled back to the atmosphere from which it came. Your sweat on a hot day probably illustrates the basic point about as well as any other real-world analogy.

By pumping underground water back to the atmosphere, each tree irrigates our skies. Multiply this thousands, hundreds of thousands, or even millions of times over, and a whole forest ends up pushing a pretty serious river of water back to the atmosphere. We see some of this airborne river's fallout as morning dew, but it also supplies atmospheric moisture for subsequent rains; a lot of this moisture goes up to recharge rainclouds that will be carried away by winds that take them to nearby or distant areas before their load of rain falls once again.



Photo: www.bnr.bg

deforestation has potential to loose more carbon dioxide into the atmosphere than we liberate in our burning of fossil fuels.

Science has been sorting out the facts of the matter ever since, and, while the estimates have been refined, the gist of the tale holds true.

After a tree is cut, it begins to decompose. Then, in the process of rot, it lets go of its carbon in the form of carbon dioxide, the same gas that we get on burning fossil fuels. Now, cutting one tree is of course no big deal, but multiply this simple loss over western Montana, for example, or the entire Pacific Northwest, and we see lots of carbon gone from its storage closets to the skies, where it now warms the planet. The basic lesson is that drought and climate change can begin very close to home.

deforestation has potential to loose more carbon dioxide into the atmosphere than we liberate in our burning of fossil fuels

One of ecology's standard maxims is that "You can't do just one thing." That old dictum sure holds true when it comes to cutting trees. Because a tree is a Swiss army knife, cutting it down takes a paragon of multiple-use out of Nature's tool chest.

Lance Olsen is former president of Great Bear Foundation, Missoula, Montana.

Photo: www.scienceclarified.com

All this is well understood enough that, for many years now, scientists have regarded intact forests as rainmakers.

So far, so good, but no self-respecting Swiss army knife would settle for being nothing more than a dual-purpose umbrella and a powerful pump; a tree is also a storage closet. Even here, it does at least double duty.

From time to time, science has reported that trees store the pollutants they get from air and water, but lately the big story is their impressive storage of carbon. This is where the story of trees and forest really heats up.

Over the past 20 years, scientists have turned increasing attention to the vast amounts of carbon that is stored in trees. For any tree that had been storing carbon for, say, 700 years, a lot of carbon is set loose when any such tree is toppled by the saw. Knowing this, some scientists have said that "Big Trees give rise to streams. It is a mistake to suppose that the water is the cause of the groves being there.

On the contrary, the groves are the cause of the water being there."

—John Muir

Burning the Planet to Fill Your Fuel Tank

Cellulosic ethanol another chimerical climate "solution" that furthers biological homogenization and ecological collapse

by Glen Barry

Humanity's epitaph may well read "Much Potential, but Cut and Burnt Themselves to Death." Nearly every environmental crisis can be traced to burning hydrocarbons for energy, and cutting and clearing vegetation for a variety of reasons. Sadly, even as climate change awareness has grown, an understanding of root causes of environmental crises such as over-consumption remains dreadfully lacking. So now, at this late date in the Earth's decline, there are plans to cut and burn cellulosic ethanol biofuel produced from biomass including forest and agricultural "waste."

Vain attempts to fuel gluttonous, over-populated humanity — that is well past the Earth's carrying capacity already - from biomass may well be the final step in the destruction of Gaia's biosphere and our human habitat.

Everyone is green since the Goracle has spoken. But the fact that half-baked half-measures to try to maintain gluttonous western lifestyles remain the focus means really no one (or very few) truly approaches individual ecological sustainability. Our techno-capitalist ideological faith assures us that climate change, forest loss, water scarcity and ocean decline all have technological fixes. We see capitalism's "more is good" ecocidal policy in chimerical promises of untested "clean coal;" the myth that "healthy forests" requires industrial management, and false claims that ancient forests should and can be "certifiably sustainably" logged.

Ethanol produced from cellulose ultimately represents a mining of soil nutrients and of the Earth's productive capacity

Pie-in-the-sky climate techno-fixes divert attention from reducing individual and societal emissions — the only way to save the climate, the Earth and thus ourselves. Appropriate technologies have a role, but their primacy in the discussion diverts attention from the immediate need to reduce greenhouse gas emissions now, yesterday, 10 years ago. Fast, really fast. As climate change becomes a huge fucking business, very little attention is paid to whether a particular product, method or way of addressing the problem will truly be effective. Do something, anything (that does not require real sacrifice), and worry later whether it was the right thing or ultimately caused more problems than it solved.

Burning More Biomass NOT the Answer

and grass. Those that propose producing cellulosic ethanol from these materials state there is a large amount of wasted biomass from agricultural and forestry sources that is currently being discarded and can be drawn upon to fuel our automobile culture in particular. We are about to embark upon fueling our society from woody "waste" that may or may not exist.

Cellulosic ethanol is all the rage these days as a business opportunity to address climate change and surging energy demand. President Bush in his 2006 State of the Union address proposed expanding the use of cellulosic ethanol by some 20 billion gallons per year by 2017. Since cellulose cannot be digested by humans, at least production of cellulose does not compete with the production of food. Biofuels from food sources such as corn, sugar, palm oil and other crops were all the rage just a couple years ago and growth continues apace, but significant problems are emerging and it is unlikely food biofuels have a sustainable and equitable future, are green, or will meaningfully address climate change.

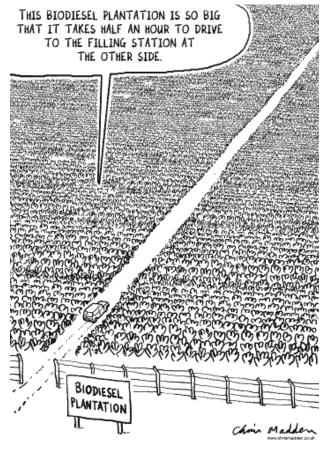
It is illustrative to further review these problems with food biofuels which were heavily sold as green and sustainable. Yet now we find food prices are soaring globally while actual biofuel production has limited if any benefit for climate change, sustainability, equity or justice. Paramilitary groups are taking land in Colombia for biofuels, Indonesia's rainforests are being cleared for Europe's fuel releasing more carbon than saved by oil palm biofuel, the price of food around the world such as corn in Mexico is skyrocketing. Who was the genius that thought of burning food for energy? Must not have been one of the billions that are poor, hungry or landless.

Cellulose Biofuels Will Destroy Forests and Land Productivity

First let's smash the fallacious myth that cellulose as a raw material is plentiful, readily available with little negative residual impact. Energy from nonfood organic biomass is only going to increase pressure on land and forests. It is the next step in the biological simplification and destruction of the Earth.

As with other capitalist environmental failings; the push for cellulosic ethanol is oblivious to limits to growth including finite amounts of land, and solar energy to power terrestrial biomass growth. Already humanity uses the majority of the Planet's arable land and net primary production. Increased demand for cellulose will certainly mean fewer natural forests, reduced land productivity, and increased land conflict.

Cellulose based biofuels will lead to more illadvised forest thinning projects to fight fires while using woody cuttings for fuel, and to genetically modified plantations of fast-growing cellulose rich trees. Most agricultural waste is ultimately returned to the land to fertilize and build soil structure, or fed to livestock; while much forest waste is in fact doom the Earth, human habitat and all of Gaia's nutrients for the next generation of forests. There creatures. Who is going to rise up and fight off will be even more pressure upon ancient primary forests to be converted to agriculture and fiber plantations.



society while maintaining ecosystem services and species, and land productivity. Cellulose biofuels will kill.

