

Rear Admiral Eugene J. Carroll

One truth stands out in history:

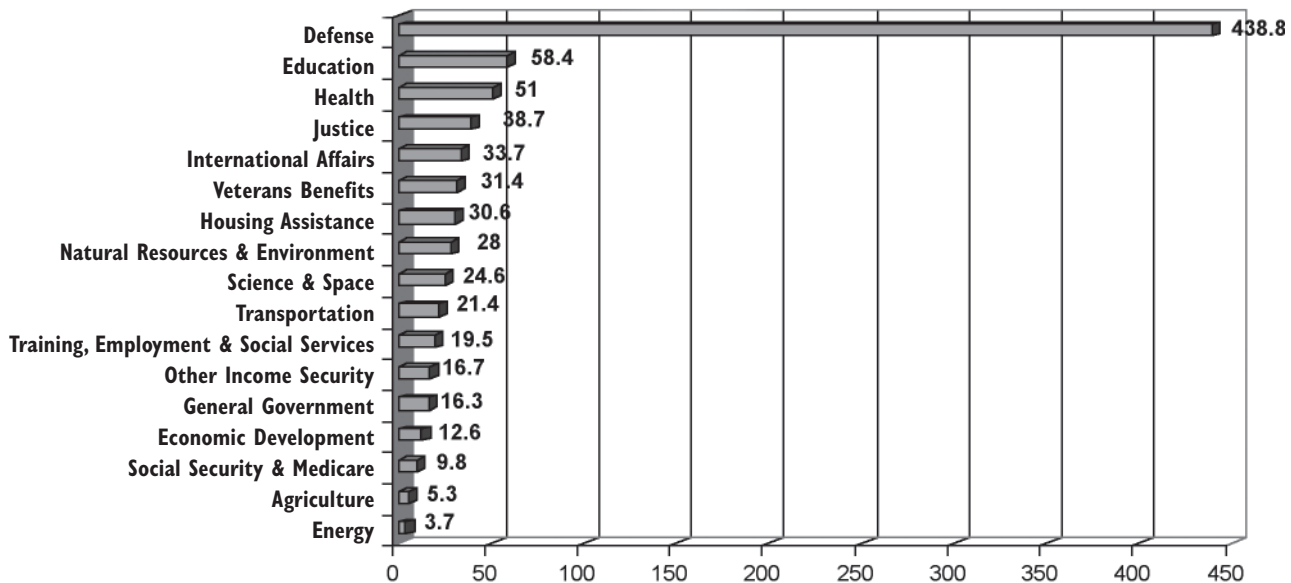
Every nation or empire which would subjugate others will ultimately fail if they attempt to base their domination on military force. There are two reasons for this. First, the people of the hegemon will finally refuse to make the sacrifices in blood and treasury necessary to maintain military control over others. Second, the subjugated will ultimately rise in opposition to reject the sovereign. Nevertheless, in the face of both history and common sense, the U.S. Congress and the Executive seem determined that they can deny both by making military power the primary instrument of U.S. foreign policy.

The future security and well-being of all Americans rests on far more than tanks,

aircraft carriers, and strategic bombers. In truth, there is no military solution to the ethnic, religious, political, and historic disputes which underlie the violence there. Our security, and the solutions to such problems in the future, will be promoted far more effectively through wise U.S. foreign policies that lead away from confrontation and make America the leader in a more peaceful, cooperative world order in the 21st Century.

Rear Admiral Eugene J. Carroll, U.S.N, former commander of the aircraft carrier U.S. Midway; first naval officer to serve as director of American military forces in Europe, where he was responsible for 7,000 nuclear weapons; former deputy director of The Center for Defense Information

FY'06 Discretionary Spending Request
(\$ in Billions)



Note: "Social Security & Medicare" refers to administrative costs associated with these programs, and not to actual benefits.

Source: OMB's "The Budget for FY 2006 Historical Tables," table 8.9

Additional Note: The \$438.8 billion shown for Defense does not include funding for actual combat operations in Iraq and Afghanistan, which for this year (FY'05) are roughly \$76 billion.

