

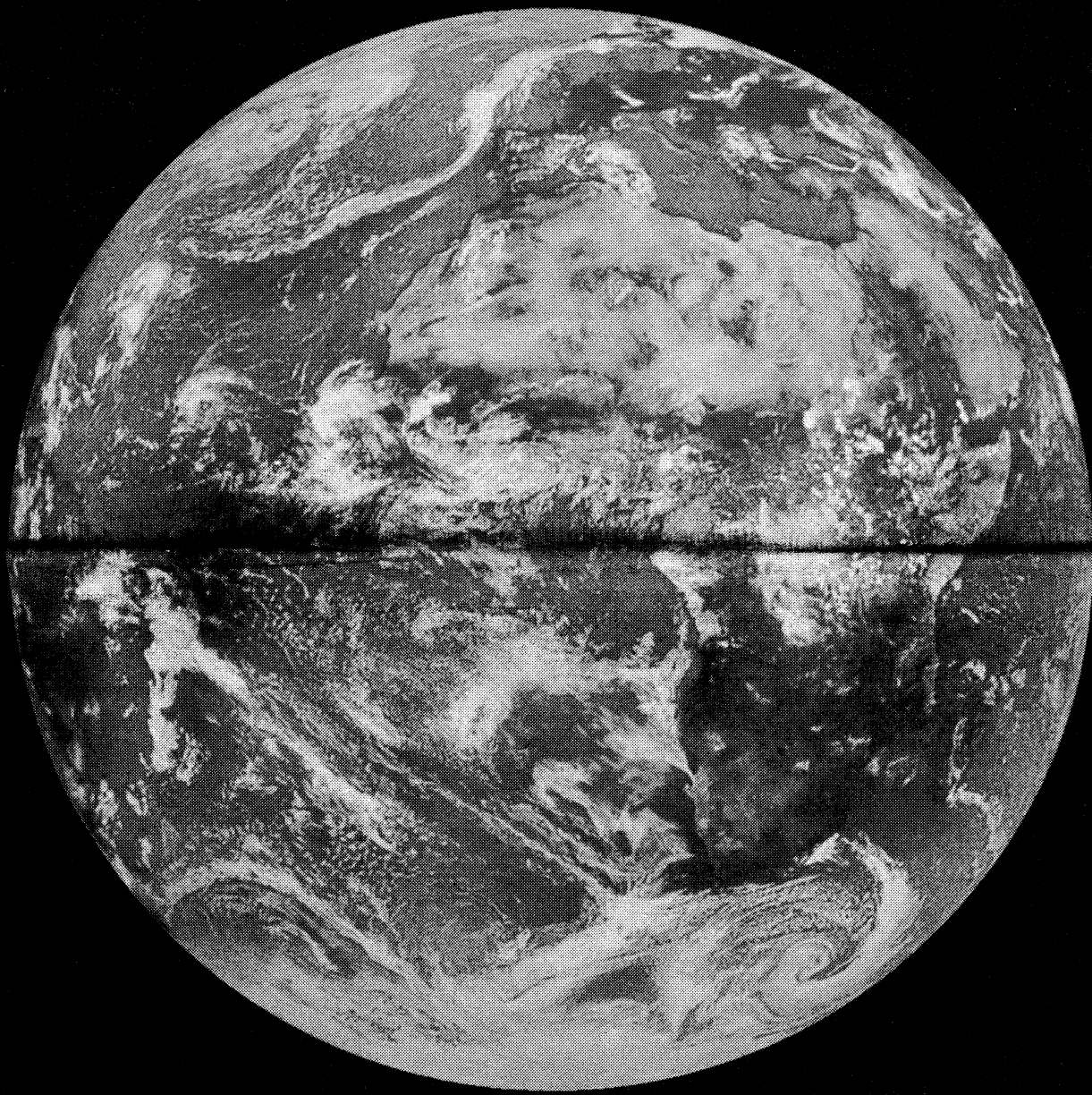
# ForestVoice

Summer  
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Protecting Forests, Defending Wildlife

A Publication of the Native Forest Council

## New Hope for an



## Old Planet

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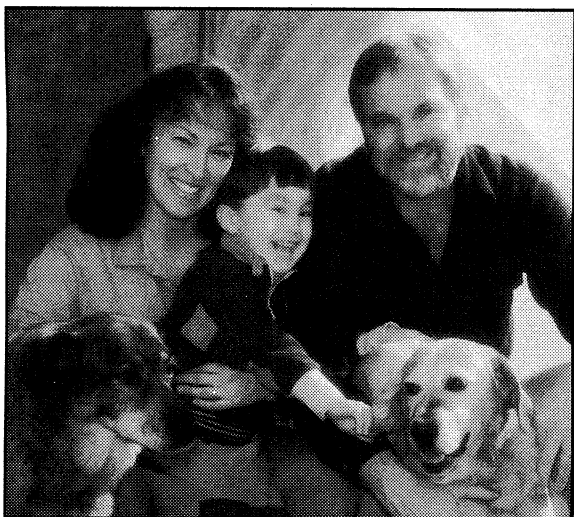
- *Grossman on reclaiming our sovereignty*
- *Hawken on capitalism's relationship with the Earth*
- *Rozek on taking the higher ground*

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# From the Executive Director



Tim, Deborah, Ben, Sugar, and Rainah

## First, You've Got to Get Mad

In 1977, Paddy Chayefsky penned an academy award-winning script for the movie *Network*. Perhaps its most memorable and enduring scene showed people all over the country spontaneously opening their windows and yelling "I'm mad as hell and I'm not going to take it any more!" at the behest of a TV anchorman fed up with the nation's accelerating and seemingly unsolvable problems.

In the movie, Howard Beale tells his audience, "I don't have to tell you things are bad. Everybody knows things are bad...Everybody's out of work, or scared of losing their job. The dollar buys a nickel's worth, banks are going bust, shopkeepers keep a gun under the counter, punks are running wild in the street, and there's nobody anywhere who seems to know what to do, and there's no end to it." Beale admits that he, too, doesn't know what to do about the problems besieging the country, but then he adds: "All I know is that first, you've got to get mad. You've got to say, I'm a human being, goddammit! My life has value."

Not much has changed in twenty years. In many respects the decline Chayefsky railed about has gotten worse. If you've chosen to remain awake and unanesthetized, the evidence is all around. The global environment continues to come under accelerated corporate assault; the poor are getting poorer and more desperate, middle class jobs and incomes are eroding, and our corrupt, mirror-image political parties remain in obedient servitude to money and the interests of those who have it.

The question is: Aren't you angry yet? And if not, what's it going to take?

The cynics will say "The game is fixed." The despairing will cry "Why bother?" The defeated will moan "It can't be done." The self-absorbed will lament "I don't have time."

But those are just the lies we tell ourselves. The most humble among us has a divine spark. It may be dimmed, it can be ignored, it is often doubted, but it cannot be extinguished. For 28 long, brutalizing years an unjust South African regime tried to extinguish Nelson Mandela's light, but he emerged from a prison cell to lead his nation. Mahatma Gandhi owned no property and held no title, but he liberated his country from the British and the hearts of his people--however briefly--from religious and ethnic hatreds. As writer Robert Fulghum observes, "Sometimes history knocks at the most ordinary door to see if anyone is at home. Sometimes someone is."

In his inauguration speech Mandela urged his countrymen not to shrink from their own

greatness: "Our deepest fear is not that we are inadequate," said Mandela, "our deepest fear is that we are powerful beyond measure...Your playing small does not serve the world. There is nothing enlightened about shrinking so that other people won't feel insecure around you. We were born to manifest the Glory of God that is within us. It is not just in some. It is in everyone."

Gandhi, living in a subjugated nation of wretched poverty, had neither the means, the freedom, nor the standing to effect change. But he did so nonetheless. How? By example. "My life is my message," said Gandhi. He beseeched his followers to "be the change you wish to see in the world." He asked nothing more of himself or his disciples--just to live in integrity, to stand up for what you believe.

To be sure, standing for one's beliefs is an act of courage and commitment. But it requires no special skill, no towering talent, no concentration of wealth, or political acumen. It is, above all, a choice.

Whoever you are, you have a role and a right. The right to your anger, your concern, your passion; and a role in correcting the injustices

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***"It is the action, not the fruit of the action, that is important."***

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you see. Can you type, or answer the phone, or write a letter? You have a role. Are you a young mother concerned for her children's future, or a grandparent troubled by your generation's legacy? You play a part. Are you working in a meaningless job, aching for something beyond the steady drain of your life energy? You have a voice. If you're a waitress, lawyer, truck driver, computer nerd, carpenter, politician, clerk, writer, banker, cleric, physician, housewife, forester, biologist, teacher, student--you are needed. You may be out of work and out of luck, but you are never out of options.

Perhaps you are a musician and wonder what you might do?

Vedran Smailovic is a musician and he lives in Sarajevo, a city ravaged by ethnic hatreds expressed in civil war. Robert Fulghum recounts his true story and the living tragedy that is Sarajevo. "Demagogues lit bonfires of hatred between citizens who belonged to different religions and ethnic groups. Everyone became an enemy of someone else. None was exempt or safe. Men, women, children, babies, grandparents--old and young--strong and weak--partisan and innocent--all, all were victims in the end. Many were maimed. Many were killed. Those who did not die lived like animals in the ruins of the city. Except for one man. A musician. A cellist."

Smailovic lived near a bakery where twenty-two people waiting in a bread line were killed by mortar fire. Sniper fire and random shelling were daily occurrences in Sarajevo. In the face of unrelenting danger, senseless brutality, and calculated horror, Smailovic wanted to make a statement. But what could a cellist do?

"He came to a certain street corner every day," Fulghum writes. "Dressed in formal black evening clothes, sitting in a fire-charred chair, he played his cello. Knowing he might be shot or

beaten, still he played. Day after day he came. To play the most beautiful music he knew.

Day after day after day. For twenty-two days.

His music was stronger than hate. His courage stronger than fear.

And in time other musicians were captured by his spirit, and they took their places in the street beside him. These acts of courage were contagious. Anyone who could play an instrument or sing found a place at a street intersection somewhere in the city and made music.

In time the fighting stopped.

The music and the city and the people lived on."

What can a cellist do? "All he knows how to do," says Fulghum. "Speaking softly with his cello, one note at a time, like the Pied Piper of Hamelin, calling out the rats that infest the human spirit."

The Serbs and the Croats, the Christians and the Muslims of Sarajevo know what a cellist can do. The place where Smailovic played, Fulghum reports, "has become an informal shrine...[It] commemorates the hope that must never die--that someday, somehow, the best of humanity shall overcome the worst, not through unexpected miracles but through the expected acts of the many."

*Through the expected acts of the many.*

Do not discount the power of your impact. You make a difference by the mere fact of existing. The question then becomes not *how* you can make a difference, but do you like the one you're *already* making? And, if you don't like it, imagine how the world would be different if we all stood unashamedly for what we believed?

Many will counter that we have such slight hope of winning. While true, it is also true that great changes, great shifts in consciousness, are frequently founded on slim hopes. "It is the action, not the fruit of the action, that is important," said Gandhi who himself had virtually no hope of success. "You have to do the right thing. It may not be in your power, may not be in your time, that there will be any fruit. But that does not mean you stop doing the right thing. You may never know what results come from your action. But if you do nothing, there will be no result."

Your life has value. Listen to your own music. Do not wait for the mortar fire. Acts of courage and compassion abound. Look for them. Believe as Fulghum does, as Smailovic does, as Mandela does, as Gandhi did, that "the myth of the impossible dream is more powerful than all the facts of history."

Our dream is to save America's forests; to secure a brighter and healthier future for our children. In our own way, we stand on the street corner and relentlessly speak the truth as we know it. For years we were told our dream was impossible. We endured ridicule, and criticism, and fierce opposition from those on both sides invested in the status quo. But we continued speaking. We spoke to everyone, especially those devoted to not hearing, and those determined to twist our meaning. And over time, others have joined us. The street corners are filling with dreamers. Their chorus can now be heard across the nation. Our voices grow stronger each day, and we will not be silenced.

We invite you to join us. If it's a street corner you seek, there is a place for you here.

# Forestry's Ugly Face



Shelton Sustained Yield Unit, Olympic National Forest, WA

Photo by Lighthawk

by Roy Keene

**T**he clearcut is the part of forestry we see the most. It's the face of forestry, the part that's presented to the public. Clearcuts look ugly to the public, and after the recent logging-related fatalities, even foreboding. Although agencies, institutes, and corporations continue to preach clearcutting as "forestry," "science," or just good business, the public fails to be converted. Clearcuts, they insist, are too ugly to be good!

In the early 1970s, Forest Service silviculturists were still permitted to call clearcutting "deforestation" which, according to the dictionary, is exactly what it is. Forestry, in contrast, is "the art and science of maintaining and developing the forest," not simply the business of removing it. Because deforestation is initially so profitable, an economic system based solely on the present dollar value of extracted timber continues to favor the liquidation of living forests into

paper dollars. The system rewards corporations which favor the short-term benefits of overcutting because dollars grow faster than trees.

The other reason clearcutting has been cleverly substituted for forestry is speculation over growth. This scheme begins with liquidating slower growing mature trees, then "renewing" them with rapidly growing seedlings. I say "speculation", since the cut and plant scenario has yet to prove it's viability over forest time spans. This "savings and loan" style silviculture scheme has, however, been responsible for the tremendous overcutting of our nation's forests and has bankrupted many watersheds, fish runs, and human communities. True, cultivated saplings may grow quicker than mature native trees, but they have yet to replace their volume or value.