Human Society's Downsizing: Starts with Less Cutting and Burning

Global environmental sustainability depends critically upon reducing the extent and scale of human impact upon natural ecosystems. All remaining primary vegetation must be protected, and large scale restoration of ecological systems where they historically occurred commenced. Humanity's overall population; as well as per capita consumption, energy use and greenhouse gas emissions must be dramatically downsized immediately. Any solutions that propose more biomass cutting and perpetuates burning for energy production exacerbates rather than solves the Earth's ecological crises.

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Humanity simply can not maintain excessive energy dependent lifestyles through yet another ill-considered and environmentally damaging energy source - cellulosic ethanol biofuels - that further draw upon the biosphere and primary production of biomass. It will not work and will the flim-flam charlatans — con artists selling us biofuels, geoengineering, carbon offsets and more consumption and growth as the keys to a climate change solution?

Using woody cellulose rich biomass for energy to power industrial societies that have already passed their carrying capacities will spell the death knell for forests, humans and all of life. Cellulosic ethanol fuel is produced from cellulose found naturally in cell walls of plants such as wood, straw



Understory removal' on southern Oregon BLM lands Photo: www.wildernessdefenders.net

Ethanol produced from cellulose ultimately represents a mining of soil nutrients and of the Earth's productive capacity. More pressure upon the land to produce ever more agricultural and plantation products will come at the cost of further deterioration of the Earth's terrestrial ecosystems, as natural ecosystems that are already failing are asked to give yet more. We can expect a whole range of follow-on problems including genetic pollution, water diminishment, and toxic chemicals associated with industrial plantations and agriculture.

As if enough forests have not been lost from Europe's bastard child, the industrial revolution, which commoditized everything, including forest ecosystems; and globally from waves of ecological imperialism as Europeans brought their capitalism, religion, cocks and forest destruction to the Americas and the world. The Earth's forests and land do not have the capacity to power human

The only solution to global heating, and the myriad of other global ecological emergencies, is to immediately begin deintensifying human impacts upon the biosphere and her natural ecosystem patterns and processes. In terms of climate, this requires targets for mandatory national emission cuts while meeting our energy, food and other needs for a reduced human population from permaculture systems and renewable, nonpolluting and non-destructive energy sources that are truly ecologically sustainable. There are no easy solutions to save the Earth; they all require sacrifice, as well as changed lifestyles and societies.

Dr. Glen Barry is the President and Founder of Ecological Internet: www.ecologicalinternet.org. He is a conservation biologist and political ecologist, a writer of essays and blogs, and a computer specialist and technology researcher.

We Ought Not Grow Cows In Dry West

by George Wuerthner

The West is a powerful place. Soaring mountains. Aridity has its cost. Low precipitation and Vast plains. Boisterous rivers. Huge spaces. Aridity has its cost. Low precipitation and frequent drought accounts for the West's limited

But one attribute defines the West more than any other: aridity.

Aridity imposes limitations and costs on human enterprises. Nowhere are the limitations and costs of aridity less apparent, yet reaping more degradation and destruction than the failed attempt to create a viable livestock industry in this dry region.

No other activity affects more of the West in more ways than livestock production

Livestock production — which includes not only the grazing of plants, but everything it takes to raise a cow in the arid West including the dewatering of rivers for irrigation, the killing of predators to make the land safe for cattle, the fragmentation of landscapes with hay fields and other crops grown to feed livestock, combined with the pulverization of riparian areas under cattle hooves, and the displacement of native wildlife — is by far the worst environmental catastrophe to befall the West.

Though the resulting biological impoverishment is less obvious to the average person than say the impacts of logging or a mine, its ecological wounds are greater. No other activity affects more of the West in more ways than livestock production.

If this sounds a bit like hyperbole, consider the following. Livestock production occurs on more than 850 million acres of public and private land in the West — one third of the U.S. land area! More importantly this is by far the driest, most fragile third of the country. Given the vast amount of land affected, and the fact that most livestock production is anything but benign, the biological impoverishment caused by the livestock industry is potentially staggering. Although no full accounting of the true cost of livestock production has ever been undertaken, we do know that livestock production is responsible for some superlatives.

It is the single greatest cause of soil erosion in the West. It is the number one source of nonpoint water pollution. It is the major consumer of scarce western water, and the major factor in the extirpation of many native species from the wolf to the grizzly bear. It is the reason that the West's wide open spaces are fragmented, fenced, and domesticated. Not surprisingly given all the above, it is the major factor in the listing of more western endangered species than any other cause.

Most of these problems are ultimately traced to aridity. Since there is little we as humans can do to effectively change the natural limitations of western geography, any proposals to make ranching somehow less destructive and more benign soon run into these non-negotiable conditions.

Aridity has its cost. Low precipitation and frequent drought accounts for the West's limited productivity. By comparison, in many parts of the moist and humid East, one can raise a cow year round on a single acre of ground. In many parts of the arid and rugged West, 100-200 acres or more are necessary to sustain a cow. Such vast expanses require more investment in fencing, water developments; more gas in the pick-up truck and just time spent gathering stock. Not surprisingly Louisiana produces more beef than Wyoming — the Cowboy State. And despite the fame of Georgia peanuts and fruit, the peach state produces more cattle than Nevada.

The wide open spaces that the West is famous for also means that livestock are far more vulnerable to predators. Most ranchers simply put their animals out on the range and allow them to fend for themselves for weeks or months at a time, giving predators plenty of opportunities for a free lunch. But in the moist East where most livestock are grazed on the back forty, one can readily monitor livestock daily and even put them in a barn or corral each night for protection. In the West, the nearly universal response has been to extirpate the predators.

If you want to grow livestock in the West you can only do it by subsidizing the livestock operation with environmental degradation

And while in the moist East the grass 200 yards from a stream is just as green and lush as along the waterway, in the West, nearly all green lush vegetation is concentrated in the thin green line of riparian vegetation. Here cows congregate and trample streambanks, pollute waterways and destroy the riparian habitat that is essential to the survival of 75-80 percent of the West's wildlife.

In the moist East where it rains, you can grow hay or other water-loving crops for animal feed without irrigation. In the West, we destroy rivers by damming and draining them to grow hay. And with the destruction of rivers, we place into jeopardy fish as diverse as the Bonneville cutthroat trout to the Sacramento smelt. And so it goes. If you want to grow livestock in the West, you can only do it by subsidizing the livestock operation with environmental degradation. And not surprisingly, as the many federally funded irrigation projects, predator control, and other state and federally funded projects demonstrate, a great deal of taxpayer money as well.

I am not trying to make a case for raising beef in the East. Even in the East livestock production is a very ecologically costly endeavor. Rather I am suggesting that the West is a totally inappropriate

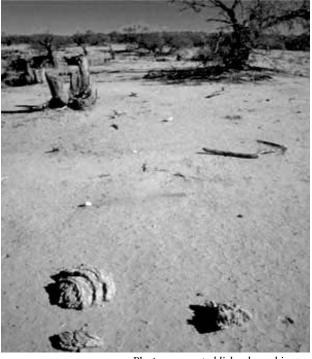


Photo: www.publiclandsranching.org

place to raise cows. That is not to say there are not better or worse ways to ranch, and some ranchers are more conscientious than others, but all must ultimately face the reality of geography. And aridity results in livestock-induced ecological costs and places economic constrains on what ranchers can afford to spend to mitigate the problems created by geography and the use of a water-loving, slowmoving, dim-witted domestic animal for stock. The western livestock industry is built upon a poor foundation—the domestic cow—and like a house built upon a steep eroding hillside, you can not ultimately fix the problem by continuously prompting up the industry.