Janie Starr

The U.S. has a history of reconciliation with its enemies: Germany, Japan, China, and Vietnam to name a few. It is time we do the same with Cuba. There is no dragon here, no evil empire; this is a place of incessant sunshine, music, and laughter; it is a place of earnest dedication and formidable resilience. In short, Cuba is not going to capitulate. Instead of continuing to punish a people because of its government, I urge that we follow Canada's example, which is to work in partnership, create relationships, and in the process encourage a more open political system. It is trite to say, but bridges have always been more effective than walls in bringing about change.

I have been warned that to speak too positively about Cuba will weaken my credibility and that people will discount me as a naive tool of Fidel Castro. I would no more defend Castro to the people of the United States than I would extol the virtues of the U.S. Congress to the Cubans. I am speaking about the human beings who are the true pawns of an untenable political situation. I have friends in Cuba now, and when I close my eyes I see their faces, and I hear their voices. I am touched by their kindness and their ability to separate me from my government, and I wonder why we North Americans have such difficulty doing the same. How does it serve us to hold this grudge? Are we so in need of an enemy? What do we really fear? The hostility the United States bears toward Cuba demeans the citizens of both countries, and needs to be put to rest, so that, at last, the healing can begin.

Janie Starr, long-time volunteer with the Foundation for Global Community in Tacoma, Washington

TIMELINE November/December 2005

Senator Robert M. La Follette

Every nation has its war party. It is not the party of democracy. It is the party of autocracy. It seeks to dominate absolutely. It is commercial, imperialistic, ruthless. It tolerates no opposition.

In times of peace, the war party insists on making preparation for war. As soon as it is prepared for war, it insists on making war. If there is no sufficient reason for war, the party will make war on one pretext, then invent another, possibly more effective pretext after war is on.

Before war is ended, the war party assumes the divine right to denounce and silence all opposition to war as unpatriotic and cowardly.

Senator Robert M. La Follette (R-Wisconsin), 85 years ago in a speech called "The Right of the Citizen to Oppose War and the Right of Congress to Shape the War Policy"



Admiral Noel Gayler

Does nuclear disarmament imperil our security? No, it enhances it.

Admiral Noel Gayler, former Commander in Chief, Pacific Command



Robert S. McNamara

I would characterize current U.S. nuclear weapons policy as immoral, illegal, militarily unnecessary, and dreadfully dangerous.

Robert S. McNamara, Secretary of Defense under presidents Kennedy and Johnson

Mac Lawrence

I've spent time. . .

...with a number of people recently who either live in Europe, or who have just come back from extended stays there. They all report the same thing: Europeans think the U.S. is out of its mind. Not the American people—the current administration.

How can so much of the world view what the U.S. is doing as crazy, while most Americans—at least according to the polls—think we're doing the right thing?

Perhaps it boils down to fear. The attacks of 9/11 brought a new level of it to the U.S. Our president acted boldly to assure us that he would make us safe. We wanted to believe him. But, at least in the case of the war on Iraq, more and more of what he told us turns out to be either questionable or outright fabrications.

By now we ought to realize that politicians don't always say what they believe, or believe what they say. Those in power have an agenda they want to carry out. What they tell us has a spin to it. It always does. They say things for a reason. They believe their reason is right and that the spin is necessary. They hire top-notch public relations

professionals who are masters at presenting selected information to the people. Every administration does it.

So, in a way, it's hard to blame the Bush administration. They did what they needed to do to build a case for war that fit with their view of the world—a war that records show those in control in Washington had wanted for some time, long before the terrorist attacks of 9/11. These folks see the world and America's role in it in a certain way. With a strong enough military, they say, the U.S. can maintain itself as the world's sole superpower, and keep our nation safe. There are bad guys out there who threaten us. We have to be strong enough to take care of all of them, with diplomacy if we can, with force if we need to.

History has shown that posture never works. Other than the death and destruction it causes, it's bad psychology: people don't react well to threats. It works much better to make friends out of everyone, including enemies. Cooperation works better than confrontation. Do unto others. You catch more flies with honey. A little bit of sugar makes the medicine go down.

from Timeline, September 2003



T.R. Reid

The European Union can't match the United States in military power—but it doesn't want to. This is partly because the point of a unified Europe is to move beyond war. Beyond that, Europeans would rather spend their tax money on the continent's lavish welfare state. Instead of buying missile shields or aircraft carriers, the Europeans have built a cozy social network. In most European countries, college education is free, doctors make house calls (and never send a bill), and new parents are paid a salary by the state to stay home and raise the baby.