In federal forests, where there is a trust mandate to maintain the wealth of the forest for future generations, liquidating high-value timber and replacing it with insignificant seedlings is more fraud than "forestry". Suppose your trustee took a thousand dollars of your child's inheritance, put one dollar back in the account at 10% interest, and expected you to be excited about the 10% "growth". Would it matter if the trustee assured you that in 80 years, if everything goes exactly as planned, and your children should live so long, they might recover the thousand dollars?

Years ago in the Mt. Hood National Forest, a Forest Service ranger related to me how he tried to sell the agency's insistence on clearcutting to the public. But the public refused to buy clearcutting pointing out that, regardless of silvicultural justification, clearcutting was ugly

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# From a Distance

by Victor Rozek

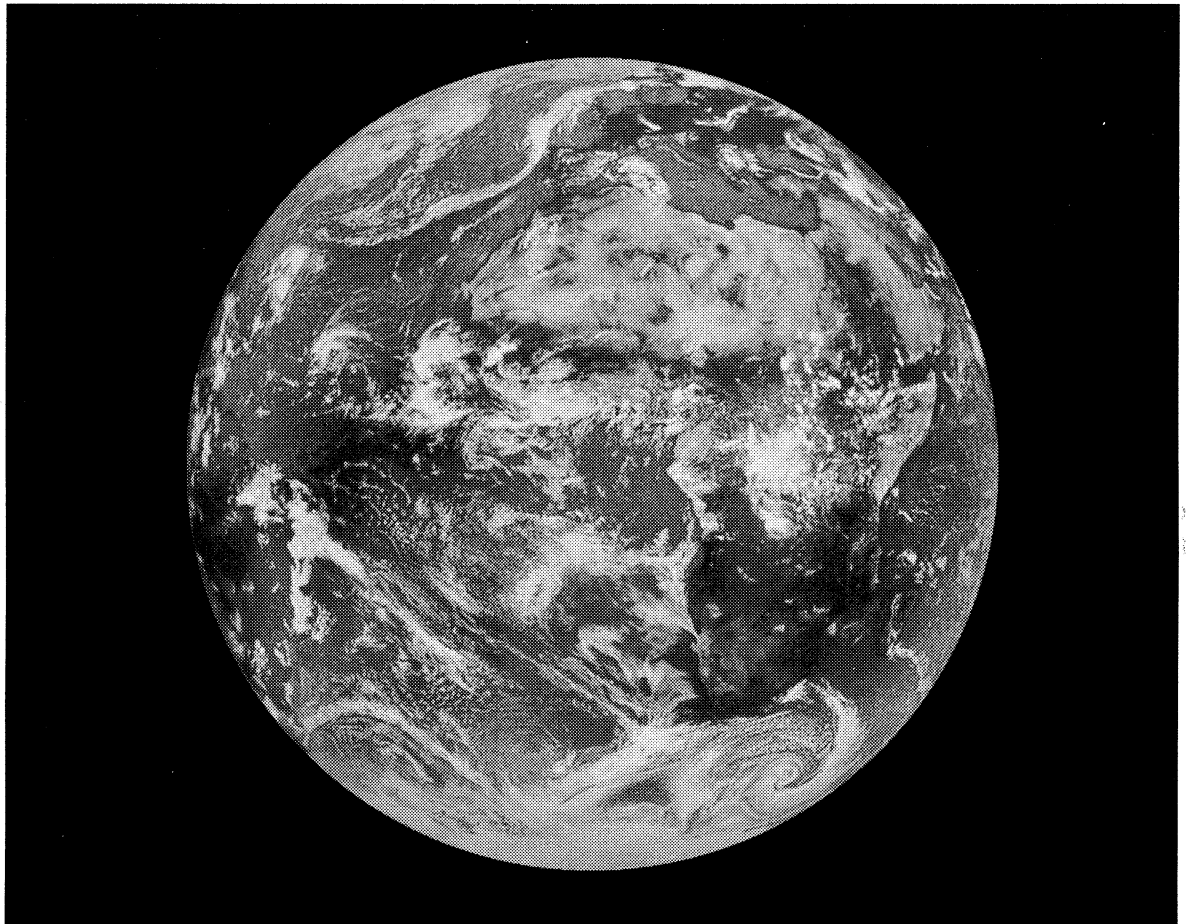
When we humans finally pushed our way into space, forever shredding the envelope that confined us to the planet, we returned with a profoundly different perception of the earth. Photos from deep space revealed what we all knew intellectually and perhaps emotionally, but had never been able to verify with our own senses: that we are one world. We saw, too, that the earth, which seemed so inexhaustible, was a finite blue-green spec hanging in an unimaginably vast and hostile space.

In contradiction to the human tendency to create separateness, we saw a single, fully integrated entity; a neutral incubator of life, indifferent to human conventions. From a distance there were no borders or nations, no ideologies, no religious intolerance, no racial hatred, no armed conflicts, and no economic predation. We saw only a silent, spinning stage which attends our fleeting dramas.

In the swirl of white clouds, the sheets of blue oceans, the bands of green forests, we saw evidence of a miraculous and highly intricate system which supports life. A closed, self-contained, self-sustaining system. A self-regulating design oblivious to the concerns and aspirations, the fears and hatreds, and the artificial divisions humans have imposed upon the landscape and each other. We saw a host, unconcerned with the activities of its guests; a living set of laws that have operated for billions of years irrespective of the willingness of inhabitants to abide by them. It was a system that favored no single form of life. It was, in a fundamental sense, indifferent to our, or any other, presence.

These life-support systems that we call the environment, are far from brittle. They are, in fact, absolutely resilient. We perceive them as fragile because we are able to damage them. But, as the fossil record shows, nature has both endured and engineered five major extinctions without our participation or approval. For five billion years, an awesome parade of life danced upon a shifting stage. The stage persists, it is only life that vanishes. Ninety-nine percent of all lifeforms that once walked, or slithered, or swam, or flew, or grew upon this sphere are gone. Ours is a planet without conscience or regret. It simply doesn't care whether it is populated by dinosaurs, cockroaches, humans, or three-headed trylobites. As once-dominant lifeforms disappear, others evolve to fill the void. We are not nature's preferred alternative.

The vulnerability we project upon the planet is merely a reflection of our own defenselessness. Infinitely fragile, are the restricted and delicate conditions that support human life. Humans flourish within a narrow band of climatic and atmospheric conditions, and these conditions are precisely what humankind is in the process of energetically dismantling. Because the system is self-contained, we have begun to discover that local impacts, if severe and persistent enough, reverberate globally. Pollution rides ocean currents, invades aquifers, and circles the globe on the jet stream. Forests cut here, impact the



climate there. If carbon emissions in the North increase global warming, the South will experience more frequent and intense hurricanes. As the planet slowly drowns in a chemical soup of our own making, animals lose their ability to reproduce and human sperm counts decline.

If ever we were given a chance to realize that our future, our very survival is inextricably linked to our neighbor's, it was from the perspective of space. No borders, no nations, no place to hide. Ultimately, we will either all win, or we will all lose. Not only do natural systems that govern the planet dictate interdependence, our numbers

and our technology make it unavoidable. We have simply not yet begun to act as if that were true. Yet no one can immunize himself from the actions of the whole or survive outside the natural system, for there is no other system to embrace, and nowhere else to go.

Consequently, any economic activity, personal choice, or government policy that puts natural systems in jeopardy, simply guarantees that we will all lose in the end. Likewise, predatory economic competition that pits nation against nation, community against community, worker against worker, and all against the environment, creates a me-first frenzy in which people and natural systems are sacrificed to economic ambition. Too often "free market" means free from accountability, and "global competition" refers to a quest for a servile workforce willing to accept the lowest wages, in nations whose desperation manifests the meekest safety and environmental standards.

Competition for economic advantage derived at the expense of the powerless--the production of wealth rooted in the misuse of people and resources--guarantees social and environmental decline. Where human exploitation is tolerated, abuse of the land is guaranteed. Our mistreatment of the planet is merely a reflection of our propensity to exploit one another. The state of the world ecology mirrors our personal ecology.

If the image on both sides of the mirror is troubling, the distortions are frequently byproducts of the win/lose dynamic that delimits human relationships with each other and the planet. It is the belief that if I/we win, someone or something else must lose. Win/lose drives no-cost-too-great economic competition. It is used by corporations to rationalize passing environmental costs of production to the public. It invites denial, not awareness. It is why corporate CEOs are rewarded for firing thousands of people; and why third-world children are paid \$1 a day to make athletic shoes that sell here for over \$100 a pair. Win/lose is also at the core of the confrontational model on which environmentalism is based--and it guarantees the movement will fail. If those harming the environment believe they can win at nature's expense, environmentalists believe they can win at the expense of those who disagree with them. Both beliefs are perilously short-sighted.

There is no win/lose: there is only win/win or lose/lose. How does it serve us to make our

*If ever we were given a chance to realize that our future, our very survival is inextricably linked to our neighbor's, it was from the perspective of space. No borders, no nations, no place to hide.*

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neighbors and, by extension vast portions of the global population, losers? From an environmental perspective, does anyone really win at the expense of natural systems? There simply is no escaping from the consequences of our actions; no possibility of externalizing costs, either interpersonal or environmental. We live in a closed system and someone always pays. The earth always pays.

Nowhere was the bankrupt nature of win/lose environmentalism more clearly revealed than in the 104th Congress. Prior to the Republican ascension, greens had made modest progress on a wide variety of environmental fronts. But they failed to invest the opposition in their solutions, content only to "win." In doing so, they created a potent counterforce; a collection of aggrieved corporate and private interests whose economic ox or sovereign conceit (I'm an American, I can trash the environment if I want) had been gored, and who united with the single aspiration of beating back what they perceived as the green threat. The 104th Congress was pay-back time. The hostility and tenacity with which the environment was attacked was only surprising in the abstract. To those in power, it was personal.

The framers of the constitution knew that winning provides "for the common good." The challenge for environmentalists is to align their means with their desired results. An environmental movement, a society, or a planet, simply cannot be successfully organized, for the long term, around winner-take-all competition. The conflict that grows from rivalry encourages destructive employment (over-logging, over-fishing), predatory investment, and combative environmentalism. In the words of George Soros, one of the world's most prominent financiers, "there is something wrong with making the survival of the fittest a guiding principle of civilized society." Even when the fittest are on our side. Strategically, win/lose is *only repeatable as long as there is somewhere else to go, new resources to exhaust, new populations to enslave.* The view from a capsule in space suggests that this strategy will produce increasingly marginal returns.

The creation of losers (whether people, businesses, movements, nations, or natural systems) is, of course, always justified by the "winners." Based in righteousness, it is celebrated by those who believe themselves to be separate, superior, chosen by God, more deserving, more worthy, or simply stronger than the object of their conquest. However justified our outrage and indignation may at times be, killing the violent will not make us peaceful and bludgeoning the browns won't make them green.

Given the unifying reality of a single planet, with shared global life-support systems, it is time to reframe what it means to "win." Winning is inclusive. It augments rather than diminishes. It respects rather than blames. It puts personal and national advantage in the context of planetary advantage. It sustains living systems and communities. Winning is accountable.

Environmentalists will be right to ask: does winning in an inclusive, accountable sense mean compromising ones values? No, it does not. But it does mean teasing apart and understanding the *positions* and *interests* of opposing sides. Typically, positions are static, unyielding. They are sound-bite representations of complex world views. Zero-Cut. Wise Use. By itself, the phrase "Zero-Cut" does nothing to explain the ecological and economic justifications for ending logging on public lands. Nor does an unadorned demand for "Wise Use" impart wisdom, or demonstrate economic hardship in timber communities. While *positions* often appear incompatible, if not diametrically opposed,

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*interests* frequently reveal unanticipated tufts of common ground. The environmentalist, discourse may reveal, is primarily interested in saving the forest. The logger may be primarily interested in saving his job. Can both interests be served if the logger is employed restoring damaged watersheds, and thinning second-growth, single species plantations for the purpose of reintroducing biological diversity? Of course. But identifying and sifting through competing interests to find parcels of commonality requires sitting down with the objects of our vilification with the intent of not withdrawing until both sides have secured a victory.

The irony and the glory of environmental advocacy is that when it is done properly, with intelligence, respect and sensitivity, in the long term everyone wins. When forests stand and cleanse the air, purify the water and moderate the climate; when they support abundant fisheries, provide wild edibles, and yield medicines; when forests shelter wildlife and abate flooding, does the logger not also win? Do his children not win? Are his grandchildren diminished?

The polluter and the environmentalist alike benefit from clean water and breathable air. The fisherman and the industrialist both profit from oceans teeming with life, not refuse. That which sustains us all should not be squandered, traded or negotiated away (not by government, industry, or environmentalists), for it belongs to no single person or generation; does not exist for the profit of any single corporation, or the sole benefit of economically dominant nations. Sustainability, by definition, abides no losers.

Only as we reject the notion of winning at other's expense, can we demand that others not win at ours. Otherwise, we remain trapped in an endless cycle of conflict and competition. For environmentalists, the win/lose model creates potent antidotes to every mild victory. Retaliation comes swiftly from industries that believe they must seize and consume dwindling resources for, if they do not, others will. Every gain becomes a precursor to an even larger loss. In a contest of conquerors, environmentalists remain helplessly overmatched, participants in the very paradigm that fuels the crisis.

The shift is coming and it will either be voluntary or imposed upon us by the limits of natural systems to support human life. Weaning ourselves from the heady toxin of conquest will not be simple, but it will be far less painful than the inevitable consequence of not remembering that we are as inescapably linked to each other as the individual cells that comprise our bodies. As consciousness evolves, those in the front lines will be met with resistance and ridicule. They will be called naive, unrealistic, and unwilling to see the world as it is. In this, the critics will be correct. The vision of those willing to see our future as inextricably tied to that of our brothers and wholly dependent on natural systems, will be remarkably broader--much as the eagle's vision differs from the ant's. As they begin to align their behavior with their vision, they will be leading by example the transformation toward consonance and sustainability. There will be an elevated perspective, a shared providence, where self interest, community interest, national interest, and planetary interest meet and blur. Where there is no separateness, no intolerance, no economic predation; there are no borders, no ideologies, no racial hatreds, no armed conflicts, *no losers of our making.* They will be seeing our planet and all its inhabitants as if for the first time...from a distance.