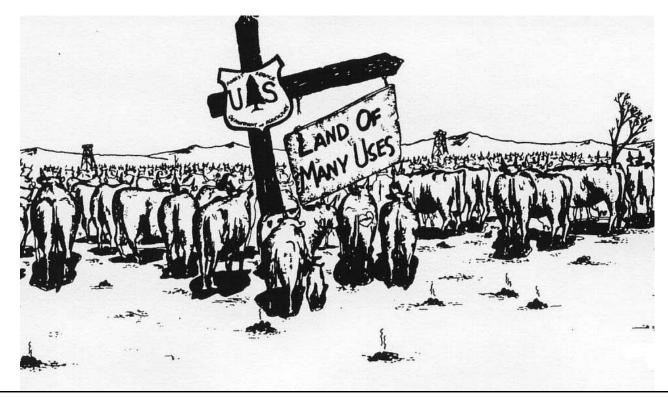
What will a West freed from the yoke of cows be like?

For starters many species currently at low numbers or restricted distribution will see their populations grow to fill the great spaces of the West. Wolves may again howl beyond the city limits of Boise and Salt Lake. Salmon once again may jam the spawning beds of the Salmon, John Day and Powder rivers. Bison could roam the prairie just beyond the city limits of Casper, Denver and Billings. Rivers will run clear and full.

the West is a totally inappropriate place to raise cows

This rejuvenated West won't be some throw back to the times of Lewis and Clark. We have crossed too many ecological thresholds, and we have too many people for that to be a reality any time soon. But this new livestock-free West will nevertheless almost certainly will be more ecologically productive, more beautiful, and wilder than at present. And that is plenty good enough for me.

George Wuerthner is a writer, activist, biologist and



photographer whose pictures can be seen at www.wuerthnerphotography.com

"Oh give me a home... Where the deer and the antelope play. Where seldom is seen the hamburger machine, And the flies are not swarming all day."

-Edward Abbey

Precious Few Societies Have Taken Care Of Their Most Fundamental Resource

Book Review Dirt: The Erosion of Civilizations by David R. Montgomery Review by Eric A. Davidson

Dust in the wind: civilizations collapse when their soil runs out.

If everyday expressions offer clues to what we value, then the common use of "dirt-cheap" to describe anything inexpensive speaks poorly of our appreciation for soil. Like water andair, soil is not efficiently traded and priced in the marketplace, and yet we could not live without it. It doesn't take a rocket scientist to figure out that food security and human wellbeing depend on fertile soil. That expression implies admiration for the intelligence of rocket scientists, and similar praise is due to Earth scientist David Montgomery, whose new book insightfully chronicles the rise of agricultural technology and the concomitant fall of soil depth just about everywhere in the world from prehistoric to modern times. The topic could not be more timely, as recent largescale expansion of maize (corn) production in the United States and sugar cane in Brazil for biofuel signals a new era of competition between the energy and food sectors for the globally finite resource of arable land and the remaining good soil.

Montgomery catalogues a tragically recurrent pattern: starting with the first farmers in the Tigris and Euphrates river basins, across the Mediterranean of the ancient Greeks and Romans, through bronze, iron and industrial ages, repeated in the Americas and in Asia, and up to contemporary practices on industrial mega-farms and smallholder slash-and-burn fields. In each case, agriculture expanded on good land, which fueled population growth, followed by further agricultural expansion onto marginal land, ultimately leading to soil erosion, declines in agricultural productivity, and often societal collapse and emigration.

Perhaps owing to the repetitive nature of this story, the writing is not as captivating as Jared Diamond's "Collapse" (Viking, 2004), which similarly charts the interplay between the prosperity and longevity of civilizations and their husbandry of several kinds of inherited natural capital. Equally provocative, however, Montgomery asserts that the rise and fall of many civilizations, generally lasting from 800 to 2,000 years, roughly corresponds to how long it takes for their soils to erode away. Greece onwards, showing that we have known for a long time how to obtain good crop yields and simultaneously conserve soil. Reasons that such sage advice has seldom been followed include perverse economic incentives and land tenure laws imposed by governments that reward mining the soil for shortterm profits. Montgomery offers a wealth of interesting examples.

The Lincoln Memorial in Washington DC now stands near where colonial ships once sailed in the Potomac River and is built on the sediments washed downstream from former colonial tobacco farms. High prices paid for tobacco in Europe, a plentiful supply of cheap land in the American colonies, and tax revenue for the British government generated from tobacco sales motivated both private and government sectors to seek maximum crop yields rather than promote sound agricultural management. These shocking changes become obvious over many decades

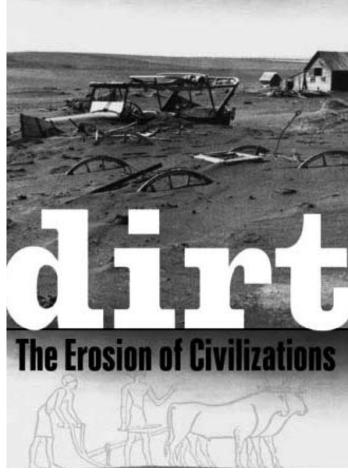
and centuries, but soil often slips away at a rate that a farmer may not perceive during a single lifetime.

We are currently losing soil at least 20 times faster, on average, than it is being replaced through natural processes

Further advances in technology will probably increase crop productivity, and some expansion of agricultural land is still possible, but Montgomery argues that soil has become a scarce resource. More than a history lesson of the legacies of past civilizations, the book raises a critical concern for modern times. We are currently losing soil at least 20 times faster, on average, than it is being replaced through natural processes. To meet the demands for food and, more recently, energy, we need Montgomery's scholarly, historical perspective, as well as the ability to project

current trends of land management to future scenarios.

In the final chapter, the author offers a vision of organic farming for both



David R. Montgomery

room carpet and in sediments of reservoirs and estuaries. The greatest strength of this book is its persistent and forceful demonstration of a lesson that adult societies have yet to embrace: societies prosper and persist best when they figure out ways to keep their soil where it belongs and not treat it as if it were dirt cheap.

"The Nation that destroys its soil destroys itself."

—Franklin Delano Roosevelt





It doesn't take a rocket scientist to figure out that food security and human well-being depend on fertile soil

Not all is gloomy. A precious few examples of good soil management are described. Montgomery also cites philosophers, agronomists and soil scientists from ancient

large and small farms.

When Ι talk to elementary school classes about soil, I start by distinguishing it from dirt. Kids quickly catch on that soil nourishes plants in forests, grassland, farms, and gardens, whereas dirt is soil transported to places where it is unwanted, such as under fingernails, on the living



LOGGING CAUSES Big Timber's Inc

"Deforestation is the increase atmosphere

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"Between 25 and 30 percent of the greenhouse gases released into the atmosphere each year – 1.6 billion tonnes – is caused by deforestation."

- Food and Agriculture Organization of the United Nations

Native Forest

The "carbon store" - vegetation, soil & oceans

Logging & land clearing

Any serious attem



Only 5% Remains. Saving Life is Not Extreme. Zerocut on Public Lands — Native Forest Council

CLIMATE CHANGE *onvenient Truth*

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ASA

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"The loss of natural forests around the world contributes more to global emissions each year than the transport sector."

- Sir Nicholas Stern, Stern Review on the Economics of Climate Change for the British Government

Oil, gas & coal

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e U.S. must involve n our 643 million blic lands.