T.R. Reid, San José Mercury News, February 20, 2005

Maha Ghosananda

What would one would say to the general of an army who is planning to attack another country? The Buddha dealt with this very situation. His family was fighting over water to build a rice field. He went to them and told them, "If you make war, there will be no end to it. Those who claim victory will be met with hatred by those who lost. Those who won will also feel hatred toward those who lost. Hatred itself will kill you. There is no need for another enemy. Hatred will kill you."

Maha Ghosananda, *Cambodian Buddhist monk*



Charley Reese

All of our wars and attacks kill, wound, and impoverish people, and the political talk about peace and democracy is just so much manure.

Charley Reese, *King Syndicated Features writer*

Mac Lawrence

If those in power really want a war, it's easy to stir up the emotions of fear and hatred, to create and demonize enemies. The techniques are well known: threats to our way of life, accusations, hurts and injustices of the past repeated endlessly, half-truths, outright lies, fabricated events. The realities of war—death and destruction—are not mentioned. No other solution than war is considered. The talk is only of the reasons for the war and how it will be won—with massive force, brilliant planning, surgical strikes, night-vision goggles, laser-guided bombs with incredible accuracy delivered from unimaginable heights, cruise missiles, bunker-buster nukes. Politicians of all parties fall in line. There is flag-waving, and a national rallying in support of the men and women in uniform.

from *Timeline*, March 2003



A Native American grandfather was talking to his grandson about how he felt. He said, "I feel as if I have two wolves fighting in my heart. One wolf is the vengeful, angry, violent one. The other wolf is the loving, compassionate one." The grandson asked him "Which wolf will win the fight in your heart?" The grandfather answered, "The one I feed."

Loretta Green

If you ever want to see how insane war is,

...look into the eyes of our young soldiers. You will surely conclude that we have gone mad.

Eighteen, 20, 25—they are children lugging in their backpacks the ponderous baggage of their elders' failed diplomacy.

Some are so young that you are tempted to take your crying towel and dry behind their ears.

It breaks my heart.

There is no acceptable answer for why we do this to our young—why decade after decade, century after century the world has gone to war.

Each day the portraits of this war are the brave, young, helmeted men and women, having to stiffen their chins in the face of a death that is premature and surely preventable.

What enormous transitions they have been forced to make. One day a high-school graduate merrily kicking a soccer ball and thinking about a job in the local auto-body shop or a seat in a distant college classroom.

And then the sudden transition from mamas' comfortable kitchens to a place where people are trying to kill them.

One day the transition from dropping off a tiny daughter at her gentle

kindergarten to a violent place where they must aim artillery. A place where, without meaning to, they mangle an innocent girl just like their own.

In the name of liberation for an oppressed people, they make the odd transition from nurturing to killing.

True, this is a volunteer military team that speaks of proudly serving our country, but most of them signed up for the defense. Being assigned to the offense was a trick play—a reverse—an audible by their commander-in-chief.

Their great-grandfathers have done it before them and their sons and daughters will do it after them, but it is a lot for a young spirit to reconcile.

After all, killing is at the top of a horrible deed list. Killing is in a territory of its own—roped off from their personal guidelines of good and evil, acceptable and taboo, possible and unthinkable.

So war squares and hardens the round faces of the young who become its components and its casualties.

They are there because somewhere the youthless heads of states and the old generals sputter, threaten, challenge, and dare across the seas.

With stiffening arms, they pull their rusting swords from their scabbards.

They throw down a gauntlet and incite their progeny to carry it into battles not of youths' making and often not of their understanding.

And for a time in the smoke of battle and choking desert storms, soccer balls, Old Navy fashions, and Hootie & the Blowfish seem childish and frivolous. Oh, to return to frivolity.

Because somewhere a military officer arrives at a home and locks eyes with the fearful, knowing parents of a downed Marine. Afterward, everyone speaks of his courage and sacrifice.

Could he have been the one with the round, boyish eyes who looked as if he were wearing his father's helmet?