*The author invites comments. Send replies to the Native Forest Council, PO Box 2190, Eugene, OR 97402*

# Reclaiming Our Sovereignty

## Reestablishing control over the corporation

by  
Richard L. Grossman

***“The King did not grant away his sovereignty over you when he made you a corporation. When His Majesty gave you power to make wholesome laws, and to administer justice by them, he parted not with his right of judging whether justice was administered accordingly or not. When His Majesty gave you authority over such subjects as live within your jurisdiction, he made them not YOUR subjects, nor YOU their supreme authority.”***

In 1628, King Charles I granted a charter to the Massachusetts Bay Company. In 1664, the King sent his commissioners to see whether this company had been complying with the terms of the charter. The governors of the company objected, declaring that this investigation infringed upon their rights. On behalf of the King, his commissioners responded:

*The King did not grant away his sovereignty over you when he made you a corporation. When His Majesty gave you power to make wholesome laws, and to administer justice by them, he parted not with his right of judging whether justice was administered accordingly or not. When His Majesty gave you authority over such subjects as live within your jurisdiction, he made them not YOUR subjects, nor YOU their supreme authority.*

From childhood, this King had been trained to act as a sovereign should.

What about us?

By means of the American Revolution, colonists took sovereignty from the English monarchy and invested it in themselves. Emerging triumphant from their struggle with King George and Parliament, they decided they would figure out how to govern themselves.

Alas, a minority of colonists were united and wealthy enough to define most of the human beings in the 13 colonies as property or as non-persons before the law and within the society, with no rights that a legal person was bound to respect.

Ours was a flawed sovereignty from the beginning.

Because of its moral failings and structural inequities, whole classes of people had to organize and struggle over centuries to gain recognition as part of the sovereign people -- that is, they had to get strong enough as a class to define themselves and not let other people or institutions define them: African Americans, Native peoples, women, debtors, indentured servants, immigrants...

To this day, many still must struggle to exercise the rights of persons, to be recognized as persons by law and by society.

Throughout this nation's history, there has always been plenty of genuflecting to democracy and self-governance. But the further each generation gets from the Revolution, the less the majority act like sovereign people. And when it comes to establishing the proper relationship between sovereign people and the corporations we create, recent generations seem to be at a total loss.

Yet, earlier generations were quite clear that a corporation was an artificial, subordinate entity with no inherent rights of its own, and that incorporation was a privilege bestowed by the sovereign. In 1834, for example, the Pennsylvania Legislature declared:

*A corporation in law is just what the incorporation act makes it. It is the creature of the law and may be molded to any shape or for any purpose that the Legislature may deem most conducive for the common good.*

During the 19th Century, both law and culture reflected this relationship between sovereign people and their institutions. People understood that they had a civic responsibility not to create artificial entities which could harm the body politic, interfere with the mechanisms of self-governance, assault their sovereignty.

They also understood that they did not elect their agents to positions in government to sell off the sovereignty of the people.

In other words, they were human beings who tried to act as sovereign people. One thing they did was to define the NATURE of the corporate bodies they created. If we look at mechanisms of chartering, and at the language in not only corporate charters, but state general incorporation laws and even state constitutions prior to the 20th Century, we find precise, defining language, mandatory and prohibitory language, often self-executory in nature. These mechanisms DEFINED corporations by denying corporations political and civil rights; by limiting their size, capitalization and duration; by specifying their tasks, and by declaring the people's right to remove from the body politic any corporations which dared to rebel.

Here is an example of language which sovereign people--responding to the rise of corporations after the Civil War--placed in the California Constitution of 1879, and which appears in other state constitutions at about that time:

Article I, section 2: All power is inherent in the people...

Article I, section 10: The people shall have the right freely to assemble together to consult for the common good, to instruct their representatives...

Article XII, section 8: The exercise of the right of eminent domain shall never be so abridged or construed as to prevent the Legislature from taking the property and franchises of incorporated companies and subjecting them to public use the same as the property of individuals, and the exercise of the police power of the State shall never be so abridged or construed as to permit corporations to conduct their business in such manner as to infringe the rights of individuals or the general well-being of the State.

The principal mechanism which sovereign people used during the 19th Century to assess whether their corporate creations were of a suitably subordinate nature was called QUO WARRANTO. The quo warranto form of action, as attorney Thomas Linzey has noted, 'is one of the most ancient of the prerogative writs. In the words of the Delaware Court of Chancery, the remedy of quo warranto extends back to time whereof the memory of man runneth not to the contrary.

Quo warranto is simply Latin for BY WHAT AUTHORITY. All monarchs understood how to use this tool in self-defense. They realized that when a subordinate entity they had created acted BEYOND ITS AUTHORITY, it was guilty of rebellion and must be terminated.

Sovereignty is in our hands now, but the logic is the same: when the people running a corporation assume rights and powers which the sovereign had not bestowed, or when they assault the sovereign people, this entity becomes an affront to the body politic. And like a cancer ravaging a human body, such a rebellious corporation must be cut out of our body politic.

During the first hundred years of these United States, people mobilized so that legislatures, attorneys general and judges would summon corporations to appear and answer to quo warranto. In 1890, the highest court in New York State revoked the charter of the North River Sugar Refining Corporation with these words:

*The judgment sought against the defendant is one of corporate death. The state which created, asks us to destroy, and the penalty invoked represents the extreme rigor of the law. The life of a corporation is, indeed, less than that of the humblest citizen, and yet it envelopes great accumulations of property, moves and carries in large volume the business and enterprise of the people, and may not be destroyed without clear and*

**“The State need not permit its own creation to consume it.”**

**“The blessing of potentially perpetual life and limited liability...so beneficial in the economic sphere, pose special dangers in the political sphere.”**

**Over time, corporations were able to claim for themselves rights and privileges taken from the sovereign people—via violence and favorable decisions of federal judges.**

**Regulatory and administrative law only enables us to question specific corporate behaviors, one at a time, usually after the harm has been done...over and over and over again.**

*abundant reason...Corporations may, and often do, exceed their authority only where private rights are affected. When these are adjusted, all mischief ends and all harm is averted. But where the transgression has a wider scope, and threatens the welfare of the people, they may summon the offender to answer for the abuse of its franchise and the violation of its corporate duty...The abstract idea of a corporation, the legal entity, the impalpable and intangible creation of human thought, is itself a fiction, and has been appropriately described as a figure of speech...The state permits in many ways an aggregation of capital, but, mindful of the possible dangers to the people, overbalancing the benefits, keeps upon it a restraining hand, and maintains over it a prudent supervision, where such aggregation depends upon its permission and grows out of its corporate grants...the state, by the creation of the artificial persons constituting the elements of the combination and failing to limit and restrain their powers, becomes itself the responsible creator, the voluntary cause, of an aggregation of capital...the defendant corporation has violated its charter, and failed in the performance of its corporate duties, and that in respects so material and important as to justify a judgment of dissolution... Unanimous.*

Such a judgment should not be regarded as punishment of the corporation, but rather a vindication of the sovereign people. When our sovereignty has been harmed, we are the ones who must be made whole. The concept is similar to what Hannah Arendt described in her book *Eichmann in Jerusalem* (1963):

The wrongdoer is brought to justice because his act has disturbed and gravely endangered the community as a whole, and not because, as in civil suits, damage has been done to individuals who are entitled to reparation. The reparation effected in criminal cases is of an altogether different nature; it is the body politic itself that stands in need of being “repaired,” and it is the general public order that has been thrown out of gear and must be restored, as it were. It is, in other words, the law, not the plaintiff, that must prevail.

There is no shortage of court decisions affirming the sovereignty of the American people over corporate fictions, recognizing the need to restore the general public order. In *Richardson v. Buhl*, the Nebraska Supreme Court in the late 19th Century declared:

*Indeed it is doubtful if free government can long exist in a country where such enormous amounts of money are...accumulated in the vaults of corporations, to be used at discretion in controlling the property and business of the country against the interest of the public and that of the people, for the personal gain and aggrandizement of a few individuals.*

The Illinois Supreme Court, in *People ex. rel. Peabody v. Chicago Gas Trust Co.*, (1889):

*When a corporation is formed under the general incorporation act, for the purpose of carrying on a lawful business, the law, and not the statement or the license of the certificate must determine what powers can be exercised as incidents of such business... To create one corporation that it may destroy the energies of all other corporations of a given kind, and suck their life blood out of them, is not a ‘lawful purpose.’*

The Supreme Court of Georgia, in *Railroad Co. v. Collins*, at about the same time:

*All experience has shown that large accumulations of property in hands likely to keep it intact for a long period are dangerous to the public weal. Having perpetual succession, any kind of corporation has peculiar facilities for such accumulation, and most governments have found it necessary to exercise great caution in their grants of corporate charters. Even religious corporations, professing and in the main, truly, nothing but the general good, have proven obnoxious to this objection, so that in England it was long ago found necessary to restrict them in their powers of acquiring real estate. Freed, as such bodies are, from the sure bounds—the grave—to the schemes of individuals, they are able to add field to field, and power to power, until they become entirely too strong for that society which is made up of those whose plans are limited by a single life.*

Justices White, Brennan and Marshall, dissenting in a 1976 case, *Buckley v. Valeo*:

*It has long been recognized, however, that the special status of corporations has placed them in a position to control vast amount of economic power which may, if not regulated, dominate not only the economy but also the very heart of our democracy, the electoral process...The State need not permit its own creation to consume it.*

Chief Justice Rehnquist, dissenting in the same case:

*...the blessing of potentially perpetual life and limited liability...so beneficial in the economic sphere, pose special dangers in the political sphere.*

A great achievement of corporations as they set out towards the end of the 19th Century to transform the law and recreate themselves was to replace basic tools of sovereign people—chartering, defining incorporation laws, “by what authority” proceedings, and charter revocation—with regulatory and administrative law, new legal doctrines, and fines as corporate punishment. Many people of that time understood that these changes amounted to a counter-revolution, and so they resisted with great passion and energy.

Farmers and workers were not willing to concede that the corporate form would define work and money and progress and efficiency and productivity and unions and justice and ethical conduct and sustainability and food and harm and personhood and reasonable. They were not willing to concede that corporations should have the rights and privileges of persons.

So they organized, educated, resisted. They were crushed by giant corporations’ ability to use state and federal government to take rights away from people and bestow them upon corporations.

Over time, corporations were able to claim for themselves rights and privileges taken from the sovereign people—via violence and favorable decisions of federal judges. Corporations were conceded personhood, and a long list of civil and political rights such as free speech, and property rights such as the right to control investment, production and the organization of work.

By the beginning of the 20th Century, corporations had become sovereign, and they had turned people into consumers, or workers, or whatever the corporation of the moment chose to define humans as.

Without a clear understanding of history, most citizen efforts against corporations in this century have been struggles against the symptoms of corporate domination in regulatory and administrative law arenas.

***Sovereign people do not beg of, or negotiate with, subordinate entities which we created.***

***When a subordinate entity violates the terms of its creation, and undermines our ability to govern ourselves, we are required to move in swiftly and accountably to cut this cancer out of the body politic.***

But these are NOT arenas of sovereignty. These are stacked-deck proceedings, where people, communities and nature are fundamentally disadvantaged to the constitutional rights of corporations. Here, we cannot demand: BY WHAT AUTHORITY has corporation X engaged in a pattern of behavior which constitutes an assault upon the sovereign people. Here, we cannot declare a corporation ULTRA VIRES, or BEYOND ITS AUTHORITY.

To the contrary, regulatory and administrative law only enables us to question specific corporate behaviors, one at a time, usually after the harm has been done...over and over and over again.

In these regulatory and administrative proceedings, both the law and the culture concede to the corporation rights, privileges and powers which earlier generations knew were illegitimate for corporations to possess. In addition, in these proceedings, the corporation has the rights of natural persons: a human and a corporation meet head on, in a "fair" fight.

Today, our law and culture concede our sovereignty to corporations. So do most of our own citizen organizations dedicated to justice and environmental protection and worker rights and human rights.

Consequently, our organizations use their energy and resources to study each corporation as if it were unique, and to contest corporate acts one at a time, as if that could change the nature of corporations.

Folks relentlessly tally corporate assaults; study the regulatory agencies and try to strengthen them.

We try to make corporate toxic chemicals and corporate radiation and corporate energy and corporate banking and corporate agriculture and corporate transportation and corporate buying of elections and corporate writing of legislation and corporate educating our judges and corporate distorting of our schools, a little less bad.

Isn't it an old story? People create what looks to be a nifty machine, a robot, called the corporation. Over time the robots get together and overpower the people. They redesign themselves and reconstruct law and culture so that people don't remember they created the robots in the first place, that the robots are machines, are not alive.

For a century, the robots propagandize and indoctrinate each generation of people so they grow up believing that robots are people too, gifts of God and Mother Nature; that they are inevitable, and the source of all that is good.

Isn't it odd how gullible we've been, how docile, how obedient? Isn't it odd that we don't remember who We the People are; how sovereign people should regard ourselves, how sovereign people should act? We need to realize what power and authority we possess, and how we can use it TO DEFINE THE NATURE OF CORPORATIONS, so that we don't have to mobilize around each and every corporate decision that affects our communities, our lives, the planet.

In the face of what we experience about corporations, of what we know to be true, why are so many people so obedient? Why do we hang on to the hope that the corporation can be made socially responsible? Isn't this an absurd notion? After all, organizations cannot be responsible. This is just not a relevant concept, because a principal purpose of corporations is to protect the managers and directors who run them from responsibility for their decisions.

