E&CN'S LIST OF THE MONTH: PROPERTY RIGHTS GROUPS, PAGE 20

Environment Climate News

THE MONTHLY NEWSPAPER FOR NEW-ERA ENVIRONMENTALISTS

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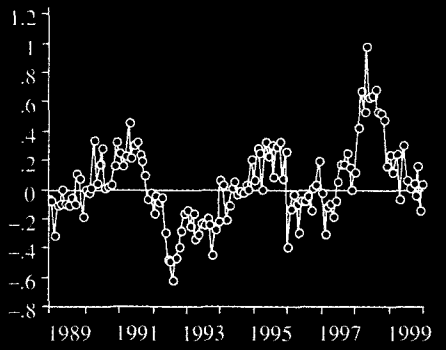
Still no global warming



Each month, *Earth Track* updates the global averaged monthly satellite measurements of the Earth's temperature. See page 8.

Happy birthday,

600 scientists endorse biotech

Recombinant DNA, other developments called life-savers

By FRANCIS SMITH

A declaration supporting agricultural biotechnology and signed by over 600 scientists from around the world was released January 22 at a press briefing in Montreal. The briefing, sponsored by International Consumers for Civil Society, featured Dr. C.S. Prakash, director of the Center for Plant Biotechnology Research at Tuskegee University and author of the proclamation.

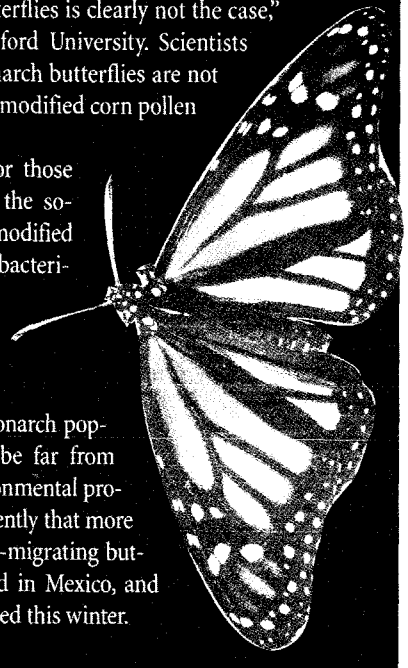
The statement declares that "recombinant DNA techniques constitute powerful and safe means for the modification of organisms and can contribute substantially in enhancing quality of life by improving agriculture, health care, and the environment."

The scientists assert that "the responsible genetic modification of plants is neither new nor danger-

BRIEFLY REPORTED

Monarch butterfly not in danger, revisited

"The worst-case image of this toxic cloud of corn pollen wiping out moths and butterflies is clearly not the case," said Stuart Weiss of Stanford University. Scientists reported recently that monarch butterflies are not in danger from genetically modified corn pollen as earlier feared.



This is good news for those farmers who want to use the so-called Bt corn, which is modified with a protein from the soil, bacterium *Bacillus thuringiensis.* Bt corn is resistant to the corn borer, a pest that can devastate corn crops.

By sheer numbers, Monarch populations would appear to be far from endangered. Mexico's environmental protection agency reported recently that more than 5 million of the south-migrating butterflies have already arrived in Mexico, and 180 million more are expected this winter.

Study: Let sleeping chemicals lie

"Recent research has cast doubt on the validity of current analytical methods for assessing the risk from organic pollutants in soils," said Cornell professor Martin Alexander, coauthor of a study published in the December 15 issue of *Environmental Science & Technology*. "Current methods determine the total concentration of compounds, not the amounts that are actually available to do harm. If we are not measuring bioavailabilty [the amounts of toxins available to harm organisms], we are overestimating—sometimes appreciably—the

Welcome *Evergreen* readers!

By JIM PETERSEN
Evergreen Foundation

As part of our continuing effort to reach new audiences we believe to be important to our educational mission, the Evergreen Foundation is partnering with The Heartland Institute in our first-ever exchange of mailing lists. *Evergreen* readers will receive three complimentary copies of *Environment & Climate News*; if you want to remain on the newspaper's complimentary mailing list, simply complete and return to Heartland the postcard attached to the front of this issue.

We have admired Heartland's work from afar for several years and are very pleased that they saw equal value in our work. We hope our Evergreen members will remain *Environment & Climate News* subscribers by returning the subscription card . . . and we hope Heartland's members will consider joining the Evergreen Foundation.

Who is Evergreen?

The Evergreen Foundation is a nonprofit forestry research and educational organization dedicated to the advancement of science-based forestry and forest policy. To this end, we publish *Evergreen*, a quarterly magazine designed to keep foundation members and others abreast of issues and events impacting forestry, forest communities, and the forest products industry.

In our research, writing, and publishing activities, we work closely with forest ecologists, silviculturists, soil scientists, geneticists, botanists, hydrologists, fish and wildlife biologists, historians, archeologists, economists, forest landowners, and state and federal agencies responsible for protecting the nation's forest resources.

Support for our work comes from Foundation members and other public and private sector entities that share our interest in science-based forestry. We also generate revenue from the sale of educational products, including reprints of past issues and "Our Daily Wood," a pie-shaped wood block that is the volumetric equivalent of the amount of wood fiber consumed every 24 hours by every person on Earth.

The Foundation operates under Internal Revenue Service 501(c)(3) regulations that govern the conduct of tax-exempt organizations created for charitable, educational, religious, or scientific purposes. We do not lobby or litigate. Forestry education is our only business. Contributions to the Foundation are tax-deductible to the full extent the law allows.

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Medical scientists call proposed DDT ban unethical

Proposed U.N. ban "unacceptably endangers health in countries with malaria"

By DAVE GORAK

DDT—a pesticide known to kill birds and thought by some to endanger humans—has found new friends among the medical community whose responsibility it is to fight a disease once thought to be under control: malaria.

More than 370 medical researchers, including three Nobel laureates, in 57 countries are urging the United Nations not to implement a proposed worldwide ban on the use of DDT. They have signed an open letter to diplomats involved in ongoing treaty negotiations, being conducted under the auspices of the United Nations Environment Program, aimed at eliminating so-called persistent organic pollutants. At the very least, the scientists want to allow the pesticide to be sprayed on the inside walls of homes, a proven method for repelling mosquitoes that carry malaria.

"As people who have dedicated our careers to health in the developing world," the open letter reads, "we wish your country to carefully scrutinize any treaty proposal among those chemicals, known to environmentalists as the "dirty dozen," which enter the food chain and can be spread widely through air, water, and bird migration. Begun in 1998, discussions about the pollutants are scheduled to conclude late this year, and observers say negotiators on both sides of the issue have hardened their positions.

Supporters of a complete ban, which include the World Wildlife Federation and Physicians for Social Responsibility, argue that even small amounts of DDT sprayed in homes hurt the environment. They also cite studies that suggest the chemical can be found in breast milk of nursing mothers, and may have other "subtle effects on human health." To date, however, there is no conclusive evidence that DDT endangers human health.

For more information...

WWW ...on the **Roll Back Malaria** initiative and the malaria-DDT relationship, visit the Web site of the Malaria Foundation International at **http://www.malaria.org/**. The Open Letter to DDT Treaty Negotiators is available at **http://www.malaria.org/DDTopen.html** and can be signed at **http://www.malaria.org/ddtcov-**

Does the GOP still stand for freedom?

George W. Bush abandons private property rights, calls for more government

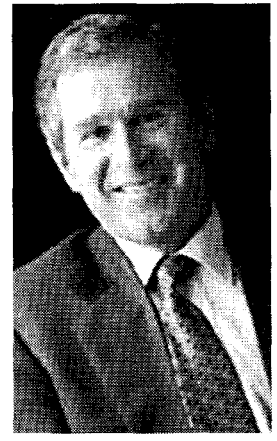
By R.J. SMITH

Are those who forget history doomed to repeat it? In the case of Texas Governor George W. Bush, the answer would appear to be yes.

In 1994, Bush won his upset election to the governorship over highly popular then-Governor Ann Richards by riding the wave of the private property rights movement's zealous opposition to federal land-use control and government land acquisition.

In June of that year, a memo was leaked from Secretary Bruce Babbitt's U.S. Fish & Wildlife Service outlining plans to declare hundreds of thousands of acres—private farmland, cattle and game ranches, and private homes—as critical habitat for the endangered Golden-cheeked Warbler (a small songbird) across 33 counties in and near the Texas "Hill Country."

Overnight, massive opposition arose, scores of property rights organizations sprang up, and existing Heritage Associations created to defend property rights multiplied their membership. Rallies were held night after night for months in all the small towns across the Edwards Plateau. Small schoolhouse auditoriums that might seat a couple hundred were packed with standing-room-only crowds of ranchers, farmers, parents, and teachers carrying banners, pitchforks, shotguns, and signs protesting big government and its use of the Endangered Species Act to destroy private property rights and prevent Texans from



U.S. Constitution were prominent in banners and posters.