Somewhere an unknown private becomes an extraordinary hero because she gets wounded and taken prisoner. When in reality, as her very ordinary father puts it, all his little girl wanted to do was come back home "to school-teach."

This is not how we wanted to make our girls women.

This is not how we wanted to make our boys men.

It's enough to break your heart.

editorial by Loretta Green in the San Jose Mercury News



Martin Luther King, Jr.

A time comes when silence is betrayal. Even when pressed by the demands of inner truth, men do not easily assume the task of opposing their government's policy, especially in time of war. Nor does the human spirit move without great difficulty against all the apathy of conformist thought within one's own bosom and in the surrounding world.

Some of us who have already begun to break the silence of the night have found that the calling to speak is often a vocation of agony, but we must speak. We must speak with all the humility that is appropriate to our limited vision, but we must speak. For we are deeply in need of a new way beyond the darkness that seems so close around us.



Harold Saunders

The obstacles to peace lie in human minds and hearts. They are psychological, human, and political. Peace will remain unattainable until we have a political strategy for breaking down "the other walls" that block our path.

Harold Saunders, director of international affairs for the Kettering Foundation; former secretary of state for Near Eastern and South Asian affairs; author of A Public Peace Process: Sustained Dialogue to Transform Racial and Ethnic Conflicts

Lawrence of Arabia

The people of England have been led in Mesopotamia into a trap from which it will be hard to escape with dignity and honor. They have been tricked into it by a steady withholding of information.... Things have been far worse than we have been told, our administration more bloody and inefficient than the public knows.... We are today not far from a disaster.

T.E. Lawrence (Lawrence of Arabia), after a visit to Baghdad reporting on conditions after the region was liberated from the Turks during World War I



Admiral Jonathan Howe

Women understood the cost of war and were genuinely interested in peace. They had had it with their warrior husbands. They were a force willing to say enough is enough. The men were sitting around talking and chewing qat while the women were working away. They were such a positive force. You have to look at all the elements in society and be ready to tap into those that will be constructive.

Admiral Jonathan Howe, reflecting on his experience leading the UN mission in Somalia in the early 1990s

Wendell Berry

We have not yet learned to think of peace apart from war. We wait, still, until we face terrifying dangers and the necessity to choose among bad alternatives, and then we think again of peace, and again we fight a war to secure it.

At the end of the war, if we have won it, we declare peace; we congratulate ourselves on our victory; we marvel at the newly-proved efficiency of our latest weapons; we ignore the cost in lives, materials, and property, in suffering and disease, in damage to the natural world; we ignore the inevitable residue of resentment and hatred; and we go on as before, having, as we think, successfully defended our way of life.



Swanee Hunt and Christina Posa

Certainly, some extraordinary men have changed the course of history with their peace-making. Yet women are often the most powerful voices for moderation in times of conflict. While most men come to the negotiating table directly from the war room and battlefield, women usually arrive straight out of civil activism and—take a deep breath—family care.

*from the cover story “Women Waging Peace”
by Swanee Hunt and Christina Posa*

Starhawk

The Earth is a living, conscious being. In company with cultures of many different times and places, we name these things as sacred: air, fire, water, and earth.

Whether we see them as the breath, energy, blood, and body of the Mother, or as the blessed gifts of a Creator, or as symbols of the interconnected systems that sustain life, we know that nothing can live without them.

To call these things sacred is to say that they have a value beyond their usefulness for human ends, that they themselves become the standards by which our acts, our economics, our laws, and our purposes must be judged. No one has the right to appropriate them or profit from them at the expense of others. Any government that fails to protect them forfeits its legitimacy.

All people, all living things, are part of the earth life, and so are sacred. No one of us stands higher or lower than any other. Only justice can assure balance: only ecological balance can sustain freedom. Only in freedom can that fifth sacred thing we call spirit flourish in its full diversity.

To honor the sacred is to create conditions in which nourishment, sustenance, habitat, knowledge, freedom, and beauty can thrive. To honor the sacred is to make love possible.

Starhawk, *from The Fifth Sacred Thing*

Barbara Kingsolver

It is not naïve to propose alternatives to war.