Native Forest

For more information on the link between logging and climate change, go to *www.forestclimate.org*

Are Big Enviro Groups Holding Back Anti-Warming Movement?

While the U.S. government and some corporations are finally acknowledging global climate change, some critics say partnering with such forces may "tame" the movement's goals and strategies.

by Megan Tady In These Times

The heat is on environmental groups and politicians to churn out proposals for stabilizing the planet's rising temperatures, but some environmentalists say existing plans to cool climate change are timid. Their criticism reveals arift between two approaches: preserving the American way of life at the expense of quicker solutions, or changing the structure of U.S. society to counter an unprecedented threat.

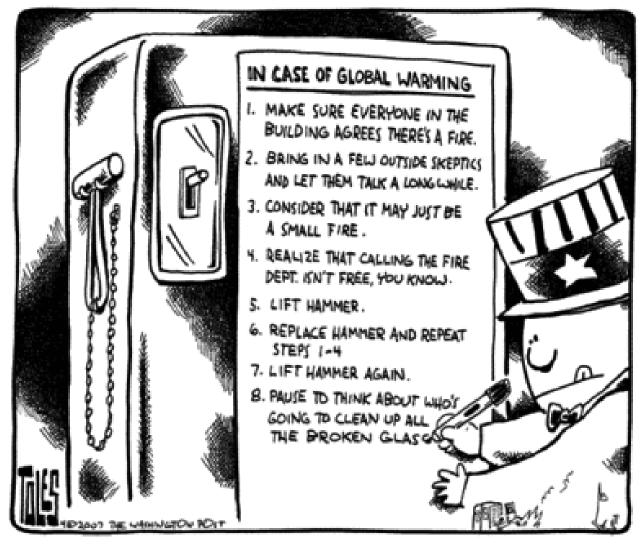
The dominant approach to human-induced global warming revolves around slow but dramatic reductions in greenhouse-gas emissions by mid-century. The mainstream environmental community, along with a handful of politicians and corporations, is calling for various regulations and market-based actions to reduce greenhouse-gas output by 60 to 80 percent over the next 43 years.

"They're really holding the whole movement back by setting their sights so low."

This goal is based on what some scientists have estimated the United States needs to do to help the world limit the rise in global temperatures to less than two degrees Celsius above pre-industrial levels. The goal presupposes that some climate change is inevitable. In 2006, a governmentcommissioned report in the United Kingdom called the "Stern Review" said that the "worst impacts of climate change can be substantially reduced" by cutting greenhouse emissions to meet the twodegree goal.

Even if climate warming is kept to two-degrees or lower, the report said there will still be "serious impacts" on "human life and on the environment." For instance, the report predicted the disappearance of drinking water in the South American Andes and parts of Southern Africa and the Mediterranean, up to 10 million people affected by yearly coastal flooding, and 10 to 40 percent of species on Earth going extinct. "They're really holding the whole movement back by setting their sights so low."

Noting that "2050 is a long time away," David Morris, vice president of the Institute for Local Self-Reliance, said he wants to see action right away. "So



energy system will take time because market forces will take a while to make renewable technology prices competitive.

"It's still possible that we can avoid dangerous climate change and cut emissions in half by midcentury through a process that doesn't require an immediate shutdown of all of our coal-powered plants," said John Coequyt, Greenpeace energy policy analyst. "We can still do this in a phased — and as a result — economically beneficial manner."

"There's no reason we can't get there within the next five to ten years with significant funding."

In January, Greenpeace published what it called a "blueprint for solving global warming." The plan calls for 80 percent of electricity to be produced from renewable energy, 72 percent less carbon dioxide emissions, and for U.S. oil use to be cut in half — all by 2050.

The timeline is based on removing the market barriers to green energy, while making dirty energy more expensive. It does not call for significant public funding of renewable energy or government investments in new energy infrastructure or public transportation.

Tokar dismissed the 2050 timeline, saying the U.S. could cut greenhouse-gas emissions more quickly if

funding and distributing renewable energy, but instead promotes weaker reforms like removing

the U.S. could cut greenhousegas emissions more quickly if pressure groups took a different stance and instead called for immediate government intervention

subsidies for fossil-fuel industries and forcing prices to reflect the actual costs of environmental damage. To reduce market barriers faced by cleanenergy technology, Greenpeace advocates offering producers of sustainable power priority access to the electricity grid and reducing the governmental red tape that inhibits their startup.

"None of [the solutions presented by mainstream groups] address the power structures. None of them address corporations. None of them address a lack of democracy."

"What would be the other option?" asked Coequyt. "Mandate that every house has to have solar panels on it and that coal plants have to shut down?"

According to Tokar, Greenpeace and other groups

what I want to know is, what are [environmental groups and politicians] going to do tomorrow?"

Morris and others who want to see more immediate and deeper action fear such incremental changes are downplaying the urgency of the situation. "They're really holding the whole movement back



by setting their sights so low," said Brian Tokar, Biotechnology Project Director at the Institute for Social Ecology in Vermont.

Market-based solutions

The basic premise behind long-term plans for emissions reduction is that moving away from a fossil-fuel-based pressure groups took a different stance and instead called for immediate government intervention.

"The only thing that can change it is a significant investment in public funds to really jumpstart the industry," Tokar said. "There's no reason we can't get there within the next five to ten years with significant funding."

Coequyt of Greenpeace agreed with Tokar that the United States could reach emissions-reduction goals sooner if not for the perceived need to depend primarily on the market to make renewable energy the best choice for consumers.

"That's definitely the case; we could see faster action," Coequyt said. "It's hard for us to be a lot faster than what we put in our scenario, but if the government made it a true national priority, I don't think there's any doubt that we could go faster."

Despite this admission, Greenpeace is not pushing for the government to get heavily involved in should be calling for the funding of public transportation and subsidies to make housing more energy efficient. "We can do all of these things immediately," he said.

Dissidents also rebuke the mainstream environmental community for not pushing hard for a less-energy-intensive lifestyle in the United States.

Coequyt acknowledged Greenpeace is not yet urging Americans to fundamentally change the way they live to fight climate change. "What we're saying right now is that we have the technology, and we can reduce our energy through efficiency use so much, and we can do it without having to completely change our lifestyle," he said. "But it is certainly possible that in the near future we may have to have a more-urgent call."

But for some environmentalists, making the urgent call for lifestyle changes — from something as tame as driving less to more radical changes like

adopting a vegetarian, localized diet — should go hand in hand with the push for larger, system-wide greenhouse-gas reductions and energy efficiency. They say radically scaling back consumption is needed to ensure global environmental sustainability and equity.

Dissidents also rebuke the mainstream environmental community for not pushing hard for a less-energy-intensive lifestyle in the United States

Mark Hertsgaard, an environmental journalist, said that to avoid "irrevocably cooking" the planet, "we cannot continue this resource-intensive life." Given a rising global population and unmet energy needs of poorer countries, he said: "At the end of the day, we also have to cut back on our appetite. That's just arithmetic."

Morris, of the Institute for Local Self-Reliance, said environmentalists need to start pushing largescale changes into the public discourse. "We need to start asking for the kind of sacrifice that will be required," he said.

Political Disconnect

Another plan published by the United States Climate Action Partnership (US-CAP), a coalition of corporations and environmental groups, calls for legislation to rapidly enact a "mandatory emissionreduction pathway," with an ultimate goal of 60 to 80 percent carbon reductions by 2050.