But people can declare organizations criminal, or vile--take a look at the Nuremberg Trials. And people can define organizations, business or government. Again, see the Nuremberg Trials.

But only people can be responsible. How? By exercising our sovereign authority over ALL the institutions we create.

We the People are the ones who must be accountable. We are not accountable when we create monster robots which run rampant in our communities, and which in our names sally forth across the world to wreak havoc upon other places and upon other people's self-governance.

We are not being socially responsible or civically accountable when we don't act like sovereign people.

We are not being socially responsible or civically accountable when we play in corporate arenas by corporate rules.

We are not being socially responsible or civically accountable when we permit our agents in government to bestow our sovereignty upon machines.

We are not being socially responsible or civically accountable when we organize our communities and then go to corporate executives and to the hacks who run corporate front groups and ask them please to cause a little less harm; or when we offer them even more rewards for being a little less dominating.

Sovereign people do not beg of, or negotiate with, subordinate entities which we created.

Sovereign people INSTRUCT subordinate entities. Sovereign people DEFINE all entities we create. And when a subordinate entity violates the terms

of its creation, and undermines our ability to govern ourselves, we are required to move in swiftly and accountably to cut this cancer out of the body politic.

With such deeds do we honor the millions of people who struggled before us to wrest power from tyrants, to define themselves in the face of terror and violence. And we make all struggles for justice and democracy easier by weakening the ability of corporations to make the rules, and to rule over us.

Some might say this is not a practical way to think and act. Why? Because corporations will take away our jobs? Our food? Our toilet paper? Our hospitals? Because we don't know how to run our towns and cities and nation without global corporations? Because they will run away to another state, to another country? Because the Supreme Court has spoken? Because philanthropic corporations won't give us money? Because it's scary? Because it's too late to learn to act as sovereign people?

Because in 1997 it is not realistic for people across the nation and around the world to take away the civil and political rights of all corporations, to take the property rights and real property corporations have seized from human beings, and from the Earth?

Yeah, and it IS realistic to keep conceding sovereign powers to corporations; to keep fighting industrial corporations and banking corporations and telemedia corporations and resource extraction corporations and public relations corporations and transportation corporations and educational corporations and insurance corporations and agribusiness corporations and energy corporations and stock market corporations one at a time forever and ever?

On January 10, 1997, President William Jefferson Clinton sent a letter to the mayor of Toledo, Ohio. The mayor had asked the president for help in getting the Chrysler Corporation to build a new Jeep factory within Toledo city limits to replace the ancient one which Chrysler Corporation was closing.

The President of the United States, leader of the most powerful nation the world has ever known, elected head of a government always eager to celebrate the uniqueness of its democracy to the point of forcing it upon other nations, wrote:

*...As I am sure you know, my Administration cannot endorse any potential location for the new production site.*

*My Intergovernmental Affairs staff will be happy to work with you once the Chrysler Board of Directors has made its decision...*

Our president may not have a clue, but We the People did not grant away our sovereignty when we made Chrysler into a corporation. When we gave the Chrysler Corporation authority to manufacture automobiles, we made the people of Toledo not its subjects, nor Chrysler Corporation their supreme authority.

How long shall we the people, the sovereign people, stand hat in hand outside corporate boardrooms waiting to be told our fate?

How long until we instruct our representatives to do their constitutional duty?

How long until WE become responsible...until WE become accountable, to our forebears, to ourselves, to our children, to other peoples and species, and to the Earth?

*Richard Grossman can be reached at the Program on Corporations, Law, and Democracy, PO Box 806, Cambridge, MA 02140 508-487-3151*



# Annual Report

*Native Forest Council*

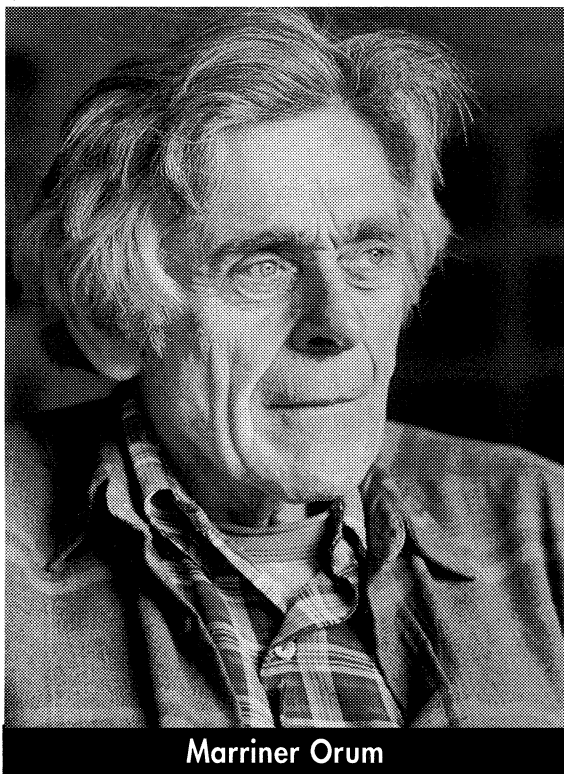
*1996*

*The Native Forest Council  
is still here working to save  
America's public forestlands.  
Our goal is to educate the public  
about the urgent need to preserve  
forests and watersheds for  
their life-support values.*

Timothy Hermach  
Executive Director, Native Forest Council

## *Leading by example*

Michael Williams ©1997



Marriner Orum

At age 80, R. Marriner Orum is still an avid bike enthusiast. He lives in the hills of Eugene, Oregon and pedals up grades daunting to men half his age. "I'm slowing down a bit," he says, but his body still has the slender, sinewy musculature of

a man who has ridden many miles, and his eyes sparkle with the remembrance of many things seen.

He grew up in Philadelphia, the son of a machine shop owner who struggled to feed his family during the depression. After high school, a cousin got him a job in a Minnesota paper mill. There, he first fell in love with the great forests of the north.

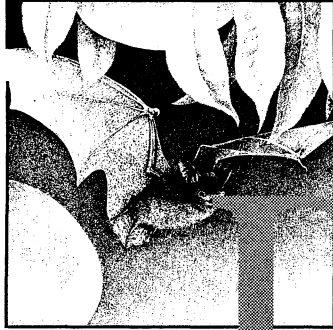
In 1941, he was drafted. "They asked me where I wanted to serve. I told them I wanted to be part of the ski troops, so they sent me to Louisiana. Not much snow there." He eventually served three years in the South Pacific moving with the demands of the war from New Caladonia to Guadalcanal, to Fiji and the Solomon Islands and finally The Philippines. He survived the fighting and bouts of malaria and hepatitis, and returned home. "I was lucky," he said.

While in the South Pacific and not engaged in combat, he learned to love the jungles, the thick, scented tropical vegetation. After his discharge, he decided to pursue a career in forestry. In 1945 he got a summer job with the Forest Service, assisting

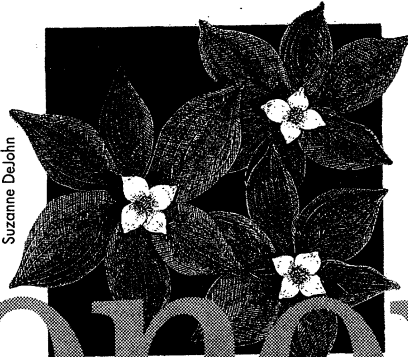
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### **Our Mission**

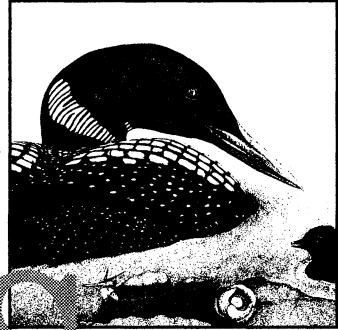
It is the mission of the Native Forest Council to provide *Visionary Leadership*, to ensure the INTEGRITY of forest ecosystems, without compromising people or forests.



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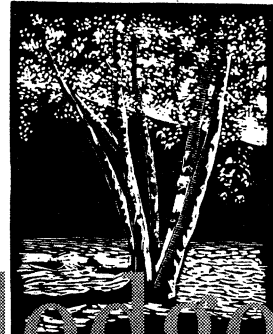
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# Past Present & Future

## Organizational Goals

*At a time when only 5% of America's original forests remain, it is unimaginable that debate still continues regarding how much to save.*

The Native Forest Council has therefore committed itself to:

- Preserving and protecting all remaining native forests on public lands.
- Ending all commercial logging and other extractive activity on public lands.
- Restoring the native biodiversity of public lands which have been logged and converted to tree farms.
- Saving American jobs by ending the practice of exporting raw and minimally processed logs.
- Advocating for economic assistance for timber communities and workers.

## Leading by example

Continued from first page of insert

a researcher on the Allegheny National Forest in Pennsylvania. The researcher, seeing his enthusiasm, convinced him to go back to school to earn a degree.

"I got my degree in 1949 and landed a job as a farm forester in Delaware." By 1952, he was working on the Umpqua National Forest in Oregon. His district was small and he remembers being concerned about the amount of timber the Forest Service was expected to cut. For four years he cruised timber sales, burned slash, and planted trees. He then moved to the Willamette National Forest where he continued preparing timber sales. "Every year the cut would go up," he said.

In 1962, he moved to Eugene. By then he was involved in land exchanges, donations, right-of-way appraisals, and scenic easements. "At one time when we did land exchanges, the government had to get the better of the deal. Then we traded value for value. That's no longer the case."

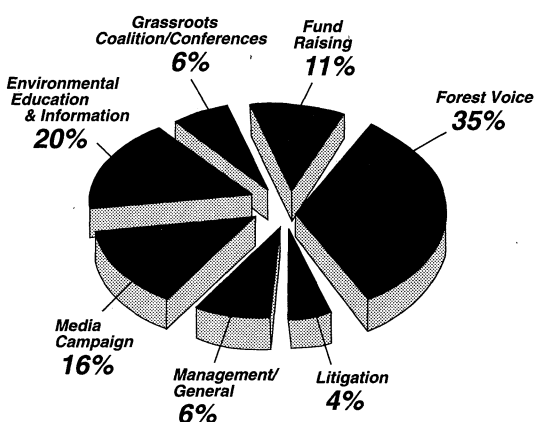
Having spent years on the ground in America's public forests, Mr. Orum concluded

there was too much emphasis on timber at the exclusion of other forest values. He wrote his first "activist" letter to the supervisor of the Willamette National Forest urging him to designate the entire Three Sisters "primitive area" as wilderness. His suggestion was ignored.

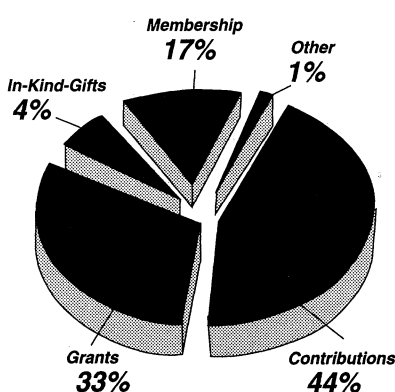
In 1967 he joined the Sierra Club and has been on the executive committee of the Many Rivers Group in Eugene for over 20 years. He has fought for the forests with wisdom and grace, and the power of his experience. We are pleased that he is also a supporter of the Native Forest Council. "At first I thought Zero Cut was extreme," said Mr. Orum, "but you look around the country, at over-logged private lands, and you realize the only real forests left are on public lands. And they should be saved."

Last year, Mr. Orum made an extraordinary gesture of support on behalf of the forests he loves. He sold a two bedroom home, and rather than pay excessive capital gains, he donated the proceeds to three organizations whose work he supports. We were proud to be among them, and are deeply grateful for Mr. Orum's gift of \$18,679. We honor both his commitment and his position as an elder in the forest movement.