We could be the kindest nation on Earth, inside and out. I look at the bigger picture and see that many nations with fewer resources than ours have found solutions to problems that seem to baffle us. I'd like an end to corporate welfare so we could put that money into ending homelessness, as many other nations have done before us. I would like a humane health-care system organized along the lines of Canada's. I'd like the efficient public-transit system of Paris in my city, thank you. I'd like us to consume energy at the modest level that Europeans do, and then go them one better. I'd like a government that

subsidizes renewable energy sources instead of forcefully patrolling the globe to protect oil gluttony. Because, make no mistake, oil gluttony is what got us into this holy war, and it's a deep tar pit. I would like us to sign the Kyoto agreement today, and reduce our fossil-fuel emissions with legislation that will ease us into safer, less gluttonous, sensibly reorganized lives. If this were the face we showed the world, and the model we helped bring about elsewhere, I expect we could get along with a military budget the size of Iceland's.

from a 2001 editorial by Barbara Kingsolver



This seems a reasonable time

...to search our souls for some corner where humility resides. Our nation behaves in some ways that bring joy to the world, and in others that make people angry. Not all of those people are heartless enough to kill us for it, or fanatical enough to die in the effort, but some inevitably will be more and more, as desperation spreads. Wars of endless retaliation kill not only people but also the systems that grow food, deliver clean water and heal the sick; they destroy beauty, they extinguish species, they increase desperation.

I wish our national anthem were not the one about the bombs bursting in air, but the one about purple mountain majesties and amber waves of grain. It's easier to sing and closer to the heart of what we really have to sing about. A land as broad and green as ours demands of us

thanksgiving and a certain breadth of spirit. It invites us to invest our hearts most deeply in invulnerable majesties that can never be brought down in a stroke of anger. If we can agree on anything in difficult times, it must be that we have the resources to behave more generously than we do, and that we are brave enough to rise from the ashes of loss as better citizens of the world than we have ever been. We've inherited the grace of the Grand Canyon, the mystery of the Everglades, the fertility of an Iowa plain—we could crown this good with brotherhood. What a vast inheritance for our children that would be, if we were to become a nation humble before our rich birthright, whose graciousness makes us beloved.

Barbara Kingsolver from her book *Small Wonder*

Marya Grathwohl

In the Cincinnati Zoo is an exhibit that has no live animals.

Instead, it houses photos and two stuffed and mounted birds, the last survivors of their species. Martha the passenger pigeon and Incas the Carolina parakeet lived in this building and died here, Martha on September 1, 1914, and Incas on February 21, 1918. At one time, Martha's species was the most abundant of all land birds, flying over the eastern half of an entire continent in flocks of billions that darkened the sky. The Carolina parakeet was our only native psittacine; it ate the cockleburs that now plague our south-eastern fields. Today, the cerulean warbler, a blue and white song-bird that was once easily spotted in deep eastern U.S. forests, has declined in population by 70 percent since 1966 due to forest degradation for logging and development.

Several years ago, the American Museum of Natural History took a poll of biologists, asking if we are in the middle of a mass species extinction. Seventy percent said yes. In numbers alone, that means fifty to one hundred species are vanishing every day, approximately 1,000 times faster than natural extinction rates; faster than at any time in the last sixty-five million years. Recently a report from eight of the foremost nature organizations indicates that one in eight plant species worldwide is imperiled; in the United States alone, one in three is endangered. Twenty-four percent of all mammals are endangered. Their diminishment and disappearance goes largely unnoticed by most of us. The magnitude of this

continued on next page

*Could we have imagined flight
on a planet without birds?*



Marya Grathwohl continued

loss of life is hard for me to grasp. I know that if current trends in species extinction continue, we may lose half of all Earth's plant and animal species within the next fifty years. But can I imagine that world, that threadbare communion of life? The tiny cerulean warbler's song may fall silent forever within my lifetime. Will I notice?