The partnership includes the Natural Resources Defense Council, Environmental Defense, the Pew Center on Global Climate Change and the World Resources Institute. They are joined by nine corporations — including DuPont, BP America and General Electric.

Vicki Arroyo, who is with the Pew Center, said their proposal is "ambitious."

But, Arroyo said, the plan "can't start today" because passing legislation takes time. "There really is no way in our system to move any faster than what's being recommended here," Arroyo said.

Many of the proposals reflect the need to court the Bush administration and politicians, who have refused to call for tough measures on climate change.

Bill McKibben, an environmentalist organizing national demonstrations against climate change with the new "Step It Up" campaign, likened the United States's stance on global warming to an "ocean liner heading in the other direction entirely." He said, "[Eighty percent reductions by 2050] seems to be at the moment the outer limit of what's politically possible."

radically scaling back consumption is needed to ensure global environmental sustainability and equity

For author and radical environmentalist Derrick Jensen, the obstacles to faster changes presented by the U.S. political system, illustrate the need for more-holistic measures.

"None of [the solutions presented by mainstream groups] address the power structures," Jensen said. "None of them address corporations. None of them address a lack of democracy... the environmental groups are not questioning this larger mentality that's killing the planet."

Megan Tady is a staff journalist with the NewStandard.



"We are playing Russian roulette with features of the planet's atmosphere that will profoundly impact generations to come. How long are we willing to gamble?"

—David Suzuki



NFC Member Profile: Jeanie Mykland

Olympia, Washington's Jeanie Mykland — NFC lifetime member, green gospel-preaching volunteer and *Forest Voice* distributor extraordinaire — grew up"exploring and loving nature." With the creation of Earth Day in 1970, Jeanie began delving deeply into the "interconnections" between forests, clean air, pure water, fertile soils, a livable climate and human existence. Upon returning to the U.S. after three years living abroad in forest-starved Europe, the importance of our nation's 5 percent remaining native forests became even clearer to Jeanie.

Jeanie taught elementary school (K-4) for 30

When asked what led her to become a member and volunteer for NFC above all other organizations, she says simply, "honesty, integrity and passion."

Jeanie is often asked about her "Stumps Lie" bumper Don't sticker on her car, which gives her an opportunity to educate Olympia's citizens about the "interconnectiveness" of forests, air, water, soil and human existence, while slipping them an ever-handy copy of the Forest Voice.



years, with a major focus on the environment. As her school district did not have a "sufficient" environmental program, Jeanie took it upon herself to research and gather curriculum materials to teach a new generation about the crucial importance of our forests, mountains, rivers and streams.

Eventually heeding the call of the wild, Jeanie spent the 1980s in the last frontier, Alaska. On moving back to Washington in the 1990's she noticed "a huge change in the Pacfic Northwest — more people, more clearcuts, less nature, more roads" and countless other disturbing changes in the land. But hope was on the way.

While shopping one day at her local food co-op Jeanie picked up an issue of the *Forest Voice*, which she says was "just what I needed. I was immediately encouraged that someone was at least trying to promote ideas for saving the natural world." Since then, Jeanie's been one of NFC's most valuable members, distributing thousands of *Forest Voice* a year across her eco-conscious town of Olympia.

Jeanie takes her role as forest advocate seriously, "I've learned so much through the NFC and want to help pass the message on so we maybe have a chance to change our focus in this country and the world."

Despite the heartbreaking reality of human-caused planetary destruction, Jeanie is hopeful for the future. She believes there's still a chance for world peace (noting that wars and "imperialism" are major users of the planet's natural wealth) and insists that as a nation we must "stop the unsustainable exploitation and marketing — there's too much waste everywhere."

Ultimately, Jeanie's vision of a sane and healthy future involves "the dismantling of the system of corporate rule and reclaiming public control over air, forests and water — these are essential ecological resources that belong to us all."

Jeanie's deep understanding of the essential role of planetary ecosystems to all life on Earth, her passion and love for the natural world, and her willingness and ability to communicate the need for forest protection to others makes her a vital advocate that we are lucky to have on our team.

Thanks again Jeanie!

The Greatest Dying

by Jerry Coyne and Hopi. E Hoekstra

Two hundred fifty million years ago, a monumental catastrophe devastated life on Earth. We don't know the cause — perhaps glaciers, volcanoes or even the impact of a giant meteorite — but whatever happened drove more than 90 percent of the planet's species to extinction. After the Great Dying, as the end-Permian extinction is called, Earth's biodiversity — its panoply of species — didn't bounce back for more than ten million years.

Aside from the Great Dying, there have been four other mass extinctions, all of which severely pruned life's diversity. Scientists agree that we're now in the midst of a sixth such episode. This new one, however, is different — and, in many ways, much worse. For, unlike earlier extinctions, this one results from the work of a single species, Homo sapiens. We are relentlessly taking over the planet, laying it to waste and eliminating most of our fellow species. Moreover, we're doing it much faster than the mass extinctions that came before. Every year, up to 30,000 species disappear due to human activity alone. At this rate, we could lose half of Earth's species in this century. And, unlike with previous extinctions, there's no hope that biodiversity will ever recover, since the cause of the decimation — us — is here to stay.

Unlike earlier extinctions, this one results from the work of a single species, Homo sapiens

To scientists, this is an unparalleled calamity, far more severe than global warming, which is, after all, only one of many threats to biodiversity. Yet global warming gets far more press. Why? One reason is that, while the increase in temperature is easy to document, the decrease of species is not. Biologists don't know, for example, exactly how many species exist on Earth. Estimates range widely, from three million to more than 50 million, and that doesn't count microbes, critical (albeit invisible) components of ecosystems. We're not certain about the rate of extinction, either; how could we be, since the vast majority of species have yet to be described? We're even less sure how the loss of some species will affect the ecosystems in which they're embedded, since the intricate connection between organisms means that the loss of a single species can ramify unpredictably.

But we do know some things. Tropical rainforests are

disappearing at a rate of two percent per year. Populations of most large fish are down to only 10 percent of what they were in 1950. Many primates and all the great apes — our closest relatives — are nearly gone from the wild.

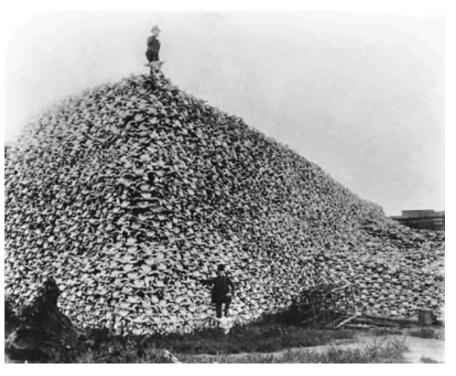
And we know that extinction and global warming act synergistically. Extinction exacerbates global warming. By burning rainforests, we're not only polluting the atmosphere with carbon dioxide (a major greenhouse gas) but destroying the very plants that can remove this gas from the air. Conversely, global warming increases extinction, both directly (killing corals) and indirectly (destroying the habitats of Arctic and Antarctic animals).

As extinction increases, then, so does global warming, which in turn causes more extinction — and so on, into a downward spiral of destruction.

Why, exactly, should we care? Let's start with the most celebrated case: the rainforests. Their loss will worsen global warming — raising temperatures, melting icecaps, and flooding coastal cities. And, as the forest habitat shrinks, so begins the inevitable contact between organisms that have not evolved together, a scenario played out many times, and one that is never good. Dreadful diseases have successfully jumped species boundaries, with humans as prime recipients. We have gotten AIDS from apes, SARS from civets, and Ebola from fruit bats. Additional worldwide plagues from unknown microbes are a very real possibility.