George W. Bush jumped on this wave of fervent discontent and opposition, became a champion of the property rights movement, challenged Babbitt and the ESA, and rode into the governor's mansion championing the basic necessity of private property rights for the preservation of freedom. Bush lauded the outstanding private stewardship of lands, habitats, and wildlife across the vast state of Texas—the result of broad private ownership of land in the state and the near-absence of government land ownership in Texas. Bush noted that Texas is the nation's pre-eminent private property state; the outstanding conservation of its resources, he said, is a testament to that private stewardship.

Secretary Babbitt was forced to withdraw his land-use control scheme, and George W. Bush was elected Governor.

Not only had Bush recognized the overdon the first principles of life, liberty, and property and the importance of private property rights in undergirding individual liberty and protecting the environment.

On November 8, Bush announced his full support for a radical left and green plan to fund the Federal Land and Water Conservation Fund with a permanent, dedicated, off-budget, entitlement fund—of at least $1 billion a year . . . in perpetuity. The fund would permit government agencies at all levels—federal, state, county, and local—and even environmental groups, to acquire private lands and transfer them to government ownership.

Thousands of property rights organizations and associations, state and county farm bureaus, state cattlemen's associations, and millions of homeowners, farmers, tree farmers, cattlemen, hunters, families, and landowners have fought such proposed legislation for over a decade. They were, to put it

no matter what he promises, no matter what first principles he compromises, the environmentalists and the left will still support either Gore or Bradley.

Not only has Bush called for expanding government ownership of private land at a time when about 42 percent of all the nation's land is already owned by the government—there is no crisis in government landownership whatsoever—but he even went so far as to say that if we leave land in private ownership, we'll "leave the future generations a world of polluted air, toxic waste, and vanished wilderness and forests."

Who is writing his speeches, EarthFirst!?

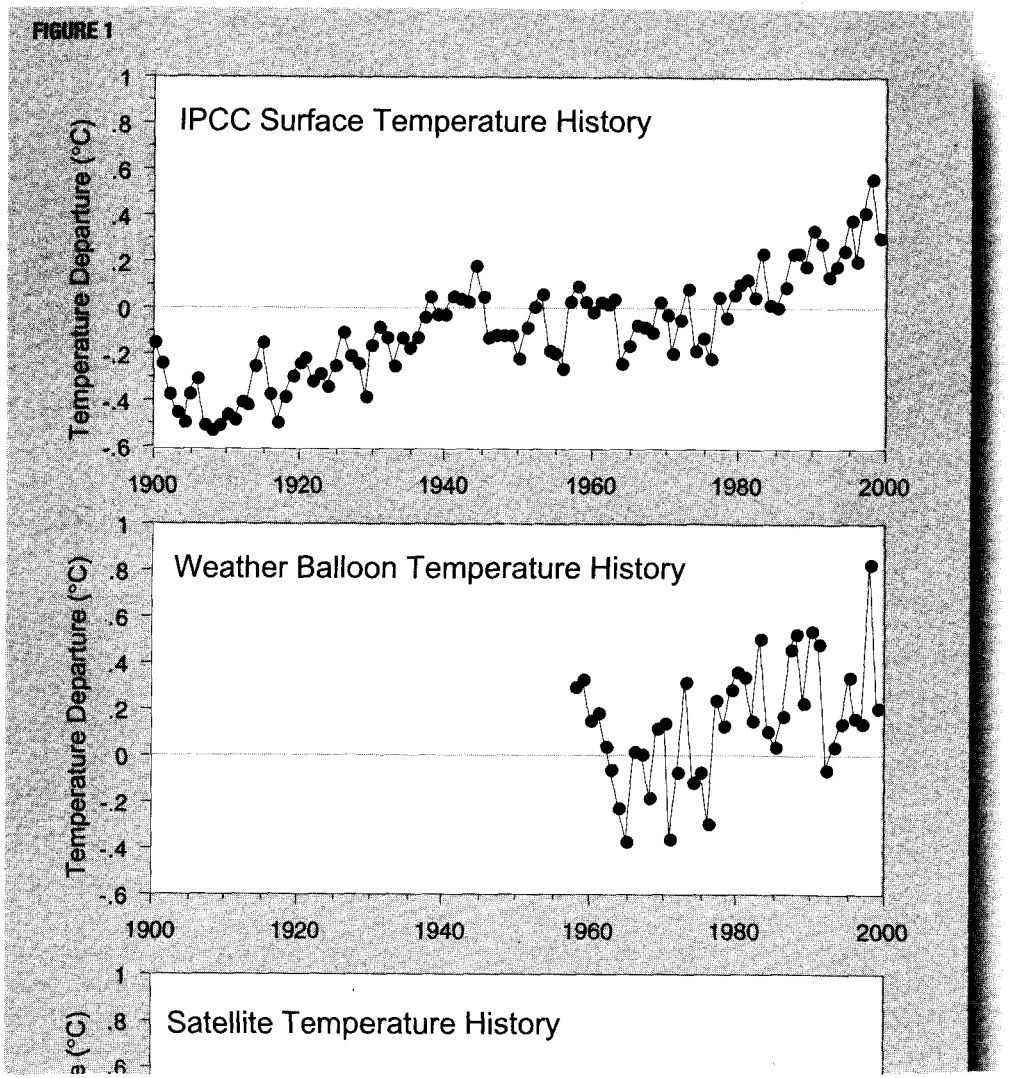
Perhaps Bush should go back and reread the statements and speeches he made in 1994. Perhaps he should drive across the magnificent wildlife habitat of Texas' ranchlands and look at the stewardship carried out by private landowners (and wonder why the government wants so badly to get its hands on those lands).

Perhaps he should go out to the Pacific Northwest and fly over a mosaic of brown, dead, and dying government-owned forestlands, and then visit the green and healthy private forestlands, to refresh the lessons of caring private stewardship and conservation that comes with private ownership.

And perhaps most importantly, Bush should go back and visit the Alamo and walk quietly and reflectively through that small, hallowed

Hot air for the millennium

FIGURE 1



By PATRICK J. MICHAELS, PH.D.

Any of you who don't think the federal government is composed largely of alarmist gasbags obviously did not survive last December's Y2K crisis. Or perhaps you merely sizzled away in the record heat our fair republic endured, as reported by our friends from the Department of Commerce, who have pronounced 1998-1999 the warmest years in the United States for which we have adequate records—with 1998 the hottest, and 1999 the second-warmest.

Resolving the difference between the U.N.'s surface temperatures and those measured by the satellites and weather balloons may spell the end of the global warming crisis.

January's Y2K lesson taught many of us that

Historical Climate Network (HCN), composed of several hundred rural weather stations selected from the roughly 16,000 official sites that are available. For a broader (and cooler) perspective, consider two others, one from NASA, and another from the very same NCDC.

The first is University of Alabama climatologist John Christy's satellite history, which has been carefully corrected for instrument and orbit changes. It shows 1999 to be slightly cooler than the average for the 21 years in which the platforms have been taking our temperature. There are 12 warmer years and eight cooler ones in this history, which itself shows a slight warming trend *only* because of the big 1998 El Niño. (Which means that the decade from 1998 to 2007 will very likely show a cooling trend.)

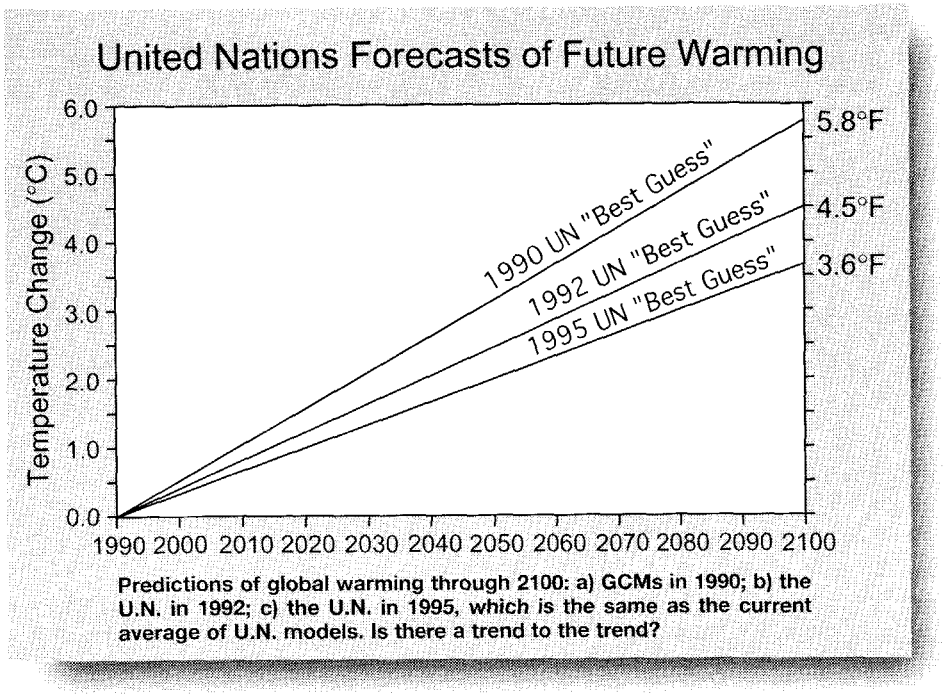
The satellite temperatures are known to closely track those measured by weather balloons in the layer from 5,000 to 30,000 feet—a zone forecast by computer models of global warming to be heating even more rapidly than the surface. This record extends back to 1958. Fifteen years were warmer than 1999 and 27 were cooler.