We can try to absorb these facts or maybe, in our grief, quietly tuck them away as distant tragedies. (When the Preuss' Red Colobus Monkey vanished several years ago, it seemed to make no real difference in my daily life.) But can we get a sense of how our powers of imagination, creativity, and love are diminished by their leaving? Can we feel how lonely we're becoming without them? Rachel Carson called the loneliness a "silent spring." And hearing her, our hearts felt the chill. We can imagine that silence, now. No raptors lifting on thermals over my home and I may forget how to dare a dream into reality. No prairie grass seeds flung against an autumn full moon and I will feel a loss of hope in my soul. Could we have imagined flight on a planet without birds? What is lost in the soul of a child who never sees a meadow of wildflowers?

All Earth's species emerged in an immense, slow dance from common ancestors who lived in the seas over three billion years ago. Over time, Earth's climates and continental movements and predator-prey relationships endowed seeds with power to survive drought and ice, shaped graceful bodies that could swim and fly, and cherished consciousness that kept

wolf pups fed and created finely tuned musical instruments. Thanks to the achievements of modern science we in industrial societies now know what indigenous peoples have always known, that we inhabit one planetary home and all of us, all beings, are held as kin within the powers of deep relatedness. Darwin gave us revelation from Earth that gifts us with a most profound spiritual insight: We are all a communion.

Within just the last century have we learned that the Milky Way is one of one hundred billion galaxies, all streaming away from each other in a cosmic dance driven by primordial energy we call expansion. In all this grandeur we have yet to find another cerulean warbler or Colobus monkey. The warbler's song began in the middle of a star whose fierce heat forged complex chemical elements from simpler elements forged in yet an earlier star. When the second-generation star exploded as a supernova, those elements were blown into neighboring space where another power, gravity, gathered them up over millennia into a planet. That planet would eventually shape from those elements the bones and lungs and muscles of a bird fiercely intent upon finding a mate. These same elements also formed the tuna salad you had for lunch, leaves yellowing and falling in aspen groves, fingers typing this paper, and the eyes and mind reading it. Our kinship line goes back, according to our most recent estimate, 13.7 billion years. The whole Universe is one body.

Walt Whitman intuited this when he said, "A leaf of grass is no less than the journey-work of the stars." "Why should I have

[soul] and not the camel?” asks another poet, Mary Oliver. “Come to think of it, what about the maple trees? What about the blue iris? What about all the little stones, sitting alone in the moonlight? What about roses, and lemons, and their shining leaves? What about the grass?” When did soul begin in the Universe? Revering a Creator as intimate to the life process as my DNA, I seek spirit everywhere. In this Universe, hydrogen left alone, responsive to the powers of gravity, electromagnetism, and the nuclear forces, eventually turns into a human, awake to self, to soul. How can I have soul if hydrogen doesn’t in some way, too?

Because of the reach of human powers into all the planetary and life systems, our decisions today determine which species will make it into the next century. In this century, we are planetary power comparable to climate and continental shift and the predator-prey relationship. This planetary power, which we have never before had, demands of us a planet-sized soul, a planetary spirituality, something very new and challenging and promising for industrialized societies.

Humans, I am convinced, are born from this planet hungry, not only for milk and comfort, but also for songs: songs of warblers, the alpha female wolf, water splashing clean over stones.

Marya Grathwohl, Sister of Saint Francis, lives at Prayer Lodge, a center serving Native American women



Joann Lundgren

The earlier children connect with the natural world, the better for them and for society as a whole. Children have a basic need to establish a deep emotional connection to the natural world. Until our society recognizes and finds a way to honor this need, the future of our culture—and indeed, the future of all life—is endangered. Children who are denied the opportunity to bond with the Earth are also denied the opportunity to develop a moral compass.

It is this kind of profound bonding, first with the family and then with the Earth, that ensures that the child by age fourteen will have established a foundation for compassionate intelligence—an intelligence that has the well-being of all life as its guiding principle. It is our job as adults to ensure that our children develop that bond.

Joann Lundgren, founding director of the Children in Nature program of the Foundation for Global Community



Warren Snow

We’re the only species that doesn’t have a Zero Waste policy. Nature perfected Zero Waste over millions of years. It is only in the last hundred years that humanity has moved away from recycling and begun to create benign products that don’t harm the environment. So we’re really just getting back on the program.