But it isn't just the destruction of the rainforests that should trouble us. Healthy ecosystems the world over provide hidden services like waste disposal, nutrient cycling, soil formation, water purification, and oxygen production. Such services are best rendered by ecosystems that are diverse. Yet, through both intention and accident, humans have introduced exotic species that turn biodiversity into monoculture. Fast-growing zebra mussels, for example, have outcompeted more than 15 species of native mussels in North America's Great Lakes and have damaged harbors and water-treatment plants. Native prairies are becoming dominated by single species of (often genetically homogenous) corn or wheat. Thanks to these developments, soils will erode and become unproductive — which, along with temperature change, will diminish





agricultural yields. Meanwhile, with increased pollution and runoff, as well as reduced forest cover, ecosystems will no longer be able to purify water; and a shortage of clean water spells disaster.

In many ways, oceans are the most vulnerable areas of all. As overfishing eliminates major predators, while polluted and warming waters kill off phytoplankton, the intricate aquatic food web could collapse from both sides. Fish, on which so many humans depend, will be a fond memory. As phytoplankton vanish, so does the ability of the oceans to absorb carbon dioxide and produce oxygen. (Half of the oxygen we breathe is made by phytoplankton, with the rest coming from land plants.) Species extinction is also imperiling coral reefs — a major problem since these reefs have far more than recreational value: They provide tremendous amounts of food for human populations and buffer coastlines against erosion.

As extinction increases, then, so does global warming, which in turn causes more extinction — and so on, into a downward spiral of destruction

In fact, the global value of "hidden" services provided by ecosystems — those services, like waste disposal, that aren't bought and sold in the marketplace — has been estimated to be as much as \$50 trillion per year, roughly equal to the gross domestic product of all countries combined. And that doesn't include tangible goods like fish and timber. Life as we know it would be impossible if ecosystems collapsed. Yet that is where we're heading if species extinction continues at its current pace.

Extinction also has a huge impact on medicine. Who really cares if, say, a worm in the remote swamps of French Guiana goes extinct? Well, those who suffer from cardiovascular disease. The recent discovery of a rare South American leech has led to the isolation of a powerful enzyme that, unlike other anticoagulants, not only prevents blood from clotting but also dissolves existing clots. And it's not just this one species of worm: Its wriggly relatives have evolved other biomedically valuable proteins, including antistatin (a potential anticancer agent), decorsin and ornatin (platelet aggregation inhibitors), and hirudin (another anticoagulant).

Plants, too, are pharmaceutical gold mines. The bark of trees, for example, has given us quinine (the first cure for malaria), taxol (a drug highly effective against ovarian and breast cancer), and aspirin. More than a quarter of the medicines on our pharmacy shelves were originally derived from plants. The sap of the Madagascar periwinkle contains more than 70 useful alkaloids, including vincristine, a powerful anticancer drug that saved the life of one of our friends.

Of the roughly 250,000 plant species on Earth, fewer than five percent have been screened for pharmaceutical properties. Who knows what lifesaving drugs remain to be discovered? Given current extinction rates, it's estimated that we're losing one valuable drug every two years.

The global value of "hidden" services provided by ecosystems — those services, like waste disposal, that aren't bought and sold in the marketplace — has been estimated to be as much as \$50 trillion per year

Our arguments so far have tacitly assumed that species are worth saving only in proportion to their economic value and their effects on our quality of life, an attitude that is strongly ingrained, especially in Americans. That is why conservationists always base their case on an economic calculus. But we biologists know in our hearts that there are deeper and equally compelling reasons to worry about the loss of biodiversity: namely, simple morality and intellectual values that transcend pecuniary interests. What, for example, gives us the right to destroy other creatures? And what could be more thrilling than looking around us, seeing that we are surrounded by our evolutionary cousins, and realizing that we all got here by the same simple process of natural selection? To biologists, and potentially everyone else, apprehending the genetic kinship and common origin of all species is a spiritual experience — not necessarily religious, but spiritual nonetheless, for it stirs the soul.



In the end, we must accept the possibility that we ourselves are not immune to extinction.

But, whether or not one is moved by such concerns, it is certain that our future is bleak if we do nothing to stem this sixth extinction. We are creating a world in which exotic diseases flourish but natural medicinal cures are lost; a world in which carbon waste accumulates while food sources dwindle; a world of sweltering heat, failing crops, and impure water. In the end, we must accept the possibility that we ourselves are not immune to extinction. Or, if we survive, perhaps only a few of us will remain, scratching out a grubby existence on a

devastated planet. Global warming will seem like a secondary problem when humanity finally faces the consequences of what we have done to nature: not just another Great Dying, but perhaps the greatest dying of them all.

Jerry Coyne is a professor in the Department of Ecology and Evolution at the University of Chicago. Hopi E. Hoekstra is John L. Loeb Associate Professor in the Department of Organismic and Evolutionary Biology at Harvard University and curator of mammals at Harvard's Museum of Comparative Zoology.





William Randolph Hearst: Foe of the Forest

Why we cut trees for paper, from www.reefermadness.org

In the early days of our nation, the hemp plant (a.k.a. cannabis) proved a valuable resource for hundreds of years, instrumental in the making of fabric, paper and other necessities. This changed during the Industrial Revolution, which rendered tree-pulp papermaking and synthetic fibers more cost-effective through the rise of assembly line manufacturing methods. A more efficient way of utilizing hemp was a bit slower in coming. It was not until the early 1930s that a new technique for using hemp pulp for papermaking was developed by the Department of Agriculture, in conjunction with the patenting of the hemp decorticator (a machine that revolutionized the harvesting of hemp). These innovations promised to reduce the cost of producing hemp-pulp paper to less than half the cost of tree-pulp paper. Since hemp is an annually renewable source, which requires minimal

chemical treatment to process, the advent of hemp pulp paper would allegedly have been better for the environment than the sulfuric acid woodpulping process. Hemp had many champions, who predicted that its abundance and versatility would soon revitalize the American economy.

William Randolph Hearst, media mogul, billionaire and real-life model for Orson Welles' Citizen Kane, had different ideas. His aggressive efforts to demonize cannabis were so effective, they continue to color popular opinion today. In the early 1930s, Hearst owned a good deal of timber acreage; one might say that he had the monopoly on this market. The threatened advent of mass hemp production proved a considerable threat to his massive paper-mill holdings - he stood to lose many, many millions of dollars to the lowly hemp plant. Hearst cleverly utilized his immense national network of newspapers and magazines to spread wildly inaccurate and sensational stories of the evils of cannabis or "marihuana," a phrase brought into the common

parlance in part due to

frequent mentions in his

The sheer number of

newspapers, tabloids,

magazines and film reels that Hearst controlled

enabled him to quickly

inundate American media

with this propaganda.

Hearst preyed on existing

prejudices by associating

cannabis with Mexican

workers who threatened

to steal American jobs

African-Americans

to

effectively

publications.

and

and

who had long been the subject of white American venom. An ironic side-note: much of this racism had already been perpetrated by the propaganda of Hearst, an unabashed racist. The American people had already developed irrational hatred for these racial groups, and so readily accepted the ridiculous stories of their crazed crimes incited by marihuana use.