## Expenses



## Revenues



## Financial Summary

Native Forest Council 1996 Summary of Revenues/Support & Expenses and Changes in Fund Balances

	Year Ended 12-31-96	Year Ended 12-31-95
<b>Revenues/Support</b>		
Membership	35,566	\$39,923
Contributions	90,536	119,578
Grants	68,100	60,454
In-Kind-Gifts	9,256	63,487
Other	2,462	3,912
<b>Total Revenue/Support</b>	<b>205,920</b>	<b>287,35</b>
<b>Expenses</b>		
Environmental Education & Information	40,917	72,592
Forest Voice	71,751	55,350
Litigation	9,319	73,185
Media Campaign	33,541	48,268
Grassroots Coalition/Conferences	13,093	18,464
Management/General	13,421	22,824
Fund Raising	22,416	28,506
<b>Total Expenses</b>	<b>204,458</b>	<b>319,189</b>
Excess (Deficiency) of Revenues/Support Over Expenses		(31,834)
Fund Balance - Beginning of Year	37,390*	69,224 *
Fund Balance - End of Year	38,852	37,390

\* after prior period adjustment

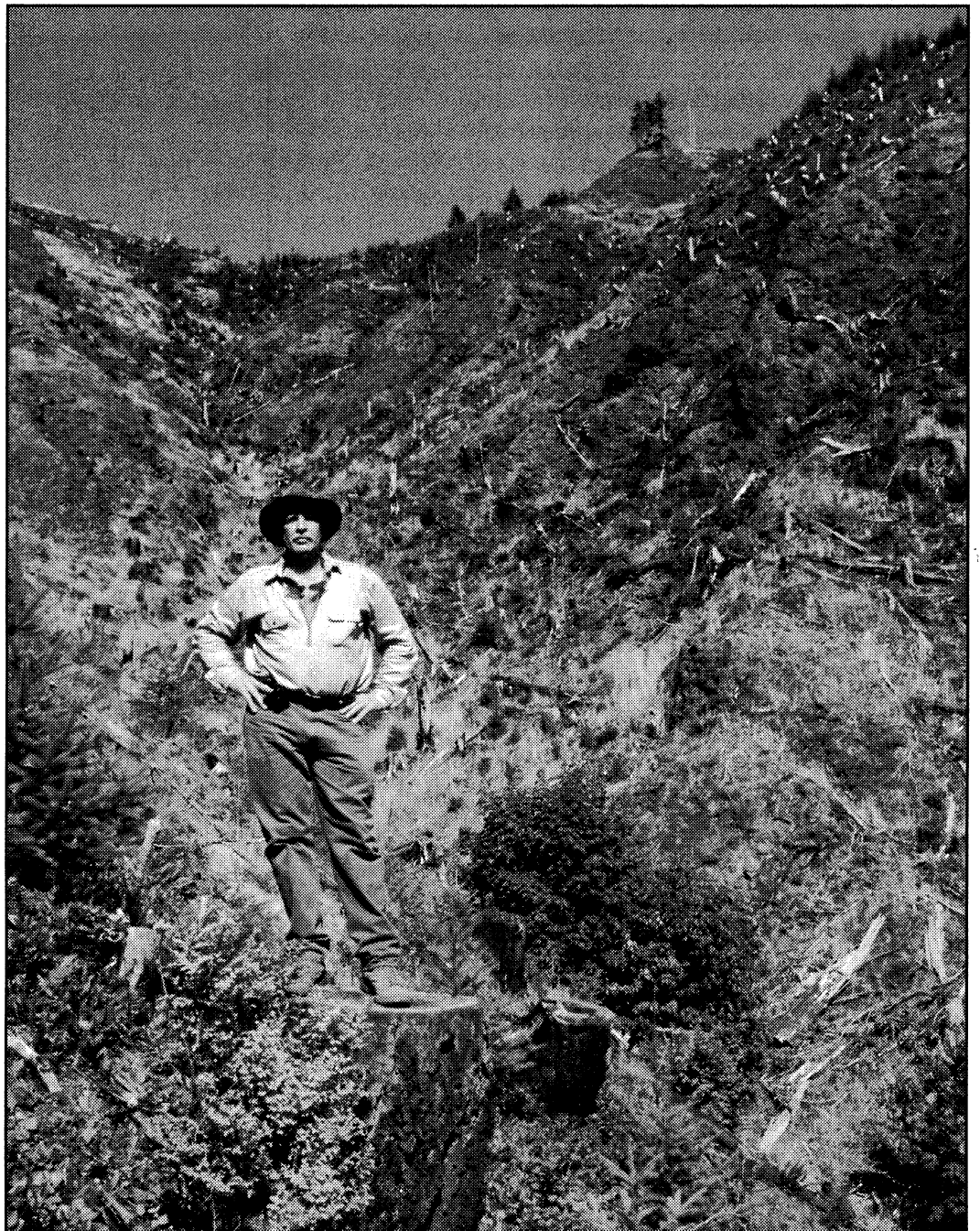
**Forestry's Ugly Face, continued from page 3**

and demeaning to their forest and they wanted it stopped. The agency, of course, didn't listen to the public it supposedly served, and the once magnificent Mt. Hood, cut into ugly pieces, became the satellite poster image for a national anti-logging campaign.

In a minimal effort to reduce conflict over clearcutting, private and federal forest managers have changed the names, but not the game. Clearcuts with a sprinkling of leave trees are called "leave-tree" cuts, "retention" cuts, "partial" cuts, and "shelterwoods." In all these fuzzy substitutions, the focus of the logging is still to remove at least 85% of the native timber and replant with alien seedlings.

Perhaps the most insidious aspect of the clearcut is that it is a common indicator of overcutting. "Sustained yield" forestry's much touted standard, where forest harvest does not exceed growth, has yet to be attained by clearcutting in federal forests. The Shelton Sustained Yield Unit in Washington's Olympic National Forest, mutually "managed" by industry, the Forest Service, and citizens, provides a classic example. The timber industry's pressure to overcut went unchecked, and the Shelton's steep landscape was stripped of high volume native stands which struggling replacement plantations have failed to renew. Often photographed by environmentalists, the ugly Shelton Sustained Yield Unit mocks its name.

Across Puget Sound is another federal forest managed with a lighter hand and a longer vision. Rejecting clearcuts, the institutional wisdom of the day, the foresters in charge of the Army's Fort Lewis forest chose more attractive and astute alternatives like thinning to encourage growth in timber stands rather than removing them. Over the last thirty years, while surrounding federal forests were being clearcut and overcut, careful stewardship of the Fort Lewis forest has more than doubled the standing volume



Roy Keene in the Shelton Sustained Yield Unit

photo courtesy of Roy Keene



The selectively cut Fort Lewis forest

photo courtesy of Roy Keene

of timber. By maintaining a mosaic of maturing forests, Army foresters have also maintained a diverse refuge for the threatened plant and wildlife species within the Sound.

Loss of habitat and failed plantations are a sad but frequent reminder of the silvicultural folly that drives deforestation. For every robust plantation shown on a timber industry television ad, there are many others that aren't doing as well. Root bound, moisture stressed, sun-scalded, nutrient deprived, blighted, attacked by beetles or browsing animals, understocked, overcrowded, washed away, genetically unadaptable, unable to thrive on parched and pounded earth, planted seedlings are not replacing the mature trees they were predicted to "renew."

While touring Forest Service managers through the private Collins Almanor forest in Northern California, I walked them out of a selectively logged stand of mature pines onto a barren desert of stumps. We had entered a unit in the adjacent Lassen National Forest that had been clearcut seven years earlier. Reforestation attempts had failed, with only a few struggling saplings surviving deforestation. When an agency forester attempted to justify this clearcut, I suggested that if this ugly site was indicative of his "science," an uninspired logger could easily replace him.

Forestry needs an image as noble as it's calling, a face lift for the 21st century. As long as clearcuts gape at travelers, degrade watersheds, decimate fish and wildlife, and contribute to the loss of human life and property, the public will rightfully view forestry as nothing more than destruction.

A late friend of mine, forester emeritus Gordon Robinson, summed it up nicely: "Good forestry," said Gordon, "looks good to the public eye." Clearcutting's promoters may cloak forestscapes with the ugly tatters of their "science," but to most of us, it is clear that the forests have been obscenely stripped bare.

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# What Price Nature?

by Victor Rozek

*What is a living planet worth?*

*Can we put a price on Nature's services?*

*Yes, say scientists.  
About \$30 trillion a year!*



photo by Jim Hosmer

Grapple, for a moment, with the complexities of establishing life on the moon. Not just for short-term visits during which you would be sealed in capsules or haute space couture wholly dependent on artificial life-support systems; but a lunar colony that is self-sustaining, able to enjoy the quality and richness of life roughly equivalent to what we take for granted on Earth. Assume, for the sake of ease, that you are not constrained by space technology because the moon already has a hospitable atmosphere with an adequate ozone layer, an inviting climate, good water, and potentially arable soil. Now, what would you bring?

Food, certainly. To begin, you would have to select among all the plant and animal species (both terrestrial and aquatic) consumed for food, drink, and spices. An extensive list. You'd require a fiber source and wood for building material. Illness would be of concern, so you would want an abundant supply of plants from which pharmaceuticals are derived. Also, plants which can be converted to industrial products such as rubber, wax, and oils. Do you enjoy house plants? Want to start a garden? Like to hike through a forest teeming with wildlife? The choices are expansive. Of course you'd bring the family pet, and you might want to ensure that your kids don't miss seeing such wonders as elephants or butterflies, or brightly colored parrots. The list is beginning to get long.

Your space ship is filling up, but that's just the beginning. All of the lifeforms you have chosen in turn depend on other lifeforms for their survival. Birds, bats, and insects pollinate plants and flowers; grasses and trees hold the soil in place, regulate the hydrological cycle, and provide the animals with food and shelter; bacteria, fungi, and small animals make the soil fertile and break down waste and dead organic matter. And so on.

The food chain is more accurately represented as a pyramid: it takes a lot of life at the bottom to support a little life at the top. Which lifeforms would you bring? Which could you afford to leave behind? And how would you know if you had the right mixture? Bring the wrong combinations, and your crops will fail, your forests will wither, and your animals will die.

The fact is, says Gretchen C. Daily--Bing Interdisciplinary Research Scientist in Stanford's Department of Biological Sciences, and the editor of *Nature's Services* an extraordinary book on the value of ecosystems--that no one knows precisely which, or even approximately how many, species are required to sustain human life.

The complexity is far greater than we imagine. The single issue of soil fertility provides a revealing example. Soil organisms, Daily notes, are crucial to the chemical conversion and transfer of essential nutrients to higher plants.

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***"Ecosystem services are absolutely essential to civilization; they are priceless. Yet their lack of price has contributed to a widespread lack of awareness of their very existence, and to a corresponding misimpression that the ecosystems that supply them lack value."***

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The abundance of soil organisms is absolutely staggering. Under a square yard of Danish pasture, for instance, the soil was found to be inhabited by roughly 50,000 small earthworms and their relatives, 50,000 insects and mites, and nearly 12 million roundworms. And those numbers are tiny compared to the number of soil microorganisms. A pinch of fertile soil may contain over 30,000 protozoa, 50,000 algae, 400,000 fungi and unknown numbers and types of bacteria with billions of individuals in each species. Many of the microscopic organisms that inhabit the land have never been adequately studied or even seen.

What should you bring to assure lush, sustained plant growth, soil renewal, and waste decomposition? In what combinations? What can you leave behind?

This experiment, on a far more modest scale, was actually attempted in the Arizona desert in a glassed compound called Biosphere II. The

project sought to "create" a self-contained, life sustaining ecosystem of sufficient potency to keep eight people alive for two years.

Paul Hawkin describes the result. "At the end of 17 months, the humans showed signs of oxygen starvation from living at the equivalent of an altitude of 17,500 feet. Of the original 25 small animal species in Biosphere II, 19 became extinct. Of course design flaws are inherent in any prototype, but the fact remains that \$200 million could not maintain a functioning ecosystem for eight people [on earth] for 17 months. We add eight people to the planet every three seconds."

From the perspective of life support, it is pointless to view the environment as an "issue". It is the context in which all other issues are decided and it is a context, Daily warns, that remains largely mysterious and uncopiable. "Ecosystem services operate on such a grand scale and in such intricate and little-explored ways that most could not be replaced by technology," she argues. "Ecosystem services are absolutely essential to civilization; they are priceless. Yet their lack of price (they are typically not traded in economic markets) has contributed to a widespread lack of awareness of their very existence, and to a corresponding misimpression that the ecosystems that supply them lack value."

What *Nature's Services* seeks to do, is to put a price tag on the ecosystem benefits we take for granted. Thirty-two respected scientists and economists from around the world contributed to "the first systematic attempt to quantify the importance of environmental protection, using the tools of economic-utility assessment and cost-benefit analysis."

Preliminary estimates are staggering. The authors calculate that the aggregate value of ecosystem services rivals the total GNP of the planet, placing the amount at roughly \$30 trillion dollars annually. Maintaining the health of the systems that provide these services, the authors argue, makes absolute economic sense, and should become economic priority. Janet Abramovitz, senior researcher at the Worldwatch Institute and author of the State of the World 1997 chapter "Valuing Nature's Services," concurs and cites these examples:

***The narrowing of nature to broaden consumption has unintended economic impacts: people must pay for the services nature can no longer provide.***

***Nature is not fragile in the evolutionary sense... What is truly fragile are the conditions that support human life.***

\$\$\$ The Adirondacks in upstate New York provide clean drinking water for a city of 8,000,000 people. Protected more than a century ago as "forever wild" by the state legislature, this forested region has served five generations of urban dwellers. Were those watersheds to be logged, not only would the city's water supply be disrupted, but water treatment plants would have to be constructed to combat the turbidity. The cost of building such facilities is estimated at \$7 billion dollars.

\$\$\$ Meeting the basic needs for water and sanitation in the developing world is estimated to cost \$300 billion over 10 years. On the other hand, protecting watersheds costs only one percent, or \$3 billion.

\$\$\$ Restoration of just half of the upper Mississippi Basin's lost wetlands could control a flood of the magnitude of the 1993 disaster that cost \$12-16 billion. The restoration would affect only 3 percent of the region's land, but could prevent a repeat of that catastrophe.

\$\$\$ When non-timber forest values such as fishing, gathering and selling locally-used products, and flood and erosion control are included in economic calculations, the numbers show that the most profitable strategy--in industrial and developing countries alike--is to keep a forest standing. In Indonesia's Bintuni Bay, intact mangrove forests yield \$4,800 per hectare, year after year, for a variety of goods and services, including timber. Managing for timber alone would yield only \$3,600 per hectare for just a few years.

\$\$\$ "Minor" forest products have major value. The global trade in rattan--a tropical forest vine that is woven into furniture--is worth \$2.7 billion each year and employs a half-million people in Asia alone. In Thailand, rattan exports are worth 80 percent of the legal forest product exports.

\$\$\$ Once viewed as wastelands, wetlands are now recognized for their services of cleansing water, recycling nutrients, recharging aquifers, and controlling floods and storms, as well as supporting fish and wildlife. Some wetlands near cities have measured values of

\$40,000 per hectare for these services. Yet despite their demonstrated economic value, the U.S. and Europe have lost more than half of their wetlands, and Asia, 27 percent.

\$\$\$ Destroying coastal wetlands dramatically increases flood and storm damage and reduces coastal fish catches. In the U.S. alone, 70-95 percent of fisheries over \$3 billion at dockside are dependent on these threatened coastal nurseries.