Warren Snow, founder of New Zealand’s Zero Waste New Zealand Trust

Amory Lovins

The United States has misallocated about a trillion dollars of capital for 200 million tons or so of air conditioning equipment, and about 200 gigawatts of power supply to run it, all of which would not have been needed in the first place if we had designed the buildings to produce the best comfort at the least cost. Why didn't we do that? Well, for example, we pay our architects and engineers according to what they spend, not what they save. That's pretty easy to fix—offer your design professional, say, three years worth of measured energy savings on top of their normal fee, and you'll really get their attention. They can double or triple their fee: it's fair compensation for the extra work, and actually, you'll save money even upfront, because you'll typically save more on the capital cost.

Amory Lovins, co-author, Natural Capitalism—Creating the Next Industrial Revolution

Gregson Vaux

It is tempting to believe that the production of ethanol is a relatively easy way to convert sunlight into corn, which is then converted into ethanol, which can be used as an automotive fuel. However, corn and other crops such as sugar cane, which can be fermented to make alcohol, are energy-intensive to grow, and rely on fossil fuels. To produce a modern crop requires petroleum to plant and harvest the crops, petroleum-based fertilizer to increase crop yields, and petroleum-based pesticides. After harvesting, more fossil fuels must be used to ferment and distill the crop into ethanol. When all energy has been accounted for, 1 gallon of ethanol will provide 77,000 BTUs, but 131,000 BTUs of fossil fuel are needed to produce the ethanol. Thus, ethanol consumes more fossil fuel than it can replace.

Gregson Vaux of the National Energy Technology Laboratory



Edward O. Wilson

You do not have to visit distant places, or even rise from your seat, to experience the luxuriance of biodiversity. You yourself are a rainforest of a kind. There is a good chance that tiny spiderlike mites build nests at the base of your eyelashes. Fungal spores and hyphae on your toenails await the right conditions to sprout a Lilliputian forest. The vast majority of the cells in your body are not your own; they belong to bacterial and other microscopic species. More than four hundred such microbial species make their home in your mouth.

Such is the biospheric membrane that covers Earth, and you and me. It is the miracle we have been given. And our tragedy, because a large part of it is being lost forever before we learn what it is and the best means by which it can be savored and used.

In the end, however, success or failure will come down to an ethical decision. I believe we will choose wisely. A civilization able to envision God and to embark on the colonization of space will surely find the way to save the integrity of this planet and the magnificent life it harbors.

from a review of the book The Future of Life by Edward O. Wilson, Pulitzer Prize-winning biologist

Our problems derive not from our technology, our diet, violence in the media, or any other one thing we do.

They arise out of our culture—our view of the world. The reason most solutions offered to solve the world's crises are impractical is because they are based on the same worldview that caused the problems. Nothing but changing our way of seeing and understanding the world can produce real, meaningful, and lasting change—and that change in perspective will then naturally lead us to begin to control our population, save our forests, recreate community, and reduce our wasteful consumption.

Older cultures believe that we are part of the world. We are made of the same flesh as other animals. We eat the same plants. We share the same air, water, soil, and food with every other life form on the planet. We are born into life by the same means as other mammals, and when we die we, like they, become part of the soil which will nourish future generations. They also hold that it is our destiny to cooperate with the rest of creation. Every life-form has its special purpose in the grand eco-system, and all are to be respected. Each animal and plant has its own unique intelligence and spirit. We are permitted to compete with other plants and animals, but we may not wantonly destroy them. All life is absolutely as sacred as human life. Although hunting and killing for food are part of nature's order, when we do so it must be done with respect and thankfulness.

On the other hand, younger cultures believe that we are not an integral part

of the world. The Earth (and all of the plant and animal life on it) is something different from us. We call that different stuff "nature" and "wilderness;" we call ourselves "mankind," "humankind," and "civilization." We are very clear in our vision of the difference between us and the rest of life on the planet—we are separate from it, superior to it, and a law unto ourselves. When we want something, it's there for us to take, and we don't have to answer to anyone else. We also believe it is our destiny to subdue and rule the rest of creation. From the Bible's command to establish "dominion" over the Earth and its inhabitants, to the American government's acted-out doctrine of Manifest Destiny, to our science-fiction stories about colonizing space, we tell ourselves many stories which express that we deserve to be the designated rulers of everything we can see, from the seas to the moon and beyond. Some people try to soften this by saying that when Man was given dominion of the Earth, it meant he was given responsibility for taking care of it, but few people in our culture behave as if they believe this.