> Hearst owned a good deal of timber acreage... the threatened advent of mass hemp production proved a considerable threat to his massive paper-mill holdings



Industrial hemp production

Hearst was not alone in his scheme to destroy hemp production. The new techniques also made hemp a viable option for fabric and plastics, two areas of manufacturing which together with paper seriously threatened DuPont chemicals, which at this time specialized in the chemical manufacturing of synthetic fiber and plastics, and the process of pulping paper. In fact, Hearst and Lammont DuPont had a multi-million dollar deal in the works for joint papermaking. So these two moguls, together with DuPont's banker, Andrew Mellon, bravely joined forces to stave off the bitter onrush of bankruptcy. They combined Hearst's vellow journalism campaign (so called because the paper developed through his and DuPont's methods aged prematurely) and the appointment of Mellon's nephew-in-law, Harry J. Anslinger, to Commissioner of the newly created Federal Bureau of Narcotics, in order to successfully stamp out the threat of hemp production.

Acid Forests

by Leslie Joyner and Jim Northup

Atop our mountains are groves of skeletons. In the northeastern United States, dead fir and spruce trees at high elevations are perhaps the most visible and widely acknowledged consequence of acid deposition, better known as "acid rain."

However, after two decades of research, scientists know that the environmental impacts of acid deposition (primarily nitrogen and sulfur borne eastward from Midwest power plants and factories, but also from the exhaust of automobiles and other internal combustion engines) reach far beyond dying conifer stands on the mountain summits. A growing body of evidence points to dramatic declines in forest productivity at mid to high elevations, and the long-term, perhaps irreversible, loss of critical plant nutrients in forest soils. Tree growth has nearly ceased in some places.

> Amazingly, the U.S. Forest Service... has yet to develop a serious response to the damaging impacts of acid deposition in New England.

Amazingly, the U.S. Forest Service, which is charged with the responsibility of protecting the long-term productivity of our national forests, has yet to develop a serious response to the damaging impacts of acid deposition in New England. Both the White Mountain National Forest in New Hampshire and the Green Mountain National Forest in Vermont are currently in the midst of producing their Forest Plans for the next 15 years, and to date neither Forest has demonstrated that it is systematically and scientifically evaluating the changes that may be necessary to preserve the productivity of our federal forests.

The Forest Service's lack of action is all the more distressing because research has shown that logging, like acid deposition, also removes nutrients from the forest. When trees are cut and carted away, the nutrients bound up in the wood are removed as well. Logging that removes the most wood, removes the most nutrients.

A number of federal laws and regulations mandate the protection of long-term productivity, including the soil's capacity to support growth, on our national forests, For example, the National Forest Management Act states that "timber will be harvested from National Forest System land only where... soil, slope, or other watershed conditions will not be irreversibly damaged."

A 2003 scientific report, commissioned by the Conference of New England Governors and Eastern Canadian Premiers (NEG/ECP), states that 31 percent of Vermont's forests, including roughly 70 percent of the Green Mountain National Forest, is receiving nitrogen and sulfur deposition at levels greater than can be assimilated, causing soil nutrient depletion. Such depletion has been linked to forests' increased susceptibility to climate-related stress, disease, and damaging insects.

A 1991 study at the Hubbard Brook Experimental Forest in New Hampshire demonstrated the severity of nutrient depletion following a logging operation. Levels of calcium, magnesium, and potassium in the soil were measured prior to and following whole tree harvesting and were found to decrease by 40 percent in the first three years following the logging.

Could a double whammy of acid deposition and intensive logging cause significant harm to our forests? This would seem a logical conclusion, and in fact, the Forest Service reported in its 2003 Soil Assessment Revision for the Green Mountain National Forest that the combination of acid deposition and forest harvesting is depleting soil nutrients over much of the Northeast.

Why criticize the Forest Service, when it is not the source of the pollutants causing acid deposition? Simply put, because the agency has the responsibility to do what it can to safeguard the long-term vitality and productivity of our national forests.

The Forest Service's lack of action is all the more distressing because research has shown that logging, like acid deposition, also removes nutrients from the forest.

Forest Watch has asked the Forest Service to carefully consider the combined, long-term effects of acid deposition and logging, and to avoid logging where soil productivity has already been reduced by acid deposition. We believe the agency must do these things to comply with the law and to be good, long-term caretakers of New England's national forests.

The Forest Service needs to hear from citizens lots of them — that care about this issue. Please go to www.forestwatch.org to send a letter to Forest Service officials urging them to seriously consider the scientific evidence on acid deposition, and to protect the long-term productivity of our public lands. The NEG/ECP report, Assessment of Forest Sensitivity to Nitrogen and Sulfur Deposition in New England and Eastern Canada, can also be found at *www.forestwatch.org*.

Jim Northup, Executive Director of Forest Watch, www.forestwatch.org, possesses more than 20 years of experience in forest policy and resource planning.



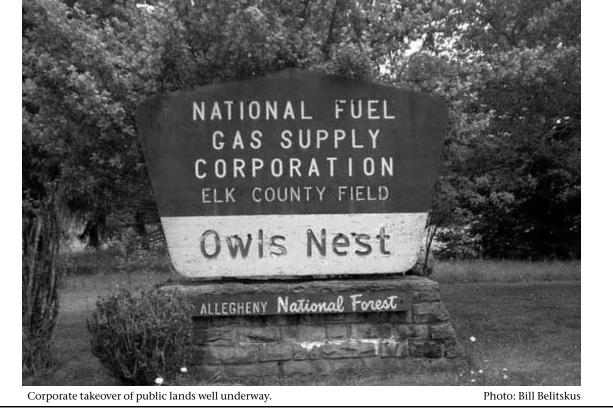


Public Lands Private Minerals

by Ryan Talbott

Eastern national forests are different than western national forests, which were created from "public domain" lands already owned by the federal government. The federal government therefore owns the mineral rights under most western national forests. By the time the federal government began to designate national forests in the east, most of the land was already privately owned.

The Weeks Act of 1911 authorized the president to acquire private lands for streamflow protection and to be set aside as national forest. It did not, however, authorize the purchase of the subsurface mineral estate and if the surface and subsurface estates had already been split (were owned by two separate owners) at the time the federal government acquired the surface, it would have to pursue acquisition of the subsurface in a separate proceeding.



Allegheny NF (Pennsylvania): 93% private minerals

Daniel Boone NF (Kentucky): 67% private minerals

Wayne NF (Ohio): 65% private minerals

Monongahela NF (West Virginia): 38% private minerals

Ryan Talbott is the Forest Watch Coordinator for the Allegheny Defense Project, www.alleghenydefense.org.

As published in the Road-Ripporter

A Response to Failure Enviros need a change in tactics

by Samantha Chirillo, Shannon Wilson and Josh Schlossberg

Over the past year, we've been hearing a lot about eco-sabotage and the absurdity of calling these acts "terrorism." Yet the question remains: What led once law-abiding citizen activists to take such desperate measures in the name of the Earth?

For at least part of the answer, we need look no further than the failure of the mainstream environmental movement to achieve genuine and lasting protections for the planet. Now, more than ever before, we must breathe new life into true grassroots activism by addressing root problems instead of just symptoms. Only then will we be able to keep people from giving up hope.

Instead of picking a stance and fighting like hell for it, the tactics of many greens have devolved to scrambling for crumbs

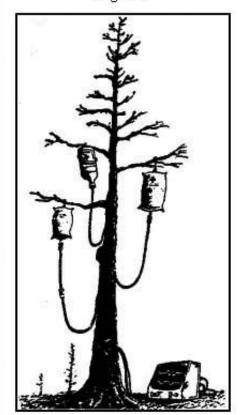
Yet today there is an epidemic of environmental groups abandoning strong stances for a "seat at the table" of politicians. Instead of picking a stance and fighting like hell for it, the tactics of many greens have devolved to scrambling for any crumbs brushed off the bargaining table and then crying "Victory!"