\$\$\$ The value of coastal mangrove ecosystems for flood control alone has been estimated at \$300,000 per kilometer in Malaysia, which represents the cost of building rock walls to replace the service.

\$\$\$ Eighty percent of the world's crops, and one-third of U.S. agricultural output, depend on pollinators like bees, insects, bats, and birds whose populations are in jeopardy. More than half of the nation's honeybee colonies have been lost since World War II, most in the last five years. Pollination services provided by bees are worth 100 times more than the value of their honey.

\$\$\$ Each wild blueberry bee pollinates 15-19 liters of blueberries in its life. Their value is so great the blueberry farmers call them "flying \$50 bills."

\$\$\$ Many modern agricultural practices actually limit crop productivity by harming pollinators. Pesticides reduce cotton yields 20 percent by killing pollinators. Plowing disturbs bee nesting sites. Just one hectare of unplowed land provides enough nesting habitat for wild bees to pollinate 100 hectares of alfalfa.

\$\$\$ Crop improvements such as disease resistance and improved yields come from breeding with wild relatives of domestic crop plants. Nature's genetic crop library has added an estimated \$66 billion to the global economy. However, wild crop gene pools--called centers of diversity--now exist in only twelve locations around the world, and are rapidly being destroyed by development.

In *Earth in the Balance*, Al Gore discusses the loss of natural diversity and its potential impact on the global food supply: "...virtually the entire rice crop in southern and eastern Asia was threatened in the late 1970s by a disease called grassy stunt virus, which was spread by brown hopper insects. The threat to the food supply of hundreds of millions of people was so potent that scientists at the International Rice Research Institute in the Philippines frantically searched through 47,000 varieties in gene banks throughout the world for a gene to resist the virus. Finally, they found it in a single wild species from a valley in India. But this plant wasn't on sacred ground and soon afterward the valley was flooded by a new hydroelectric project. What if the same search had taken place today?"

\$\$\$ A long recognized service of nature is providing life-saving medications. From antibiotics and aspirin to new heart treatments, medicines from natural products save lives, heal the sick, and help fuel a \$40 billion a year industry. The majority of plant species have never been investigated for their curative properties, yet many species are lost before their value is even understood. Taxol, a promising treatment for ovarian and breast cancer, was discovered in the Pacific Yew tree, a species long discarded and burned as "trash" during logging operations.

We are, without exception, all subsidized. Beyond providing food, fiber and minerals which serve as a base for industrial production, natural

systems also detoxify and recycle waste; purify air and water; regenerate and maintain soil fertility; stabilize global and regional climate; pollinate crops and other plants; control pests; ensure the disease resistance of plants; mitigate weather extremes like flood and drought; offer protection from the sun's harmful ultraviolet rays; and provide the spiritual solace, aesthetic beauty, and intellectual stimulation that elevate the human spirit. In short, ecosystem functions generate and maintain the conditions which make human life possible and pleasing.

The fact that much of our economic policy is directed against nature will not force nature to capitulate. But it is compromising the life-support systems which directly sustain us. The narrowing of nature to broaden consumption has unintended economic impacts: people must pay for the services nature can no longer provide. In most cases, however, because of the scope and complexity of the systems involved, money and technology will prove wholly inadequate to the task.

Nature is not fragile in the evolutionary sense. It has survived radical changes in atmospheric composition, ice ages, meteor strikes, floods, droughts, volcanic eruptions, and the hiccup that is the industrial revolution. It reigned for billions of years before the first humans learned to walk upright, and should we alter the conditions that allow our presence here to continue, it will survive amiably without us.

What is truly fragile are the conditions that support human life. We have evolved to live comfortably and safely within a very narrow range of conditions. If sufficiently disturbed or systemically altered, degradation may accelerate without our direct participation, like a boulder rolling down hill out of control. At that point, reversing the damage will not be possible in timeframes meaningful to humans.

In calculating the economic value of nature's services, the authors do not seek to place utilitarian value above intrinsic value or existence value (I will perhaps never visit the Galapagos Islands, but would be willing to support their continued protection, satisfied to know that they simply exist in a relatively undisturbed state.) The authors offer a wake-up call to decision makers across the globe in the only language they seem to understand; urging a full accounting, a full understanding of what is being lost and what is gained; providing a marker on the difficult road toward sustainability, and presenting us all with the opportunity--through the colorless lense of economics, and the bright prism of diversity--to see the full value of the forest *and* the trees.

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Eight years ago, the Native Forest Council investigated the economics of the forest issue and found public land logging to be indefensible. We continue to call for a full accounting of the services a standing forest provides. Interested readers can help by writing their representatives and insisting that non-extractive values such as flood abatement, climate moderation, watershed services, fisheries, recreation opportunities, annually-renewable products, and biological diversity be fully costed in any proposed management of public lands. We also invite readers to join the Native Forest Council and support our effort to end logging in America's national forests.

*Nature's Services:  
Societal Dependence on Natural Ecosystems  
Edited by Gretchen C. Daily  
Published by Island Press \$24.95*

# Natural Capitalism

by Paul Hawken

## Can industry flourish and not destroy nature?

Somewhere along the way to free-market capitalism the United States became the most wasteful society on the planet. Most of us know it. There is the waste we can see: traffic jams, irreparable VCRs, Styrofoam coffee cups, landfills; the waste we can't see: Superfund sites, greenhouse gases, radioactive waste, and vagrant chemicals; and the social waste we don't want to think about: homelessness, crime, drug addiction, our forgotten infirm and elderly.

Nationally and globally, we perceive social and environmental decay as distinct and unconnected. In fact, a humbling design flaw deeply embedded in industrial logic link the two problems. Toto, pull back the curtain: You won't find the efficient dynamo of industrialism back there. Embarrassingly, even by its own standards, industrialism is extraordinarily inefficient.

Modern industrialism came into being in a world very different from the one we live in today: fewer people, less material well-being, plentiful natural resources. As a result of the successes of industry and capitalism, these conditions have reversed. Today, more people are chasing fewer natural resources.

But industry still operates by the same rules, using more resources to make fewer people more productive. The consequence: massive waste—of both resources and people.

Decades from now we may look back at the end of the 20th century and ponder why business and society ignored these trends for so long—how one species thought it could flourish while nature ebbed. Historians will show, perhaps, how politics, the media, economics, and commerce created an industrial regime that wasted our social and natural environment and called it growth. As author Bill McKibben put it, "The laws of Congress and the laws of physics have grown increasingly divergent, and the laws of physics are not likely to yield."

The laws we're ignoring determine how life sustains itself. Commerce requires living systems for its welfare—it is emblematic of the times that this even needs to be said. Because of our industrial prowess, we emphasize what people can do, but tend to ignore what nature does. Commercial institutions, proud of their achievements, do not see that healthy living systems—clean air and water, healthy soil, stable climates—are integral to a functioning economy. As our living systems deteriorate, traditional forecasting and business economics become the equivalent of house rules on a sinking cruise ship.

One is tempted to say that there is nothing wrong with capitalism except it has never been attempted. Our current industrial system is based on accounting principles that would bankrupt any company. Conventional economic theories will not guide our future for a simple reason: They have never placed "natural capital" on the balance sheet. When it is included, not as a free amenity or as a putative infinite supply, but as an integral and valuable part of the production process, everything changes. Prices, costs, and what is and isn't economically sound alter dramatically.

Industries destroy natural capital because they have historically benefited from doing so. As businesses successfully created more goods and jobs, consumer demand soared, compounding the destruction of natural capital. All that is about to change.

### Natural Capital

Everyone is familiar with the traditional definition of capital as accumulated wealth in the form of investments, factories, and equipment. "Natural capital," on the other hand, comprises the resources we use, both nonrenewable (oil, coal, metal ore) and renewable (forests, fisheries, grasslands). Although we

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***Conventional economic theories will not guide our future for a simple reason: They have never placed "natural capital" on the balance sheet.***

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usually think of renewable resources in terms of desired materials such as wood, their most important value is the *services* they provide. These services are related to, but distinct from, the resources themselves. They are not pulpwood but forest cover, not food but topsoil. Living systems feed us, protect us, heal us, clean the nest, let us breathe. They are the "income" derived from a healthy environment: clean air and water, climate stabilization, rainfall, ocean productivity, fertile soil, watersheds, and the less-appreciated functions of the environment such as processing waste, both natural and industrial. A recent book edited by Gretchen C. Daily, *Nature's Services*, (see *What Price Nature*, page 14) identifies trillions of dollars of critical ecosystem services received annually by commerce.

The \$200 million Biosphere II experiment stands as a reality check for anyone who doubts the innate value of ecosystem services. In 1991, eight people entered a sealed, glass-enclosed, three-acre living system, where they expected to remain alive and healthy for two years. Instead, air quality plummeted, carbon dioxide levels rose, and oxygen had to be pumped in from the outside to keep the inhabitants healthy. Nitrous oxide levels inhibited brain function. Cockroaches flourished while insect pollinators died, vines choked out crops and trees, and nutrients polluted the water so that the residents had to filter it by hand before they could drink it. Of the original 25 small animal species in Biosphere II, 19 became extinct. At the end of 17 months, the humans showed signs of oxygen starvation from living at the equivalent altitude of 17,500 feet. Of course, design flaws are inherent in any prototype, but the fact remains that \$200 million could not maintain a functioning ecosystem for eight people for 18 months. (We add eight people to the planet every three seconds.)

The lesson of Biosphere II is that there are no man-made substitutes for essential natural services. We have not come up with an economical way to manufacture watersheds, gene pools, topsoil, wetlands, river systems, pollinators, fisheries, or tropospheres.

Technological fixes can't solve problems of soil fertility or guarantee clean air, biological diversity, pure water, and climatic stability; nor can they increase the capacity of the environment to absorb 23 billion tons of waste created annually in America alone.

### Natural capital as a limiting factor

Until the 1970s, the concept of natural capital was largely irrelevant to business planning, and it still is in most companies. Throughout the Industrial Revolution, economists considered manufactured capital—money, factories, etc.—the principal factor in industrial production, and perceived natural capital as a marginal contributor. The exclusion of natural capital from balance sheets was an understandable omission. There was so much of it, it didn't seem worth counting. Not any longer.

Historically, economic development has faced a number of limiting factors, including the availability of labor, energy resources, machinery, and financial capital. The lack of a limiting factor can prevent a system from growing. If marooned in a snowstorm, you need water, food, and warmth to survive. Having more of one factor cannot compensate for the absence of the other. Drinking more water will not make up for lack of clothing if you are freezing.

In the past, by increasing the limiting factor, industrial societies continued to develop economically. It wasn't always pretty: Slavery "satisfied" labor shortages, as did immigration and high birthrates; and mining companies exploited coal, oil, and gas to meet the increased energy demands. The need for labor-saving devices provoked the invention of steam engines, spinning jennies, cotton gins, and telegraphy. Financial capital became universally accessible through central banks, credit, stock exchanges, and currency exchange mechanisms.

Because economies grow and change, new limiting factors occasionally emerge. When they do, massive restructuring occurs. Nothing works as before. Behavior that used to be economically sound becomes unsound, even destructive.

As we approach the 21st century, economist Herman Daly cautions that we are facing a historic juncture in which, for the first time, the limits to increased prosperity are not the lack of man-made capital but natural capital. The limits to increased fish harvests are not boats, but productive fisheries; the limits to irrigation are not pumps or electricity, but viable aquifers; the limits to pulp and lumber production are not sawmills, but forests.

Like all previous limiting factors, the emergence of natural capital as an economic force will pose a problem for reactionary institutions. For those willing to embrace the challenges of a new era, however, it represents an enormous opportunity.

### Bad information

Our financial system tends to conceal the value of natural capital. Money and prices and markets don't give us exact information about how much our



suburbs, freeways, and spandex cost. But our environment accurately reflects it—our beleaguered air and watersheds, our overworked soils, our decimated inner cities.

Let's begin with a startling possibility: The United States economy may not be growing at all, and may have ceased growing nearly 25 years ago. Obviously, we are not talking about the gross domestic product, measured in dollars, which has grown at 2.5 percent per year since 1973. Despite this growth, there is little evidence of improved lives, better infrastructure, higher real wages, more leisure and family time, and greater economic security.

The logic here is simple, although unorthodox. We don't know if America's economy is growing because the indices we rely upon, such as the GDP, don't measure growth. The GDP measures money transactions on the assumption that every time a dollar changes hands, economic growth occurs. But there is a world of difference between financial exchanges and growth. Compare an addition to your home to a two-month stay in the hospital for injuries you suffered during a mugging. Say both cost the same. Which is growth? The GDP makes no distinction. Or suppose the president announces he will authorize \$10 billion for new prisons to help stem crime. Is the \$10 billion growth? Or what if a train overturns next to the Sacramento River and spills 10,000 gallons of atrazine, poisoning all the fish for 30 miles downstream. Money pours into the cleanup, the hatchery releases, the announcements warning people about tainted fish, and the lawsuits against the railroad and the chemical company. Growth? Or loss?

Currently, economists count most industrial, environmental, and social waste as GDP, right along with bananas, cars, and Barbie dolls. Growth includes *all* expenditures, regardless of whether society benefits or loses. This means the cost of emergency room services, prisons, toxic cleanups, homeless shelters, lawsuits, cancer treatments, divorces, and every piece of litter along the side of every highway.

Instead of counting decay as economic growth, we need to subtract decline from revenue to see if we are getting ahead or falling behind. Unfortunately, when it tallies the GDP, the government uses a calculator with no minus signs.

### Wasting resources means wasting people

Industry has always sought to increase the productivity of workers, not resources. And for good reason. Most resource prices have fallen for 200 years—due in no small part to the extraordinary increases in our ability to extract, harvest, ship, mine, and exploit resources. If the competitive advantage goes to the low-cost provider, and resources are cheap, then business will naturally use more and more resources in order to maximize worker productivity.