Resolving the difference between the U.N.'s surface temperatures and those measured by the satellites and weather balloons may spell the end of the global warming crisis. More and more, it appears that the reason they diverge is that warming is trapped largely in very cold air masses in Siberia that don't extend up to 5,000 feet—the altitude at which the balloon record begins. We have yet to hear any Russians clamoring for a return to the climate of the Stalin era.

As Casey Stengel used to say, "You

BACK GROUNDER

Computer models, the Kyoto Protocol, and reality...



Predictions of global warming through 2100: a) GCMs in 1990; b) the U.N. in 1992; c) the U.N. in 1995, which is the same as the current average of U.N. models. Is there a trend to the trend?

Making sense of **nonsense**

By PATRICK J. MICHAELS, PH.D.

Of all the environmental issues we have ever confronted, only one—global warming—is driven solely by the imagination of a computer. All the policy proposals to "fight" this "threat," including the notorious Kyoto Protocol to the United Nations Framework Convention on Climate Change, are based upon the output of a few silicon chips.

simulate observed weather patterns. Exploring how much has been guessed vs. what is known is quite revealing.

Climate is determined by the differential heating of the Earth's surface by the sun. To understand climate, you must know how much radiation shines on the planet and how much the planet absorbs vs. the amount it reflects away. Obviously snow and clouds, being bright white, reflect away

effective greenhouse change of around 60 percent of the "natural" carbon dioxide "background" level.

Every forecast of how the climate changes as the greenhouse effect increases requires some knowledge of how those emissions will change in the future. Climate models used to increase their effective carbon dioxide concentration by 1 percent per year. But the United Nations assumes the most likely increase in the next 100 years will be around 0.63 percent, or nearly 40 percent lower than the number the models employ in their forecasts.

Recently, NASA scientist James Hansen demonstrated that the *real* increase in the last 15 years has been around 0.40 percent, or 60 percent less than previously assumed. His reasoning? The plants are

around one-quarter of what was forecast.

By 1992, in time for the Rio Earth Summit, the GCMs had been cooled a bit, because the rate of greenhouse increase was dropped a smidgen. According to the United Nations, the likely warming to 2100 was now 4.5°F. The same critics still objected, because far too much warming was still being predicted, compared to what was being observed. But it was these models that gave us the climate treaty that is the parent of the Kyoto Protocol.

By 1995, the U.N. dropped its predictions further, to 3.6°F, under the highly debatable notion that greenhouse warming is largely being "masked" by other industrial emissions, such as

The rains of Ranchipur

Tropical precipitation as a test of climate models' accuracy

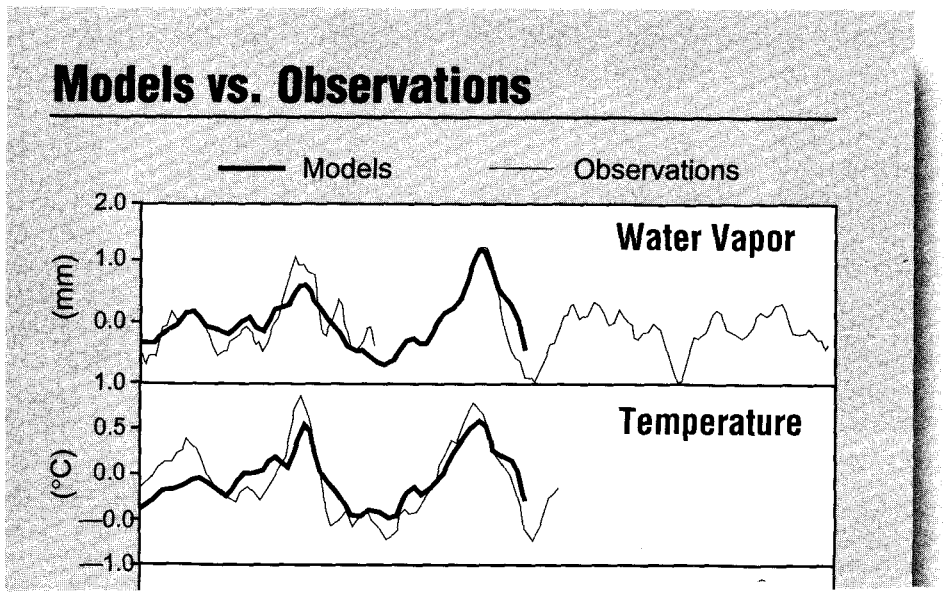
By SALLIE BALIUNAS, PH.D.
AND WILLIE SOON, PH.D.

Do you fear the force of the wind,
The slash of the rain?
Go face them and fight them,
Be savage again.
HAMLIN GARLAND,
"DO YOU FEAR THE WIND?"

Changes in temperature and precipitation are linked in the climate system. So we should not be surprised to learn that climate models of a future world say that changes in precipitation patterns will occur in response to warming from increasing levels of carbon dioxide in the air.

The IPCC 1996 *Summary for Policymakers* stated that the expected scenarios in a greenhouse gas-warmed world call for "more severe droughts and/or floods in some places and less severe droughts and/or floods in other places."

From a scientific viewpoint, the IPCC statement is odd because it is empty of specificity. It combines results from many climate models, none of which is validated. For this reason, all of the predictions can be regarded as equally probable—or improbable—and perhaps none is right.



By combining all the outcomes, we must somehow believe that the true result miraculously emerges from the unproven models. And alongside the truth, the models also produce confusing debris of incorrect results. Perhaps listing an ensemble of results from unproven models gives them a ring of veracity. But how do we know which specific outcome is correct, or that the correct prediction even lies among the many scenarios the models produce?

The answers must come from the application of the scientific method, which requires testing the models against good measurements from the real world. A model can make correct predictions if accurate observations validate it. Even then, however, its predictions may be faulty. Still, a good model is a necessary first step in making a credible prediction.

One important feature of the climate system is the hydrological cycle—its pattern of precipitation. Studying changes in, for instance, tropical precipitation is a useful way of testing modeled knowledge of the hydrological cycle, for two reasons. First, tropical precipitation is a driver of global climate change. Second, results for tropical precipitation are known to vary among different models.

B.J. Soden has made just such a comparison of tropical precipitation results, using an ensemble of 31 atmospheric models. He compared year-to-year changes among several key climate parameters. Carrying the comparison over several years is a good approach because it covers the important El Niño-Southern Oscillation cycle, which is a source of major climate influence over a period of

Wrong models?

Soden argues that if the observations are adequate, then the 31 models are fundamentally flawed. After considering several climate processes, Soden focuses on the models' inability to explain the observed amount of long-wave radiation absorbed at the surface of the Earth (the fifth parameter in the figure). Such an error might arise, for example, from a poor simulation of low-lying clouds, which closely govern radiation balance in the climate system.

Another problem with the 31 models is their common procedure of specifying sea-surface temperature and then calculating atmospheric response. A. Kitoh and O. Arakawa point out that this process neglects the coupling between air and sea and produces unreliable results. Their bottom line? A model whose sea-surface temperature is fixed can produce a mean state of climate in the tropics very different from that produced by a coupled model.

Wrong observations?

Enough model criticism. What if the observations are wrong? If we do not have an accurate picture of current climate, then it is impossible to validate the models of future climate, meaning the models' predictions are not credible.

That the ensemble of models simulates year-to-year changes in the tropical temperature fairly well, yet gives incorrect results for precipitation, leads to two conclusions. First, modeled temperature change is insensitive to model inaccuracies, so it's a poor way to diagnose systematic errors. And second, precipitation change is a good way to

Polar winds of change

A new study finds multiple causes of vortex variation

By ROBERT E. DAVIS, PH.D.

Are changes in wind flow around the poles a symptom of human-induced climate change?

University of Washington researcher John M. Wallace and colleague David Thompson addressed this question in a paper presented at the American Geophysical Union's December 1999 meeting in San Francisco.

Examining climate change in the polar regions is important for several reasons. First, most of the planet's surface warming has been concentrated in the high latitudes, particularly in winter.

Second, polar temperatures have a major influence on global wind patterns. Why? Because tropical temperatures don't change nearly so much as those in the high latitudes, and the "gradient" of the change in temperature from the tropics to the poles dictates the position and strength of the jet stream, the tracks of storms, and the resulting rainfall/snowfall patterns.