Not only have these tactics not influenced government, they have failed to send a clear message to the public. In fact, many greens have essentially cut the public out of their operations, expecting nothing beyond yearly dues or a token e-mail.

Further examples of missed opportunities abound in each of the various "rights" movements environmental, animal, human/civil, labor which have chosen to pursue their own isolated missions rather than confront the common enemy: corporate power and rule. As corporations have gained more power, the environmental movement especially, has abandoned its original grassroots momentum.

While the climate crisis makes national news, strangely absent from the debate is how logging the world's forests causes one fourth of humanmade carbon emissions. With all the life-sustaining benefits that forests provide, such as air, water and soil, when will we see the headline: "Clearcuts Cause Climate Change?"





Disengaged from the citizenry, shunning other movements and capitulating at every turn, the environmental movement has failed to connect human civilization, a healthy environment, and consumer power in the national psyche. The following are just a few of the resulting assaults on forests, our global cooling factories:

• BLM's Western Oregon Plan Revisions: a backroom sweetheart settlement with timber barons to axe oldgrowth protections from 2.5 million acres of public forests;

• U.S. Fish and Wildlife's latest Spotted Owl Extinction Plan;

• Logging under the guise of "fire prevention" and "salvage" logging;

- Forest biomass extraction;
- Bogus "restoration" on public lands.

What we propose is not the whole solution, only a missing part of the solution: being radical inside the system.

Now is the time to seize the mounting concern over climate change. Now is the time to add more uncompromising voices truly advocating for the people and the forest. Now is the time to stop just playing defense and start scoring some points. With public opinion overwhelmingly on our side, why are a handful of timber barons calling the shots?

One under-utilized tactic to protect our forests is targeting the pocketbooks of the individuals directly responsible for ecosystem destruction: the timber barons. The boycott of Umpqua Bank (or StUmpqua, whose board of directors are the most notorious clearcutters and pesticide sprayers in Oregon) has already cost the bank tens of millions of dollars.

With all the life-sustaining benefits that forests provide, such as air, water and soil, when will we see the headline: "Clearcuts Cause Climate Change"?

Instead of burning down buildings, why not educate customers of eco-conscious businesses, like Market of Choice, to encourage the company to take its \$100 million account away from Umpqua Bank and do its banking elsewhere? You'd have to burn down dozens of buildings to even come close to those numbers!

Some insist that working inside the system can never work as our problems lie at the very root of civilization. A growing number of these individuals truly are removing themselves from the culture of overconsumption.



Post-fire "salvage" logging

Peak Forests

by Mark Robinowitz

Peak Oil and Climate Change are two facets of the same problem of overshoot, and neither can be mitigated in isolation from the other. Concern about melting glaciers and extinction of charismatic megafauna is less likely to influence governmental energy policies than desperate scrambles to replace depleting fossil energy supplies.

Most projections of future carbon levels ignore the fact that fossil fuels are finite. Focusing solely on climate change ignores the most important question facing humanity whether to "spend" the remaining oil on solar panels or battleships (a simplified version of the choice).

Focusing solely on oil depletion leads to destructive policies aimed at increasing liquid fuels production, "alternative" fuels that can have worse environmental impacts than conventional petroleum, including accelerated climate change.

Peak Oil is creating simultaneous separate incentives for slower and faster forest liquidation.

Peak Oil's economic impacts have started reducing construction projects, which will slow lumber demand, creating incentives for timberland owners to hold onto their "resources" for a future uptick in the housing market.

However, short-sighted pseudo-solutions will speed up deforestation by turning trees into liquid biofuels, which cannot replace the vast amount of oil used for cars, delivery trucks, freight trains, cargo ships and airplanes.

Many power generators built in the United States in the past two decades burn natural gas, which is past peak in North America. This decline is fueling a demand to burn trees (and wood chips) to make steam to generate electricity. Converting forests into megawatts will create markets for trees too small to process into high-quality boards, making recovery of damaged woodlands virtually impossible.

However, while permaculture and bicycling must become commonplace, they alone will not stop the timber beast from clearcutting valley and mountain, poisoning and drying up your drinking water, smothering salmon and exacerbating global warming. We don't have the luxury of looking the other way and pretending Earth-death isn't happening. The only choice is to confront these issues head on.

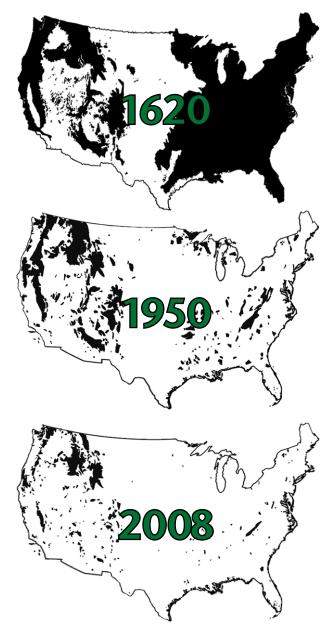
Few would deny that we need massive structural change in our government, in our society, in our culture. One approach is to pound our fists on the reinforced walls of the "system" from the outside. But how soon we forget that the most effective way to bring down any "system" has always been to knock out the supports from the inside.

Samantha Chirillo, Shannon Wilson and Josh Schlossberg are co-directors of the all-volunteer Eugenebased group Cascadia's Ecosystem Advocates, www. wildernessdefenders.net/cea.html. They encourage you to contact them at tsuga@efn.org. The ecologist David Pimental estimates that 500,000 acres of managed forests would be required to supply electricity to a city of 100,000 people powered by burning trees. In Oregon, the roughly 3.7 million people would require about 17.5 million acres, less than the amount of actual forestland. Since Oregon is the least populated West Coast state, converting forests into electricity is not the answer to the decline of fossil electricity.

Mark Robinowitz publishes www.oilempire.us: a political map to understand Peak Oil Wars.



Save Our Disappearing Native Forests

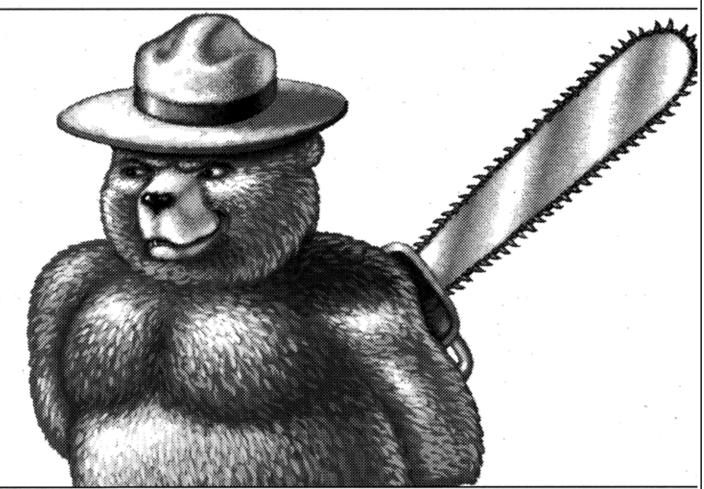


A native forest is a self-regenerating forest that has never been cut or planted by humans.





There's a bear in the woods, and he's destroying our heritage.



courtesy of Americans for An

Say it ain't so, Smokey.

YES!

I want to help save the last of America's national forests. Here's how I can help:

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