Such a strategy was eminently sensible when the population was smaller and resources were plentiful. But with respect to meeting the needs of the future, contemporary business economics is pre-Copernican. We cannot salve the social wounds or "save" the environment as long as we cling to an outdated industrial assumption that the summum bonum of commercial enterprise is to use more stuff and fewer people. Our thinking is backward: We shouldn't use more of what we have less of (natural capital) to use less of what we have more of (people). While we need to maintain high levels of labor productivity, critical to income and economic well-being, labor productivity that corrodes society amounts to burning the furniture to heat the house.

Our pursuit of greater labor productivity at all costs not only depletes the environment, it also depletes labor. Just as overproduction can exhaust topsoil,

overproductivity can exhaust a workforce. The underlying assumption that greater productivity would lead to greater leisure and well-being, while true for many decades, has become a bad joke. In the United States, those who are employed, and presumably becoming more productive, find they are working 100 to 200 hours more per year than 20 years ago. Yet for most people, real wages in the United States do not exceed 1973 levels.

In 1994, I asked a roomful of senior executives from Fortune 500 companies the following questions: Do you want to work harder in five years than you do today? Do you know anyone in your office who is a slacker? Do you know any parents in your company who are spending too much time with their kids? There was no response except a few embarrassed laughs. Then it was quiet—perhaps numb is a better word.

Meanwhile, people whose jobs have been downsized, re-engineered, or restructured out of existence are being told—as are millions of youth around the world—that we have created an economic system so ingenious that it doesn't need them, except perhaps to do menial service jobs. In parts of the industrialized world, unemployment and underemployment have risen faster than employment for more than 25 years. Nearly a third of the world's workers sense they have no value in the present economic scheme.

Clearly, when 1 billion willing workers can't find a decent job or any employment at all, we need to make fundamental changes. We can't—whether through monetary means, government programs, or charity—create a sense of value and dignity in people's lives when we're simultaneously developing a society that doesn't need them. If people don't feel valued, they will act out society's verdict in sometimes shocking ways. William Strickland, a pioneer in working with inner-city children, once said that "you can't teach algebra to someone who doesn't want to be here." He meant that urban kids don't want to be here at all, alive, anywhere on earth. That is how bad they feel. They try to tell us but we don't listen, so they engage in unprotected sex, drugs, violence, and risky behavior until we notice. By that time, their conduct has usually reached criminal proportions—and then we build more jails, blame the victims, and lump the costs of deterrence in the GDP.

The theologian Matthew Fox has pointed out that we are the only species without full employment. Yet we doggedly pursue technologies that will make that ever more so. Today we fire people, perfectly capable people, to wring out one more wave of profits. Some of the restructuring is necessary and overdue. But as physicists Amory Lovins and Ernst von Weizsäcker

have repeatedly advised, what we *should* do is fire the unproductive kilowatts, barrels of oil, tons of material, and pulp from old-growth forests—and hire more people to do so.

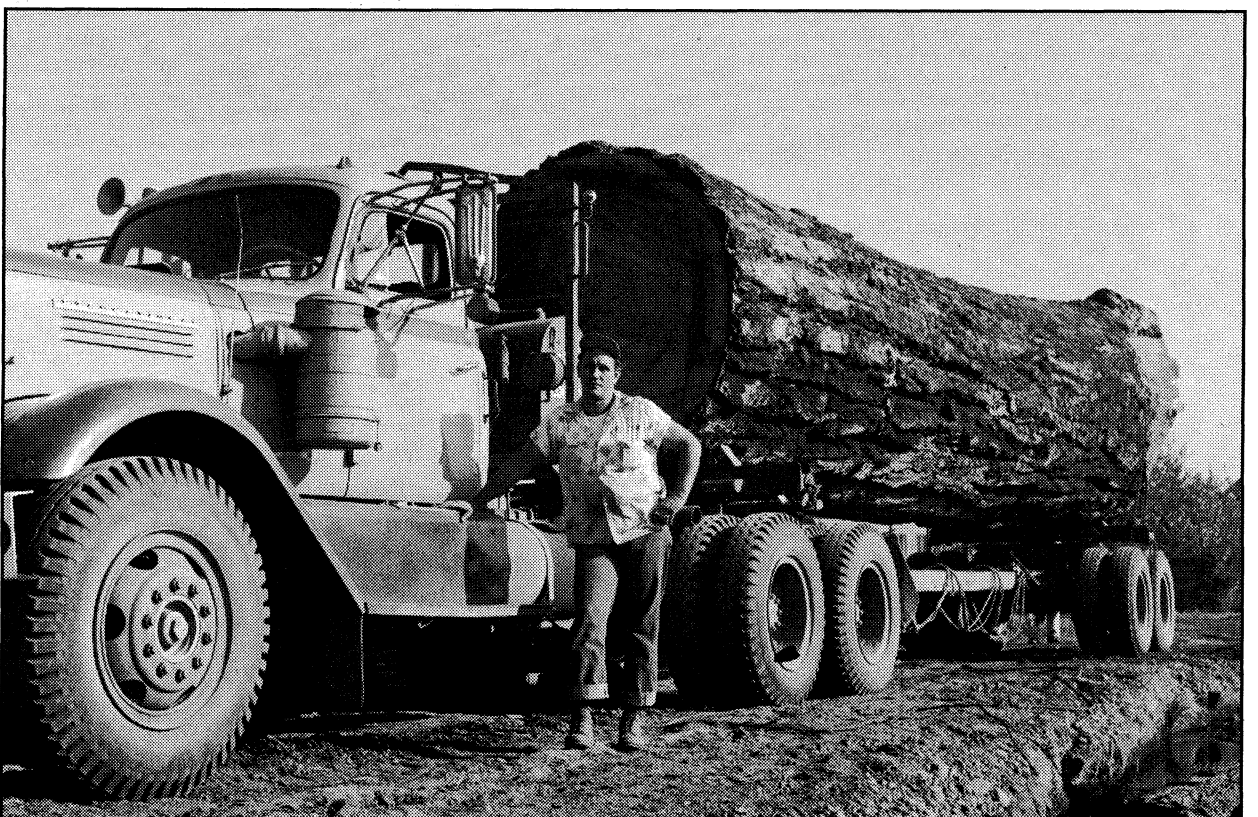
In fact, reducing resource use creates jobs. We can grow, use fewer resources, make more resources available to those who need them in the developing world, lower taxes, increase spending per capita on the needy, end federal deficits, reduce the size of government, and begin to restore damaged environments, both natural and social.

At this point, you may well be skeptical. The last summary is too hopeful and promises too much. If economic alternatives are this attractive, why aren't we doing them now? A good question. I will try to answer it. But, lest you think these proposals are Pollyannaish, know that my optimism arises from the magnitude of the problem, not from the ease of the solutions. Waste is too expensive; it's cheaper to do the right thing.

### Resource Productivity

Economists argue that rational markets make this the most efficient of all possible economies. That theory works as long as you use financial efficiency as the sole metric and ignore physics, biology, and common sense. The physics of energy and mass conservation, along with the laws of entropy, are the arbiters of efficiency, not *Forbes* or the Dow Jones or the Federal Reserve. The economic issue is: How much work (value) does society get from its materials and energy? This is a very different question than asking how much return it can get out of its money. If we already deployed materials or energy efficiently, it would support the contention that a radical increase in resource productivity is unrealistic. But the molecular trail leads to the opposite conclusion. Cars are barely 1 percent efficient thermodynamically, meaning that for every 100 gallons of gasoline, a car does only one gallon of actual work moving the passengers. Still, that looks great when compared with pesticides, which are about 0.0003 percent efficient (only 1/30,000th of a pesticide kills the insect in question; the remainder can kill things that weren't in question).

Look at the incandescent lightbulb: One hundred percent of the energy it uses heats up the filament—but only 8 percent of that actually converts the energy into light. (Some describe it as a space heater disguised as a lightbulb.) Modern carpeting remains on the floor for 8 to 12 years, after which it remains in landfills for 20,000 years or more—less than 0.06 percent efficiency. According to Robert Ayres, a leader in studying industrial metabolism, about



Spending down our natural capital

photo by Jim Hosmer



"While there may be no 'right' way to value a forest, there is a wrong way, which is to give it no value at all." P.H.

© Elizabeth Feryl

94 percent of the materials extracted for use in manufacturing durable products become waste before the product is even manufactured. More waste is generated in production, and most of that is lost unless the product is reused or recycled. Overall, America's material and energy efficiency is no more than 1 or 2 percent. In other words, American industry uses as much as 10 to 100 times more material and energy than theoretically required to deliver consumer services.

A watershed moment in the study of resource productivity occurred in 1976, when Amory Lovins published his now-famous essay "Energy Strategy: The Road Not Taken?" Lovins' argument was simple: Instead of pursuing a "hard path" demanding a constantly increasing energy supply, he proposed that the real issue was how best to provide the energy's "end use" at the least cost. Consumers are not interested in gigajoules, watts, or Btus, he argued. They want well-illuminated workspaces, hot showers, comfortable homes, effective transport. People want the *service* energy provides. Lovins pointed out that an intelligent energy system would furnish the service at the lowest cost. As an example, he compared the cost of insulation with that of nuclear power. The policy of building more nuclear power plants represented the "supply at any cost" doctrine that existed then (and still lingers today). He said it made no sense to use expensive nuclear power to heat homes, but then let that heat escape because the homes lacked insulation, which cost little. Lovins contended that we could make more money by saving energy than by wasting it, and that we'd find more energy in the attics of American homes than in all the oil buried in Alaska. His predictions proved correct although his proposals remained largely unheeded by the government. Today, the nuclear power industry has become moribund, not because of protests but because it is uncompetitive.

In 1976, energy experts used to argue about whether the United States could achieve energy savings of 30 percent. Twenty-one years later, having already obtained savings of more than 30 percent over 1976 levels—\$180 billion a year—experts now wonder whether we can achieve an additional 50 to 90 percent in energy savings. Lovins thinks we might possibly save as much as 99 percent. That may sound ridiculous, but certainly no more so than the claim that textile workers could use gears and motors to increase their efficiency a hundredfold would have sounded at the beginning of the Industrial Revolution. The resource productivity revolution is at a similar threshold. State-of-the-shelf technologies—fans, lights, pumps, superefficient windows, motors, and other products with proven track records—combined with intelligent mechanical and building design, could reduce American energy consumption by 90 percent.

State-of-the-art technologies, which are just being introduced, could reduce consumption still further. In some cases—wind power, for example—the technologies not only operate more efficiently and pollute less, they're more labor-intensive. Wind energy requires more labor than coal-generated electricity, but has proved competitive with it on a real-cost basis.

The resource revolution is starting to show up in all areas of business. In the forest products industry, clearinghouses now identify hundreds of techniques that can reduce the use of timber and pulpwood close to 75 percent without diminishing the quality of housing, the texture of books or paper, or the convenience of a tissue. In the housing industry, builders can use dozens of local or composite materials, including those made from rice and wheat straw, wastepaper, and earth, instead of studs, plywood, and concrete. Herman Miller currently designs furniture that can be reused and remanufactured a number of times; Steelcase, a subsidiary of DesignTex, a leading manufacturer of office furniture, sells fabrics that can be easily composted.

Architects, such as Peter Calthorpe, Andres Duany, Elizabeth Plater-Zyberk, et al., are designing communities that could eliminate 40 to 60 percent of driving needs. (One Minneapolis study estimated that just by using corner grocery stores, we could reduce gasoline usage by 10 percent.) Internet-based transactions may render many shopping malls obsolete. Down the road we'll have quantum semiconductors that store vast amounts of information on chips no bigger than a dot; diodes that emit light for 20 years without bulbs; ultrasound washing machines that use no water, heat, or soap; hyperlight materials stronger than steel; deprintable and reprintable paper; design-with-nature biological technologies that reduce or eliminate the need for insecticides and fertilizers; plastics that are both reusable and compostable; piezoelectric polymers that can generate electricity from the heel of your shoe or the force of a wave; and roofs and roads that do double duty as solar energy collectors. Some of these technologies, of course, may turn out to be impractical or have unwanted side effects. Nevertheless, these and thousands more are lining up like salmon to swim upstream toward greater resource productivity.

#### Resource Politics

How can government help speed these entrepreneurial "salmon" along? The most fundamental policy implication is simple to envision, but difficult to execute: We have to revise the tax system to stop subsidizing behaviors we don't want—depletion and pollution—and taxing behaviors we do want—income

and work. We need, incrementally but firmly, to transform the sticks and carrots that guide business.

Taxes and subsidies are information. Everybody, whether rich or poor, acts on that information every day. Taxes make something more expensive to buy; subsidies artificially lower prices. In the United States, we generally like to subsidize environmental exploitation, cars, big corporations, and technological boondoggles. (We don't like to subsidize clean technologies that will lead to more jobs and innovation because that is supposed to be left to the "market.") Specifically, we subsidize carbon-based energy production, particularly oil and coal; we massively subsidize a transport system that has led to suburban sprawl and urban decay; we subsidize risky technologies like nuclear fission and pie-in-the-sky weapons systems like Star Wars.

We subsidize the disposal of waste in all its myriad forms—from landfills, to Superfund cleanups, to deep-well injection, to storage of nuclear waste. In the process, we encourage an economy where 80 percent of what we consume gets thrown away after one use.

As for farming, the U.S. government covers all the bases: We subsidize agricultural production, agricultural nonproduction, agricultural destruction, and agricultural restoration. We provide price supports to sugarcane growers, and we subsidize the restoration of the Everglades (which sugarcane growers are destroying). We subsidize cattle grazing on public lands, and we pay for soil conservation. We subsidize energy costs so that farmers can deplete aquifers to grow alfalfa to make milk that we store in warehouses as surplus cheese that does not get to the hungry.