As the strongest winds meander around the globe, they form a closed loop—often referred to as the polar vortex. In winter, when the polar regions become bitterly cold, the polar vortex expands southward over the lower latitudes, its associated jet stream strengthens, and storms track farther south across the middle and southern portions of Eurasia and North America. Conversely, this vortex contracts in summer, when the polar cold air source becomes depleted and the temperature gradient weakens.

Wallace and Thompson examined the strength of the winter circumpolar vortex since 1970 and detected a significant contraction. This contracted vortex is linked to warmer winters over Europe and Asia and a northward shift in storm tracks and the associated precipitation. According to coauthor Thompson, "The recent trend seems unprecedented in the historical model."

But this major wind shift was not necessarily caused by greenhouse warming. "We can't be sure that what we're seeing is not natural," Wallace said.

Some closely related research suggests Wallace may well be correct. With two colleagues, Paul C. Knappenberger and Adam Burnett, I have prepared a paper for next month's meeting of the Association of American Geographers in Pittsburgh that augments Wallace's findings.

Our team examined the size of the circumpolar vortex in the midlayers of the atmosphere (about three miles above the surface) over time. Because these data are available back to 1948, we provide a more complete picture of observed climate changes.

When averaged over winter months (December, January, and February), the vortex has indeed contracted significantly since 1970 (Figure 1). But this contraction followed an equally impressive period of vortex *expansion* that began in the late 1940s. Since atmospheric greenhouse gas concentrations have been increasing throughout this period of record, it's difficult to argue that the recent contraction is human-induced without first dismissing the

The actual causes of these changes in vortex size are not known, but they probably arise from a combination of factors. One possible culprit is changes in tropical Pacific Ocean temperatures (the warm El Niño cold La Niña cycle), which can influence midlatitude winds over the Pacific and North America. Wallace and colleagues theorize that these vortex changes are linked to wind shifts from above—in the stratosphere (the layer of very thin air from about seven to 30 miles above the surface). If stratospheric circulation changes are, indeed, generating changes in wind patterns below, then other factors, such as potential stratospheric ozone depletion, could also play a role.

Until climatologists sort out these various causes and effects, it's safe to assume that the recent winter circulation changes are well within the normal range of variability. Which means mild, less snowy winters across the Americas and Eurasia and lowering the handicaps of midlatitude golfers everywhere.

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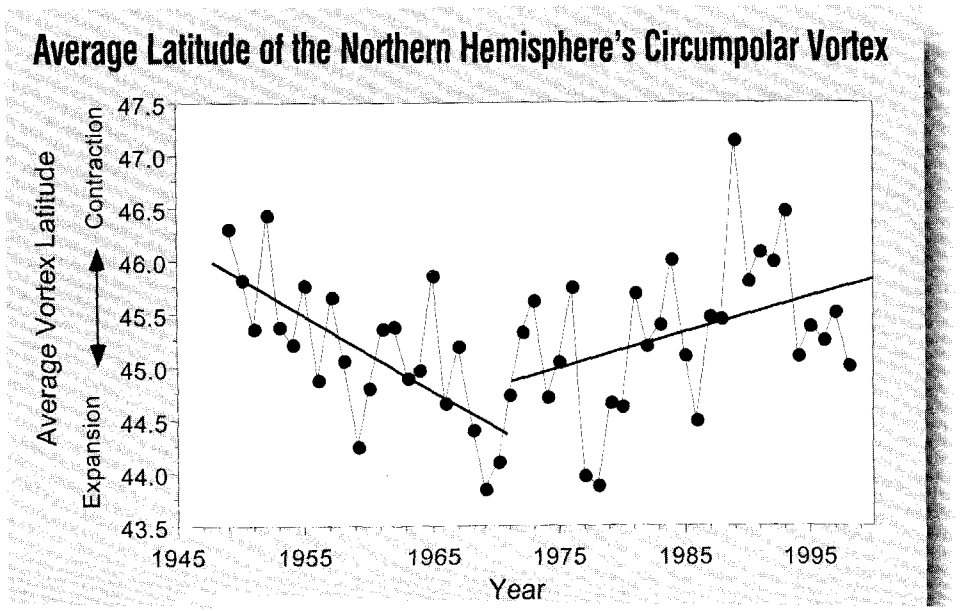
Thompson, D.W.J., and J.M. Wallace, 1999. Meteorological aspects of the arctic oscillation. Poster, American Geophysical Union, 1999 Fall Meeting, December 13-17, San Francisco, California.

Robert E. Davis is an associate professor of environmental science at the University of Virginia.



GREENING UP

Earth(worms) First

When CO_2 doubles, worms process 35 percent more soil

By ROBERT C. BALLING JR., PH.D.

In this regular feature, Robert C. Balling Jr., Ph.D., director of the Laboratory of Climatology at Arizona State University and author of The Heated Debate, *examines the latest research into the effects of increased atmospheric carbon dioxide levels on plant life.*

Charles Darwin was one of the first scientists to show that earthworms have important effects on the chemistry and physical structure of soils. He and many scientists to follow noted that worms speed up the decomposition of plant litter and improve conditions for numerous microorganisms.

As many a backyard gardener knows, most plants benefit enormously from the presence of earthworms. Indeed, wherever plant life thrives, the ground is teeming with them. Did you realize that a grassland the area of a football field typically contains several *tons* of earthworms below the emerald surface?

Hundreds of experiments have shown that increased atmospheric carbon dioxide (CO_2) promotes healthier and more productive grasslands. But what about its effect on other members of the ecological system?

Indeed, though CO_2 in and of itself benefits the grasslands, it could become a net negative if CO_2 is bad for worms. Many past studies have shown that increased atmospheric CO_2 increases root growth, stimulates fungi activity, and increases soil moisture via an increase in water-use efficiency of plants. So perhaps the future looks "bright" for these below-ground members of the biosphere.

Several years ago, Zaller and Arnone elevated atmospheric CO_2 from 350 parts per million (ppm) to 600 ppm in open-top chambers over a grassland near Basil, Switzerland.

In the second year of the experiment, they collected and measured earthworm casts in an effort to assess worms' overall activity.

The soil moisture had indeed increased with elevated CO_2, and the lucky worms beneath increased their cast production by 35 percent.

Due to their extra activity, the carbon and nitrogen in the CO_2-enriched soil was increased by 28 percent. The earthworms apparently found the world of elevated CO_2 to their liking, and the plants above benefited further from their increased soil processing and turnover.

These same two scientists published another article recently with even more good news about CO_2, earthworms, and the fate of future grasslands.

Using the same basic field design, Zaller and Arnone found that plants near the casts were much better off than those farther away, irrespective of CO_2 enrichment. The best of all worlds was a location near an earthworm cast in the elevated CO_2 environment!

An increased concentration of atmospheric CO_2 is good for grasslands and great for worms, and both results produce positive feedbacks for the overall ecosystem.

The people and animals who depend on the world's grasslands—and that means virtually all of us—should be thrilled with these results. And like the earthworms whose suffering it would no doubt cause, the Kyoto Protocol—which seeks to limit atmospheric CO_2 concentration—should never see the light of day.

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Zaller, J.G. and J.A. Arnone III, 1997. Activity of surface-casting earthworms in a calcareous grassland under elevated atmospheric CO_2. *Oecologia,* **111**, 249–254.

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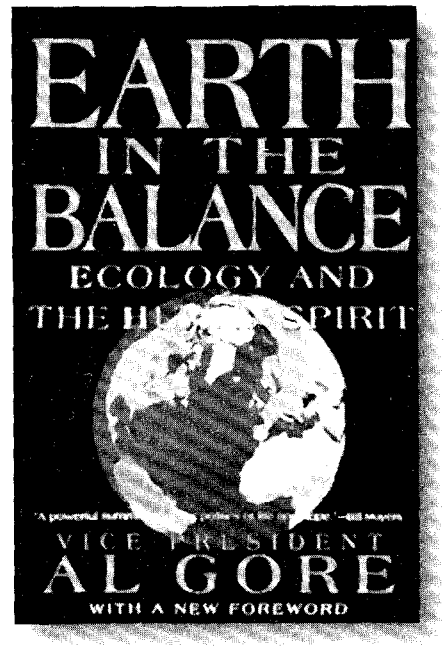
"Yes, we have CO_2 bananas!"

CLIMATE COMMENTS



Virtual climate alert

By FREDRICK D. PALMER
PRESIDENT, GREENING EARTH SOCIETY

[illegible] the United Nations and the Clinton-Gore

mate," and I submit that none can ever fairly be identified. Sir John Houghton, a noted British scientist and active participant in the climate change debate, has stated that, ultimately, any particular level of greenhouse gas emissions involves a "political decision."