The cultural stories that have been used to justify our current behavior fall into two groups: "get yours before anyone else can," and "the world is going to end anyway, so grab what you can now." These are profoundly disconnected stories; disconnected from others, from nature, and from life itself.

*from the review of the book *The Last Hours of Ancient Sunlight* by Thom Hartmann*

Bioneers

One way to feel that at least something is going right in the world is to check in with the Bioneers. These “biological pioneers” from all over the world gather each autumn at a sold out conference in northern California to talk about their latest work.

The Bioneers realize that for us humans to survive over the long haul, we must learn to live within the limits of the natural world. A key to achieving this balance, they believe, is studying how nature works and applying this knowledge to the problems and challenges society faces. The solutions they look for are those that can be replicated and spread around the globe.

The Bioneers Conference abounds with presentations on community-sponsored agriculture; organic farms that make a profit; mushrooms that render deadly bacteria harmless; prairie land restored to pristine condition; Superfund sites cleaned up by organisms in the soil itself with no need for chemicals or incineration. Not only are these nature-based projects successful, the Bioneers say they can save money over typical high-tech methods, and are frugal in their use of Earth’s resources.



Donella Meadows

Since the Earth is finite, and we will have to stop expanding sometime, should we do it before or after nature’s diversity is gone?

Wes Jackson

Aldo Leopold said there are two spiritual dangers that come from not growing up on a farm. One is the belief that heat comes from a stove and the other is the belief that food comes from a grocery store.

When I was a kid growing up on a farm here in Kansas, in the Kansas River valley near Topeka, I’d be asked to go out and catch a chicken that would be fried up for lunch or noon meal. There would be potatoes, perhaps, that would have been dug out of the garden. There would have been, perhaps, some peas. Now what came out of all of that? I would say I learned more in the first 18 years of life on that farm than I learned getting an undergraduate degree and a Ph.D. in a land grant institution. I mean, I may be a geneticist, I may be a botanist, but that sort of formal education versus what the land taught me and a culture taught me was minuscule.

Wes Jackson, environmental historian, president of the Land Institute, author of [Rooted in the Land: Essays on Community and Place](#)



Jeremy Sinek

Could there be a connection between the obesity epidemic, dirty air, global warming—and the number of mothers I see each morning chauffeuring their 1.7 children to neighborhood schools in nine-seater Chevrolet Suburbans? D’ya think?

Jeremy Sinek, editor of [World of Wheels magazine](#)

Sylvia E. Earle

The Atlantic bluefin tuna is so popular and becoming so rare that a single 900-pound fish can bring \$44,000 to the fisherman, sell for \$80,000 in the market, and cost the Japanese diner \$75 for two small slices.

Sylvia E. Earle, author, marine biologist, former chief scientist for the National Oceanographic and Atmospheric Association (NOAA)



Thomas Berry

Once we expand our sense of self to include the planet, we can call on the immense wisdom and power inherent in the natural world.

Karl-Henrik Robért

Disputes over the environment are like monkey chatter in the leaves of a dying tree, when the need is to focus on restoring the trunk and the branches.

Karl-Henrik Robért, head of Sweden's leading cancer research institute, founder of The Natural Step movement



Tom Van Sant

The Earth systems and Earth resources are ultimately the overriding issue for all cultures and for the policies of every country in the world.

Tom Van Sant, artist, sculptor, founder of The GeoSphere Project

Dass Sangare

Every day on his farm in Cote d'Ivoire, West Africa, Dass Sangare collects the urine of his seven cows. "It's not exactly a pleasant job," he says, sitting in the shade beside his hut surrounded by cotton. "They usually go in the morning just before they're milked. If you don't get a bucket under them in time, you miss most of it."

Sangare then leaves the urine to ferment for a few days, dilutes it with water, and sprays it over his cotton plants. "It's one of the best insecticides there is," he says. "It's also a herbicide and fertilizer, and it's free."

Most farmers spray their cotton with chemicals. None have worked. "If they would just spray cow urine once a week," says Sangare, "their whiteflies would go away."