Then there is the money we donate to dying industries, federal insurance provided to floodplain developers, cheap land leases to ski resorts, deposit insurance given to the felons who control the United States' savings and loans, payments to build roads into wilderness areas so that privately held forest products companies can buy wood at a fraction of replacement cost, and monies to defense suppliers who have provided the Pentagon with billions of dollars in unnecessary inventory and parts.

Those are some of the activities we encourage. What we hinder, apparently, is work and social welfare, since we mainly tax labor and income, thereby discouraging both. In 1994, the federal government raised \$1.27 trillion in taxes. Seventy-one percent of that revenue came from taxes on labor—income taxes and Social Security taxes. Another 10 percent came from corporate income tax. By taxing labor heavily (though less heavily than in Europe), we encourage businesses not to employ people.

To create a policy that supports resource productivity will require a tax shift away from the social "good" of labor, toward the social "bad" of resource exploitation, pollution, fossil fuels, and waste. This revenue-neutral tax shift will not change the amount of revenue. In the new tax system, the use of resources will get taxed in the same way as labor does now. So what will change is the source of the tax but not the amount of revenue it generates—the shift will be "revenue neutral" because the level of tax will remain the same. Revenue neutral means for every dollar of taxation added to charge for resources or waste, one dollar gets subtracted from the tax on labor and capital formation. A tax shift does not change *who* pays the taxes but *what* is taxed. Labor is freed from taxation; higher taxes on waste and wasted resources make up the difference.

We can implement this tax shift gradually to give businesses a clear horizon in which to make strategic investments. Further, the time span I propose, 15 to 20 years, is long enough to permit businesses to continue depreciating their current capital investments over their useful life. The goal is to achieve zero taxation

on employees, either on income or on employer contribution. No revenue-neutral tax shift is uniform, and by itself, without adjustments for lower incomes, it risks becoming regressive, punishing those least able to pay. In order to avoid this, we must maintain the same tax burden on the country's various income groups as at present. The important element to change isn't the taxpayer base, but the purpose of the system. Other than corporate welfare, the Internal Revenue Code, with more than 9,000 sections, has no mission or goal. The only incentive in the existing tax system is to cheat or hire tax lawyers.

Of course, a tax shift alone will not change the way business operates; a broad array of policy changes in global trade, education, economic development, econometrics (including measures of growth and well-being), and scientific research must accompany it. For the tax shift to succeed, we must also reverse the wrenching breakdown of our democracy, which means addressing campaign finance reform and media concentration.

It is easier, as the saying goes, to ride a horse in the direction it is going. The costs of natural capital will inevitably increase. Therefore, we should start changing our tax system now, to get ahead of the curve. By shifting taxes to resources, we create powerful incentives to use fewer resources. This won't—as some in industry will doubtless claim—mean diminishing standards of living. It means an explosion of innovation that will create products, techniques, and processes that are far more effective than what they replace.

Some economists will naturally counter that we should let the markets dictate costs and that using taxation to promote particular outcomes is interventionist. But *all* tax systems are interventionist; the question is not whether to intervene but *how* to intervene.

A tax system should integrate cost with price. Currently, we dissociate the two. We know the price of everything but the cost of nothing. Price is what the buyer pays. Cost is what society pays. For example, Americans pay about \$1.50 at the gas pump, but gasoline actually costs up to \$7 a gallon when you factor in all the costs—Middle Eastern oil, for instance, costs nearly \$100 a barrel: \$25 to buy it from them and \$75 for the Pentagon to keep the Middle Eastern shipping lanes open to tanker traffic. Similarly, a pesticide may be priced at \$35 per gallon, but what does it cost society as the pesticide makes it way into wells, rivers, and bloodstreams?

### The Future

In 1750, few could imagine the outcome of industrialization. Today, the prospect of a resource productivity revolution in the next century is equally hard to fathom. But this is what it promises: an economy that uses progressively less material and energy each year and where the quality of consumer services continues to improve; an economy where environmental deterioration stops and gets reversed as we invest in increasing our natural capital; and finally, a society where we have more useful and worthy work available than people to do it.

A utopian vista? No. The human condition will remain. We will still be improvident and wise, foolish and just. Natural capitalism is not about making sudden changes, uprooting institutions, or fomenting social upheaval for a new social order. (In fact, these consequences are more likely if we don't address fundamental problems.) Natural capitalism is about making small, critical choices that can tip economic and social factors in positive ways. No economic system is a panacea, nor can it create a better person, but as the 20th century has painfully taught us, a bad system can certainly destroy good people.

Natural capitalism may not guarantee particular outcomes, but it *will* ensure that economic systems

more closely mimic biological systems, which have successfully adapted to dynamic changes over millennia. After all, this analogy is at the heart of capitalism, the idea that markets have a power that mimics life and evolution. We should expand this logic, not retract it.

For business, the opportunities are clear, and enormous. With population doubling sometime in the next century, and resource availability per capita dropping by a half to three-fourths over that same period, which factor in production do you think will go up in value—and which will go down? This basic shift in capital availability is inexorable.

While there may be no “right” way to value a forest or a river, there *is* a wrong way, which is to give it no value at all. How do we decide the value of a 700-year-old tree? We need only ask how much it would cost to make a new one. Or a new river, or even a new atmosphere.

Ironically, organizations like Earth First!, Rainforest Action Network, and Greenpeace have now become the *real* capitalists. By addressing such issues as greenhouse gases, chemical contamination, and the loss of fisheries, wildlife corridors, and primary forests, they are doing more to preserve a viable business future than are all the chambers of commerce put together. While business leaders hotly contest the idea of resource shortages, even they don't dare dispute that we are losing the living systems that provide us with trillions of dollars of natural capital: our soils, forest cover, aquifers, grasslands, oceans, and rivers. Moreover, these systems are diminishing at a time when global population is in the process of doubling, which will quadruple the demand for services.

Looking ahead, if living standards and population double over the next 50 years as some predict, and if we assume the developing world shared the same living standard as we do, we will triple our resource use (and attendant waste) in four decades. Publicly, governments, the United Nations, and industries all work toward this end. Privately, no one believes that we can increase industrial throughput by a factor of 16, considering the earth's limited and now fraying life support systems.

Economists, whose theories originated during a time of resource abundance, have difficulty understanding that the depletion of those resources will lay the

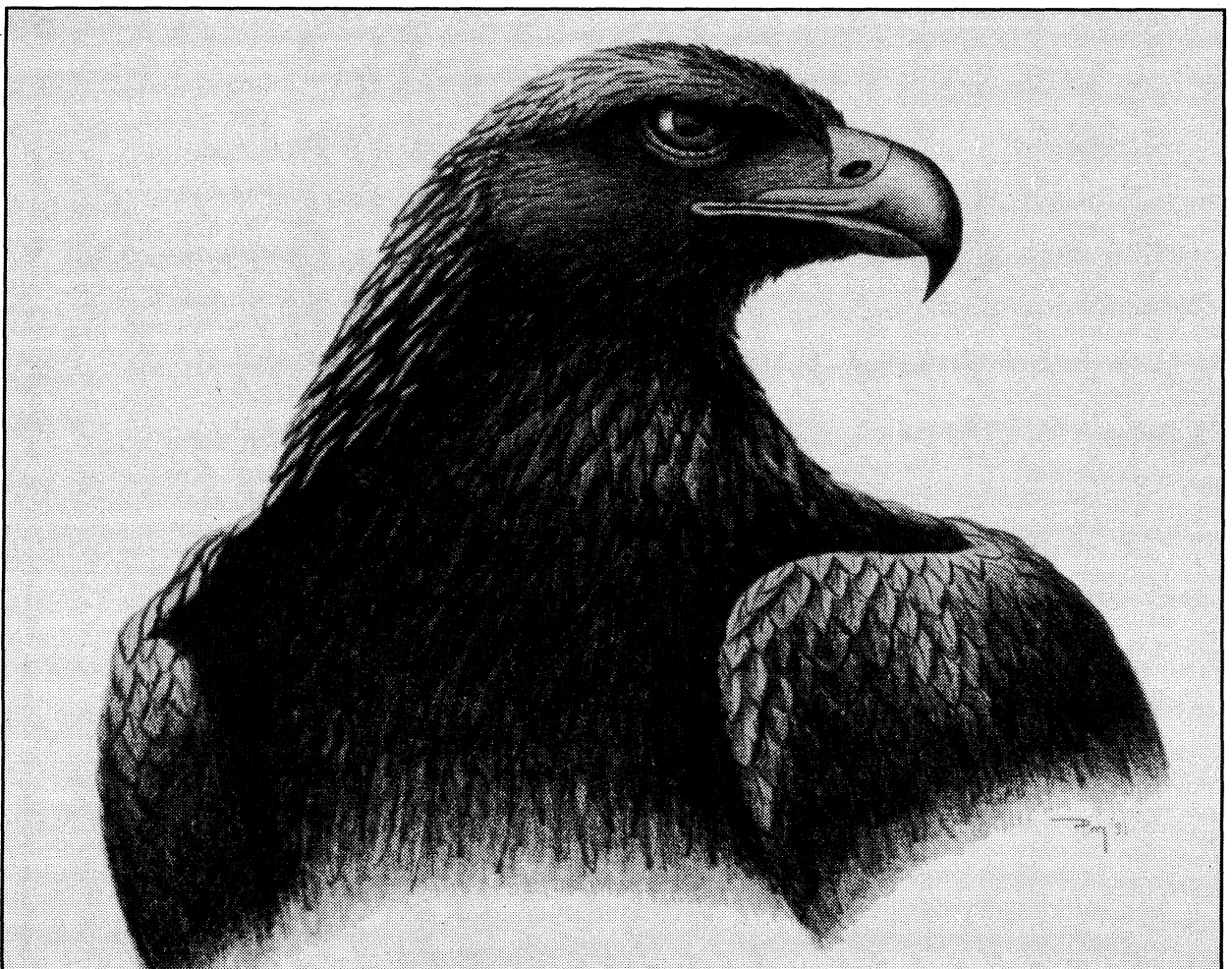
groundwork for the next stage in economic evolution. Modern industries have begun to reckon the powerful and much-ignored effects of our environmental exploitation. Also, companies no longer automatically provide workers with the “better life” promised by the traditional compact between management and labor. Our outmoded economic assumptions don't apply any longer, yet we still believe conventional economic growth will save us. If economic “growth” does save us, it will be anything but conventional.

The depletion of our resources puts our living systems, social stability, fiscal soundness, and personal health at risk. So why be hopeful? Because the solution is profitable, creative, and eminently possible. Societies may act stupidly for a period of time, but eventually they move to the path of least economic resistance. The loss of natural capital services, lamentable as it is in environmental terms, also affects costs. So far, we have created convoluted economic theories and accounting systems to work around the problem. You can win a Nobel Prize in economics and travel to the royal palace in Stockholm in a gilded, horse-drawn brougham believing that ancient forests are more valuable in liquidation—as fruit crates and Yellow Pages—than as a going and growing concern. But soon, I would estimate within a few decades, we will realize collectively what each of us already knows individually: It's cheaper to take care of something—a roof, a car, a planet—than let it decay and try to fix it later.

Despite the shrill divisiveness of media and politics, Americans remain remarkably consistent in what kind of country they envision for their children and grandchildren. The benefits of resource productivity align almost perfectly with what American voters say they want: better schools, a better environment, safer communities, more economic security, stronger families and family support, freer markets, less regulation, fewer taxes, smaller government, and more local control.

The future belongs to those who understand that doing more with less is compassionate, prosperous, and enduring, and thus more intelligent, even competitive.

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Will industry learn to value biological diversity?

## Stop logging on public lands

# Zero Cut Petition

The evidence is overwhelming that industrial logging has caused grave harm to forests, watersheds, and people. Recently, hundreds of landslides, widespread flooding, and death have resulted from the massive overcutting of public and private lands. The public is being asked to bear all the externalized costs of irresponsible logging operations--from taxpayer subsidies, damaged homes and buried roads, to higher insurance rates, fouled municipal water supplies, trashed streams and rivers, and the ultimate burden of losing family members.

Federal and state land management agencies are dominated by timber interests and staunchly refuse to protect the public interest. They continue to insist there is little direct connection between logging and its obvious impacts. The only way to protect ourselves and our forests is to kick special interests off of public lands. The time is long overdue. Surveys repeatedly show that logging public lands is not the will of the people. Join the growing chorus of voices who wish to preserve America's forest heritage. Urge the Congress to adopt Zero-Cut legislation for public lands.

Name (Please print)	Address	Telephone / fax / E-Mail

PLEASE RETURN TO: **Native Forest Council**, P.O. Box 2190, Eugene, OR 97402

## Native Forest Council

### An Invitation to Join

Back the winning team to preserve America's forests

- \$35 Standard Membership
- \$50 Supporter
- \$100 Contributor
- \$60 International Membership
- \$250 Sponsor
- \$\_\_\_\_\_ Other

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Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone \_\_\_\_\_ Fax \_\_\_\_\_ Email \_\_\_\_\_

- Check
- Money Order
- Charge my
- Visa
- Master Card

Acct# \_\_\_\_\_ Exp Date \_\_\_\_/\_\_\_\_/\_\_\_\_ Signature \_\_\_\_\_

Mail this form with check or money order payable to: **Native Forest Council PO Box 2190, Eugene, OR, 97402**  
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## About the Native Forest Council

The Native Forest Council is a non-profit, tax-deductible organization founded by a group of business and professional people alarmed by the willful destruction of our national forests. We believe a sound economy and a sound environment are not incompatible, and that current forestry practices are devastating to both.

Therefore, it is the mission of the Native Forest Council to provide visionary leadership, to ensure the integrity of native forest ecosystems, without compromising people or forests.

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## Forest Voice

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