The Clinton-Gore administration and the U.N. know there will be fierce resistance to their reg-

Because observations don't support Vice President Gore's negative vision, representatives of the U.N. and our own government have been making selective use of isolated weather phenomena to paint a picture of worldwide, inexorable, and severe human-induced global warming. This entire effort, funded by the United States to the tune of over one billion dollars per year, borders on the fraudulent.

President Clinton recently provided *Popular Mechanics* with his vision for the next 100 years. Remarkably, he begins his statement by saying, "I envision a world where climatic disruption has been halted...."! Implicit in his statement is the misguided notion that recent weather phenomena such as hurricanes, blizzards, the recent wind storms that raked across France, drought, severe summer heat, abnormal winter cold, and the like are all caused by humans.

Also implicit in his statement is the absurd and arrogant proposition that a benevolent government can prevent severe weather and make life on Earth a veritable Garden of Eden. Like Goldilocks' porridge, the weather will be not too hot, not too cold, but just right.

In *Earth in the Balance*, Vice President Gore uses a graph that shows a positive correlation between atmospheric carbon dioxide (CO_2) levels and past temperature increases. Eons ago, according to the Vice President, it was very warm on Earth because CO_2 levels were very high.

The Vice President's claim was recently proven wrong by studies showing that the opposite is true: rising temperatures caused CO_2 to rise, not *vice versa*.

Such an embarrassing scientific gaffe by the Vice President predictably has gone completely unreported by Big Media. The Vice President's *fied and accelerated the warming process*" (emphasis added).

Hello?! Nobody ever made such a finding in any of the studies. This is "virtual climate reality" manufactured by the White House from whole cloth in an effort to protect the Vice President from scientific embarrassment and to preserve the intellectual framework of his vision of climate apocalypse. If his statement in *Earth in the Balance* (of which he says he would not change a word) were correct, would we not already have experienced a runaway greenhouse effect with more CO_2 in the air causing more warming, more releases of CO_2, and so on? Say goodbye to "Buddha's Breath."

But this is of no moment for the Clinton White House or the U.N. Their regulatory agenda encompasses everything: energy production and consumption, forestry practices, agricultural practices, mining practices, "smart growth," land-use planning, vehicle design, transportation methods, and on and on. And simply stated, scientific observations don't support their agenda. Scientific observations are to the contrary.

Satellite and independently confirming radiosonde data from weather balloons show only modest, nighttime, winter warming. Observations detect longer growing seasons. Observations depict an increasingly robust biosphere.

If the Powers That Be succeed in convincing the American people that "virtual climate reality" is the basis for how we should plan our affairs, then intrusive and massive regulation will result. If, on the other hand, the American people come to understand that the science of climate change is neither scary nor threatening, then the American people will firmly reject this

BIOTECH from page 1

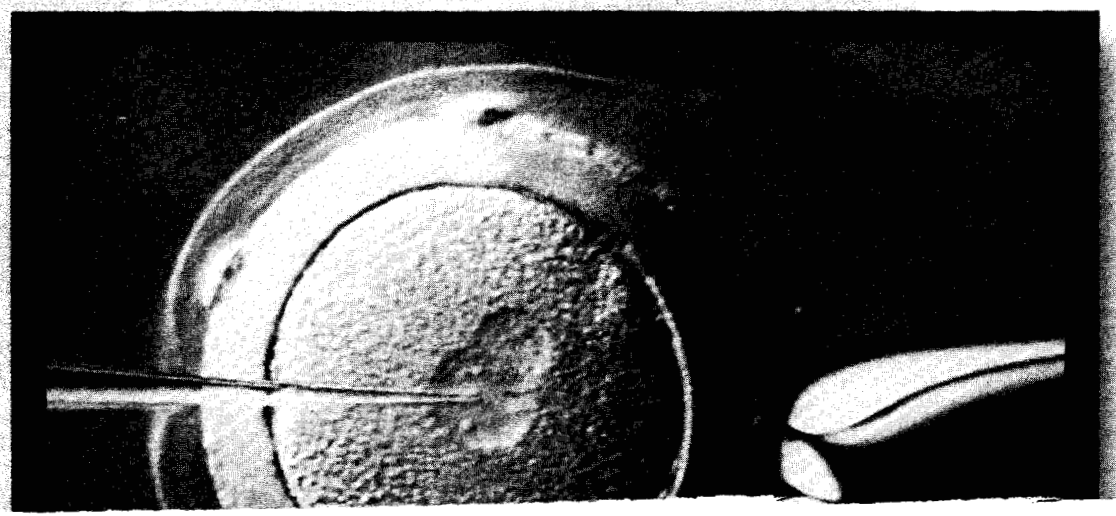
use of biotechnology in addressing the global problems of agricultural productivity and world hunger, it is critical that we as scientists become more proactive in making our voices heard."

Prakash has established a Web site, www.AgBioWorld.org, to help coordinate his effort. The declaration and a list of scientists who have signed it (which will be updated periodically) can be viewed on the site.

The biotech declaration notes that "the risks posed by foods are a function of the biological characteristics of those foods and the specific genes that have been used, not of the processes employed in their development. Our goal as scientists is to ensure that any new foods produced from recombinant DNA are as safe or safer than foods already being consumed."

Among the benefits of new DNA techniques, notes the declaration, are "environmentally friendly' crop plants with traits that preserve yields and allow farmers to reduce their use of synthetic pesticides and herbicides. The next generation of products promises to provide even greater benefits to consumers, such as enhanced nutrition, healthier oils, enhanced vitamin content, longer shelf life, and improved medicines."

Representatives from over 130 countries met in Montreal in mid-January to discuss the international Biosafety Protocol, which sets the rules for transboundary shipments and use of genetically modified foodstuffs. Among the biotechnology advocates in attendance were representatives of International Consumers for Civil Society, a coalition of 22 nonprofit groups in 10 countries. ICCS emphasizes the importance of free markets, open trade, and technological improvements for consumer well-being around the globe.



Engineering the new millennium

By GRETCHEN RANDALL

From today's cheese to tomorrow's cures, biotechnology is supplying new answers to old problems. Far from the enemy it is often made out to be by anti-progress environmentalists, genetic engineering has been largely a friend to humans and their environment.

Smile and say "cheese"

"Any person who eats cheese in Canada and the U.S. has been eating a food whose processing involves a transgenic food product," said Ralph W.F. Hardy, president of the National Agricultural Biotechnology Council (NABC), a consortium representing most of the leading not-for-profit agricultural research and education institutions in the U.S. and Canada.

According to Hardy, "the premier story and major consumer experience base in food biotechnology is cheese making. Cheese making until 1990 used mainly rennin, a preparation from animal stomachs, to coagulate the milk proteins. The lack of a consistent and reliable supply of this crude product encouraged the isolation of the animal gene and introduction of that gene into bacteria and yeast. The generic name for this product is FPC, or fermentation-produced chymosin."

FPC, approved by the FDA in

could help reduce blindness for children in Third World countries where good nutrition is often difficult to achieve.

Dean DellaPenna Ph.D., associate professor at the University of Nevada-Reno, believes "we are entering an era that will allow us to address longstanding nutritional deficiencies in the food supply." He is developing plants with increased vitamin E levels and says, "if this technology is applied to agricultural crops, the U.S. could virtually eliminate vitamin E deficiency in this country."

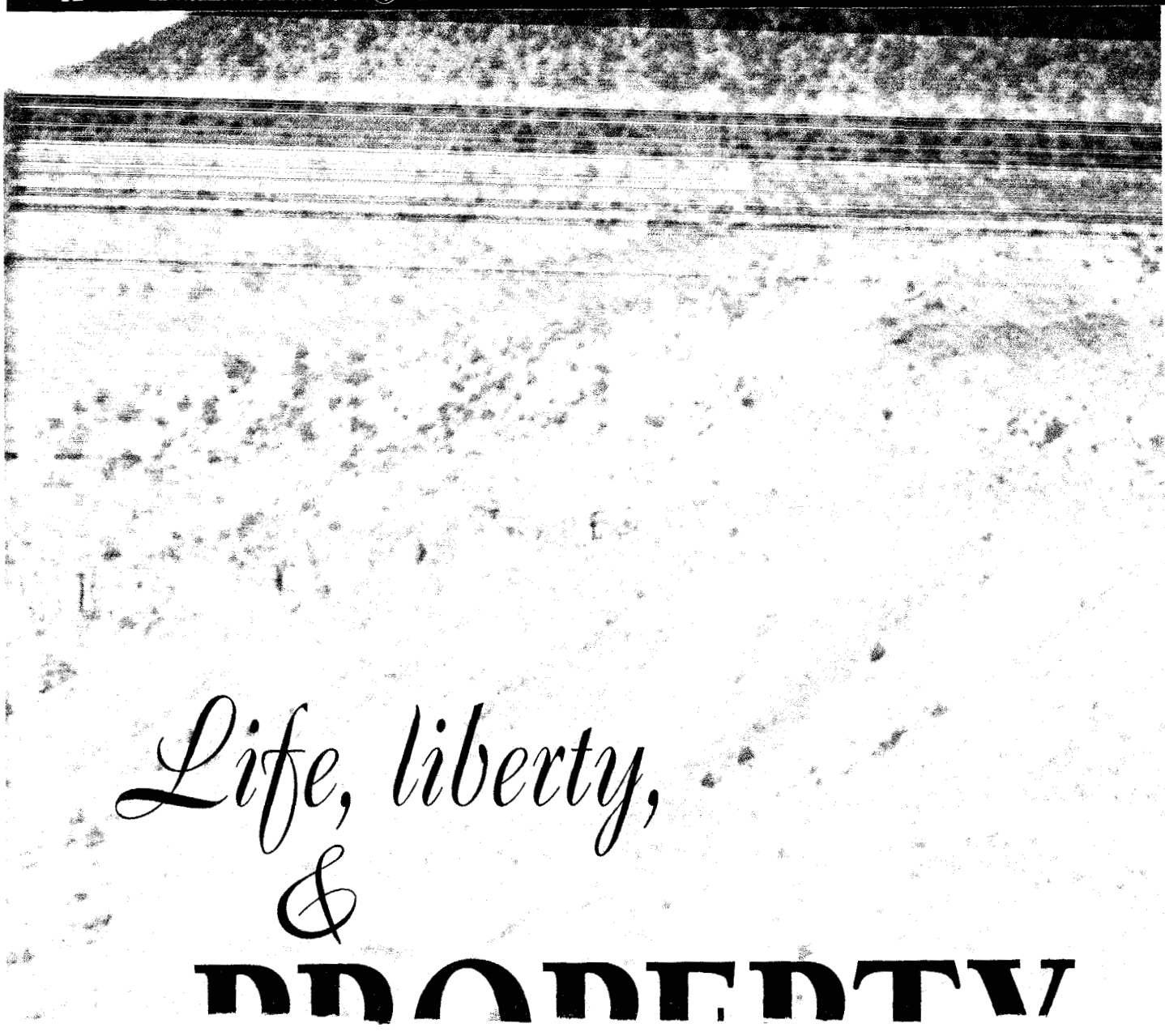
Studies show that supplemental vitamin E can reduce the risk of coronary artery disease by 40 to 50 percent.

Dr. DellaPenna adds, "a normal diet with 50 grams of engineered oil would significantly decrease the risk of heart disease and some cancers in the population, the two major causes of death in this country."

Molecular biotechnology techniques may soon provide hypoallergenic staple food products, such as rice and milk. Scientists are investigating ways to reduce lactose in dairy products. Others are trying to modify the shape of allergenic proteins in foods such as wheat and peanuts, ridding these products of their ability to trigger allergic reactions and making them easier to digest. Some work also has been done on making a product that has the desirable taste of fat without the calories.

For more information...

WWW Visit the Web site of the



President Clinto

By GRETCHEN RANDALL

In what western lawmakers called "a war on the West," the Clinton-Gore administration bypassed Congress and unilaterally declared three new national monuments and added acreage to a fourth, restricting public use on over a million acres of public land.

One monument, the Grand Canyon-Parashant, encompasses one million acres adjacent to the north rim of the Grand Canyon extending to the Nevada border. The President had taken a similarly sized plot just before the 1996 election, when he created the Grand Staircase-Escalante National Monument in southern Utah.

In the present round of monument-declaring, two smaller monuments were also created: Agua Fria National Monument north of Phoenix, a 71,000-acre area of archaeological sites; and the 840 mile-long California Coastal National Monument, which encompasses thousands of small, uninhabited islands off the coast of California. Clinton also expanded by 10,000 acres the existing Pinnacles National Monument near San Jose, California.

The President's actions were met with concern by western legislators. Rep. Bob Stump (R-Arizona), who represents the district affected by the new million-acre monument, said, "I am disappointed that the President used his executive authority to create in Arizona two national monuments—a total area larger than the entire state of Rhode Island."

All seven Republicans in the Arizona congressional delegation and Governor Jane Dee Hull had written to President Clinton before his designation. "We believe it is imperative," they wrote, "that Congress, and the people affected by any proposed monument designations, be directly involved in the final decisions of public land management."

[illegible] introduced in both the Senate and the House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A National Conference on Urban "Sprawl" and Smart Growth

- What is Sprawl?
- What is Smart Growth?
- A Citizens Guide to Smart Growth
- Lessons from Portland
- Housing Issues
- Free-market Strategies

April 26, 2000
The Radisson Hotel
160 E. Huron
Chicago, Illinois

HOST:

SUPERFUND from page 1

much less letting the public know.

According to EPA officials familiar with the program, the agency doesn't keep records on what PRPs have had to pay over the years. Even if it did, this wouldn't begin to tell the whole story. Those entangled in the statute's web of litigation have had to pay lawyers and consultants, something known as "transaction costs."

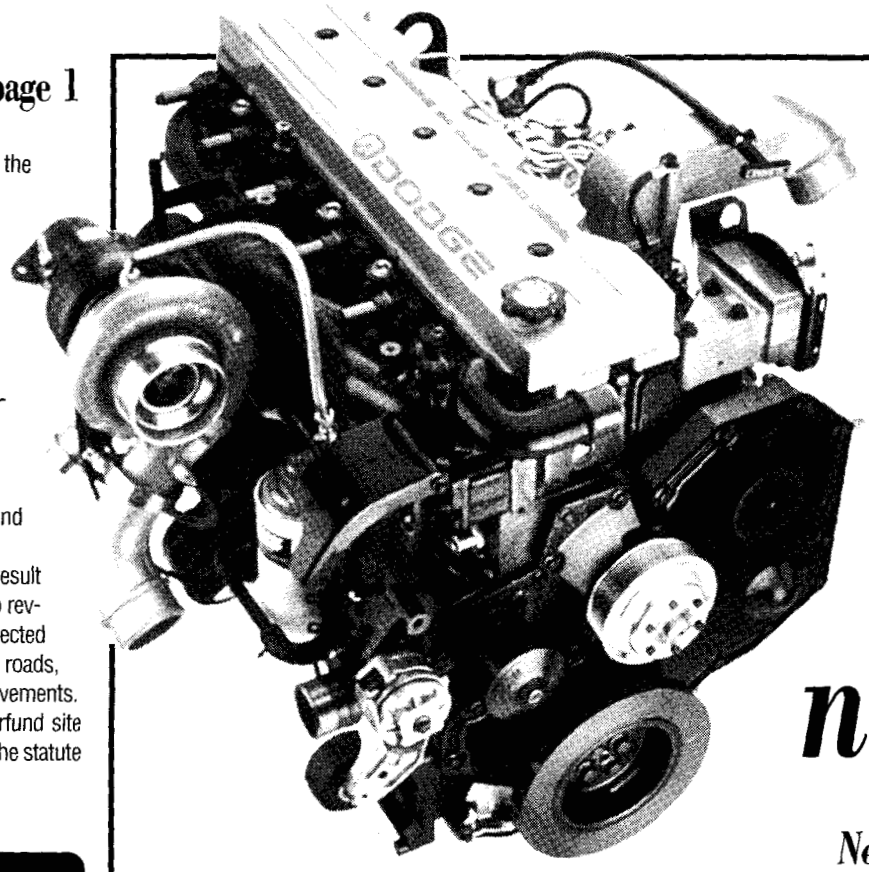
Money that a business spends on attorneys cannot be spent on new equipment, research and development, or contributions to employees' retirement plans. And these lost opportunities due to Superfund are not limited to the private sector.

Property lying dormant for years as a result of its Superfund status produces little or no revenue, and the revenues that are not collected cannot be spent on new hospitals, schools, roads, bridges, or any other infrastructure improvements. Moreover, properties located near a Superfund site also decline in value, adding to the burden the statute imposes on affected communities.

For more information...

More information on the Superfund program and efforts to reform it is available through ***PolicyFax***.

Call **312/377-3000** and request documents **#2333128** Hazardous Waste: Observations on EPA's Cleanup Program (8 pp.); **#2333129** Superfund Legislation: True Reform or a Hazardous Waste? (3 pp.); **#2333303** Cleaning Up [illegible]



The 5.9-liter Cummins 24-valve Turbo Diesel Engine, which features an electronic fuel-injection system and generates 235 horsepower—enough to tow an 11,000 pound load.
photo/Chrysler Corporation

DIESEL or *natural gas?*

New Harvard study finds environmental pros and cons with both

Which fuel is the right choice for heavy trucks and buses?

It's a question facing policymakers in California, at the U.S. Environmental Protection Agency, and at government agencies around the world, as well as executives at automakers and corporations that operate fleets of buses or trucks.

A new study comparing the two fuels, contributor to ground-level ozone and the formation of fine particulates.

The advantages of diesel, by contrast, come from its efficiency. Diesel engines convert a large fraction of the available energy into useable work. As a result, diesel engines consume less

Methane is approximately 20 times more potent as a greenhouse gas than CO_2.

The study finds that European regulators seem to be favoring diesel fuel as part of their effort to comply with the Kyoto agreements to

For more information...

OF THE MONTH

Organizations and government agencies of interest to property rights activists.

Alliance for America
http://www.allianceforamerica.org
P.O. Box 449
Caroga Lake, NY 12032-0449
phone 518/835-6702
fax 518/835-2527
A coalition of grassroots organizations concerned with protecting the constitution, property rights, and humans and the environment.

American Association of Small Property Owners
http://www.smallpropertyowner.com
A national grassroots organization of landlords, property owners and real estate investors committed to restoring common sense to regulations.

American Land Rights Association
http://www.landrights.org
phone 360/687-3087
fax 360/687-2973
A grassroots, non-profit organization advocating private property rights and multiple use of federal lands including recreational and commercial access. ALRA is engaged in issues such as compensation for government takings of property, defending cabin permittees and inholders of private property within federal lands such as national parks and national forests, opposition to land acquisition trust funds such as the Conservation and Reinvestment Act (CARA), and support for rural communities. Headquartered in Battle Ground, Washington, we also have a full-time staff and office in Washington DC.

Citizens for Private Property Rights
http://hometown.aol.com/proprts/cppr/home.html
P.O. Box 441
Santa Ysabel, California 92070
phone 760/789-5878
email Proprts@aol.com
The purpose of CPPR is to educate the public concerning civil and constitutional rights affecting pri-

Citizens for the Protection of Property Rights
http://www.lrbcg.com/cppr/
P.O. Box 188
Milan, OH 44846
C.P.P.R. pledges to fully support all landowners who seek legal action to preserve and protect their property rights and who seek monetary compensation for their loss of privacy, depreciation of land values and/or subjection to crime, liability, vandalism or property damage.

Defenders of Property Rights
http://www.defendersproprights.org/
1350 Connecticut Avenue NW #410
Washington, DC 20036
phone 202/822-6770
email mail@defendersproprights.org
Defenders of Property Rights is the only national public interest law foundation devoted exclusively to helping private property owners who have been deprived of their property by government actions. Whether their property was taken through regulation, legislation, or some other bureaucratic action, private property owners can look to Defenders to get relief.

Foundation for Research on Economics and the Environment (FREE)
http://www.free-eco.org/
945 Technology Boulevard #101F
Bozeman, MT 59718
phone 406/585-1776
fax 406/585-3000
email free@mcn.net
FREE's mission is to advance conservation and environmental values consistent with individual freedom and responsibility. We are intellectual entrepreneurs, developing environmental policies featuring private property rights, market incentives, and voluntary organizations.

Free Our Parks and Forests
http://www.freeourparks.org/
4739 University Way NE #1312
Seattle, WA 98105
phone 360/457-4719

League of Private Property Voters
http://www.landrights.org/_private/lppvhome.htm
The League of Private Property Voters
P.O. Box 423
Battle Ground, WA 98604
phone 360/687-2471
fax 360/687-2973
email ccushman@pacifier.com
LPPV has developed and publishes the Private Property Congressional Vote Index, a Congressional scorecard designed to let the public know how each Congressman and Senator voted on important land-use issues.

Liberty Matters
http://www.libertymatters.org/
Three national organizations (American Land Foundation, Land Rights Foundation, and Stewards of the Range) have combined efforts to create a service organization connecting grassroots America with public policy institutions and lawmakers to effect legislative and political change.

National Association of Reversionary Property Owners (NARPO)
http://www.halcyon.com/dick/
1075 Bellevue Way NE #278
Bellevue, WA 98004
email dick@halcyon.com
Dedicated to the principle that private property ownership must be maintained in the hands of citizens and not the government. Interesting Rails to Trails information.

National Wilderness Institute
http://www.nwi.org
P.O. Box 25766
Washington, DC 20007
phone 703/836-7404
email:nwi@nwi.org
A site to keep people informed about common sense ideas covering a variety of environmental issues including endangered species, land use rights, and environmental regulations.

People for the U.S.A.!
http://www.pfw.org
301 North Main Street
Pueblo, CO 81003
phone 719/543-8421
email pfw@iex.net
A coalition among interested individuals and groups throughout the US to protect multiple-use on public lands, individual private property rights and resource production.

Political Economy Research Center (PERC)
http://www.perc.org
502 South 19th Avenue
Bozeman, MT 59718
phone 406/587-9591
fax 406/586-7555
email perc@perc.org
A market-oriented think tank focusing on environmental and natural resource issues. Their research and policy analysis covers endangered species, forestry, fisheries, parks, public lands, property rights, Superfund, water, and environmental education.

Property Rights Congress of America
http://www.freedom.org/prc/
email prc@freedom.org
The Property Rights Congress is a unique organization. It is modeled after the 105th United States Congress. It places all action at the grassroots level, and at the same time provides a fast mechanism for property right issues to be raised to the national level. The PRC will convene an annual Session which will be a working Session to create, debate, and pass Resolutions. These Resolutions will then be passed to the proper level of government, state, or federal.

Stop Taking Our Property - STOPwatch
http://members.aol.com/jwaugh7596/STOPwatch.html
email jwaugh7596@aol.com
Originally a small group of inholders working to save their private property from being incorporated into the Indiana Dunes National Lakeshore, today STOP remains involved in

Burning Boise

By TOM RANDALL

Radical anti-civilization environmentalists at the Earth Liberation Front (ELF) have claimed credit for setting a fire that destroyed the regional headquarters of Boise Cascade timber company in Monmouth, Oregon on Christmas morning, 1999.

Radical environmentalists have claimed responsibility for burning down the regional headquarters of Boise Cascade timber company.

Earlier that year, ELF activists claimed responsibility for a multi-million-dollar fire that destroyed a ski resort in Vail, Colorado, and for a fire at Medford, Oregon-based U.S. Forest Industries.

"the Virgin Forests of Chile." Both claims have been denied by company spokespersons.

In the U.S., according to Boise Cascade, the company plants several trees for every tree harvested on the more than 2 million acres the company owns or manages. The company "has established standards for sustainable forestry that integrate the growing, harvesting, and renewal of trees with conservation of wildlife, plants, soil, air and water quality, and the maintenance of aesthetics," it reports.

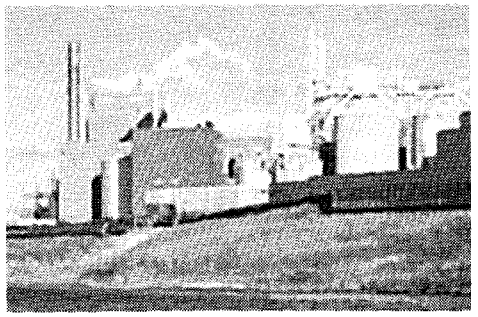
With regard to the replenishment of trees, Boise Cascade's claim, as well as those made by the industry in general, seem to be supported by U.S. Forest Service statistics. Forest Service data show that the last year more trees were harvested than planted in the U.S. was 1933. In an average year, approximately 40 percent of all newly planted trees are planted by the forest industry. Another 40 percent are planted by other private sources, and 20 percent are planted by all local, state, and federal governments.

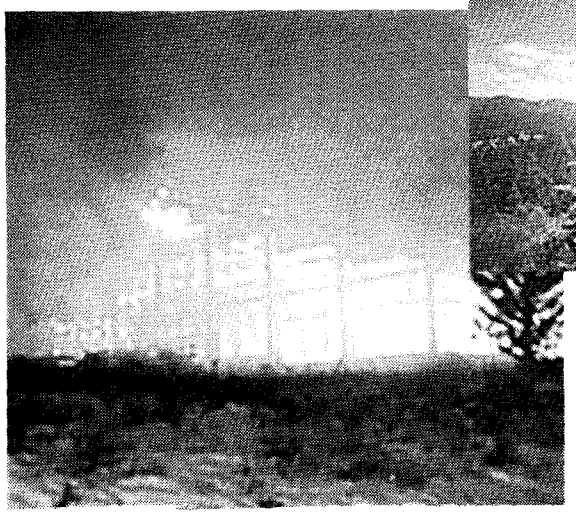
A review of Boise Cascade's plans show that Cascada Chile, the company's Chilean partnership, will *reduce* the cutting of virgin timber there and aid in the reforestation of native timber already cut. Significant economic benefits for the region are anticipated as well

agency, will provide private landowners with both the incentive and the ability to better manage degraded land and grow more and healthier trees. The company will work with landowners and universities on land management techniques and the development of superior planting stock—trees that will be supplied to landowners at cost. A native species seed collection program is already underway, in cooperation with Chile's Universidad de Austral.

In addition, the company says it will purchase timber only from Chilean private landowners who have adopted an approved forest management plan consistent with its philosophy of sustainable forest management.

The lumber processing plant being built in Chile by Cascada Chile will make oriented-strand board, used in home building. Power for the plant will be generated by using solid waste, such as tree bark, sawdust, and trim from logs. Its construction will employ 1,200 people; its operation will employ approximately 200 people full-time. The Cascada Chile complex will also include the construction of a modern deep-water port.





***From top*: The Monmouth, Oregon headquarters of Boise Cascade timber company, before the December 24, 1999 arson fire; acreage managed by Boise Cascade** *photos/Boise Cascade*; **Two Elk Lodge in Vail, Colorado, engulfed in the flames of a fire set by radical environmentalists in early 1999**

Coalition challenges proposed vehicle scrappage program

The Coalition for Auto Repair Equality (CARE), representing companies in the automotive parts, repair, and maintenance industries, has challenged as "unproven" a car/truck scrappage program proposed by the Texas Natural Resource Conservation Commission (TNRCC).

The TNRCC proposal resurrects a scrappage program repealed in 1998. The plan suffered from lack of interest among Texas motorists and opposition from the independent repair industry and taxpayers who rejected the use of tax dollars to pay for scrapped vehicles. A similar provision in the 1994 National Highway bill was killed by nationwide opposition to vehicle scrappage programs.

According to CARE, TNRCC's proposed resurrection of the program is aimed at appeasing the U.S. Environmental Protection Agency with "paper reductions" in air pollution in Texas's nonattainment areas.

The current proposal would require each affected locality—among them El Paso, Austin, Beaumont, Houston, Galveston, and Dallas/Ft. Worth—to fund a program offering motorists money to scrap their vehicles. Each locality will determine how it will have the cars and trucks scrapped, how much it will pay the motorists, and through what funding source it will raise the revenues to do so.

Scrappage program opponents warn the proposal places an unfair burden on the shoulders of motorists who can least afford it. Low- and fixed-income individuals are not likely to be able to turn a few hundred dollars—what they're likely to get through the scrappage program—into a new or newer vehicle. CARE warns that scrappage programs encourage lower-income motorists to become saddled with debt by incurring monthly car payments and higher insurance premiums.

Low- and fixed-income individuals are not likely to be able to turn a few hundred dollars what they're likely to get through the scrappage program into a new or newer vehicle.

CARE encouraged the TNRCC to look to neighboring Arizona for a more effective program aimed more squarely at

For more information...

...on vehicle scrappage programs,

call PolicyFax at 312/377-2000

EPA loses in court ...again

By TOM RANDALL

For the third time in less than a year, the U.S. Environmental Protection Agency has had one of its air-quality regulations rejected by the District of Columbia Federal Appeals Court. On January 4, 2000, the Court overturned a 1998 EPA regulation permitting areas to use reformulated gasoline (RFG) even if they were not specifically authorized to do so by the 1990 Clean Air Act.

The EPA loss came in a suit filed by the American Petroleum Institute and the National Petrochemical and Refiners Association, initiated when the Governors of Kansas and Missouri applied for permission to use RFG in the Kansas City area to relieve minor pollution problems not covered by the Clean Air Act. The plaintiffs expressed concern that expanding the use of RFG to areas not authorized by the act would strain supplies of the fuel, which is more costly than non-reformulated gasoline.

The Clean Air Act specified that areas could "opt in" to the RFG program if they were in one of four categories for non-compliance with clean air standards: marginal, moderate, serious, or severe. The Kansas City area fell into none of those categories.

"Congress provided for 'opt in' only for areas classified as marginal, moderate, serious, or severe," the court concluded. "It meant what it said. If Congress makes an explicit provision for apples, oranges, and bananas, it is most unlikely to have meant grapefruit."

In May of last year, the same court ruled EPA had violated the constitutional provision against non-delegation of legislative authority with its new rules on smog and particulate matter: in other words, EPA was making law, a power solely reserved to Congress. The court reaffirmed that decision in October.

Also in May, the court struck down EPA's new mandates for tightening restrictions on nitrogen oxide emissions in 22 southern and Midwestern states. The agency is now seeking to circumvent the court's ruling by applying the restrictions to fewer states. As of this writing, it is not clear whether this new approach will return the entire matter to court.

SLUDGE from page 1

but for the general public's safety as well. Speaking on condition of anonymity, the scientist said Class B sludge could even, in some cases, contain "super bugs," bacteria resistant to modern antibiotics.

"The CDC study shows what a serious oversight it was for EPA to approve Class B sludge without a comprehensive risk assessment for pathogens,"

DAVID L. LEWIS PH.D.

EPA microbiologist David L. Lewis Ph.D., who has been raising concerns about EPA's sludge policy since 1996, agrees. "The CDC study shows what a serious oversight it was for EPA to approve Class B sludge without a comprehensive risk assessment for pathogens," he said.

CDC's Dr. Greg Wagner, who is drafting the agency's new policy on Class B sludge, said he insisted Class B sludge represented no health risk. They defended EPA's "Sludge 503" rule at length. Tom O'Connor, chief of maintenance and operations for the Water Reclamation District, said he has confidence in the sludge rule but "would be open-minded" to any new data.

John Colletti, representing EPA Region 5 in Chicago, said the CDC report showed only that workers should use common sense when handling sludge. He indicated the report would not cause EPA to re-evaluate its sludge regulations.

Wheelabrator's public relations consultant, Bill Plunkett, said only that "the LeSourdsville study appears to be inconclusive and adds nothing to the body of knowledge about biosolids."

A history of controversy

EPA's Class B Sludge 503 rule was developed in 1993 as an alternative to ocean dumping of sludge from municipal waste treatment plants. But the rule's author, EPA's Dr. Alan Rubin, testified before the New Hampshire legislature that "[sludge] wasn't too toxic for the ocean [where much of it had been dumped previously]. The reason we got it out of the ocean was basically an image-political deal."

Rubin was testifying, in part, to refute questions raised about the safety of Class B sludge and Lewis's concern that sludge exposure may have resulted in the death of a New Hampshire man, Shayne Connor.

Lewis is well known in the scientific community for his research into the ability of viral, bacterial, and fungal human pathogens to survive in the environment. His work led to extensive changes in the way dental instruments are sterilized. While his peer-reviewed work on sludge was published in a recent issue of the

Congress to hold sludge hearings


JIM SENSENBRENNER

Rep. James Sensenbrenner (R-Wisconsin), chairman of the U.S. House Science Committee, plans to hold hearings on EPA sludge policy early this year, according to congressional sources.

Due in part to the Centers for Disease Control's finding that Class B Sludge was the probable cause of workers' illnesses in Ohio, the committee will open an inquiry into EPA's adherence to sound science in rule-making and its treatment of scientists who express dissenting views.

One focus of the committee will be EPA's treatment of microbiologist David Lewis Ph.D., who has questioned the agency's Sludge 503 rule for the last five years. Lewis has won two job discrimination/harassment suits against EPA and is now engaged a third.

irritation, respiratory problems, and flu-like

For his trouble, Lewis has been subjected to

EDITORIAL


TOM RANDALL

Uncle Sam: Sell that land!

By TOM RANDALL
MANAGING EDITOR

Teddy Roosevelt, who became the nation's 26th president following the assassination of William McKinley, has long been lionized as the man who led his troops up San Juan Hill. He was a rugged outdoorsman whose exploits set the public mood that led to the creation of the National Park system, the National Forest system, and the National Forest Service that manages it. Roosevelt became the "trust buster" who broke up the evil (read, successful) companies of the day.

Roosevelt, who established the Department of Commerce and Labor to assist him in his efforts to break up large companies, apparently knew or thought little of the free market. His trust-busting activities were based not on whether a company was illegally restraining competition, but on whether he personally considered it to be doing good or evil.

Roosevelt made an even greater error when he assumed that government would be a better steward of the land than are private individuals. His was probably an honest mistake. He loved the outdoors and, lacking the rare foresight of the founding fathers, probably thought that future bureaucrats and politicians would be good stewards of the land, while future private landowners might tend to use their land for their own selfish interests.

Since the Rough Rider's time, numerous studies have shown private lands to be well-managed. By contrast, the politicians and bureaucrats who followed him—and the Clinton-Gore administration is certainly no exception—have used federal ownership of one-third of the country to build bureaucratic empires and amass political power, to the detriment of the land, its resources, and its people.

The administration unabashedly names new national monuments, closing land off to human activity, to appease its radical green supporters during every Presidential election year. The 1.7 million-acre Grand Staircase-Escalante National Monument in Utah was designated just before the 1996 election, and now three new monuments (with more in the wings) have been named in support of Al Gore's campaign. Always, the designations have come despite the strenuous objections of residents, state and local government officials, and congressional delegations.

The nation's National Parks have fallen into such a disastrous state of disrepair, new restrictions are sought against their use by the public.

A recent survey of the Fish and Wildlife Service's wildlife refuge managers, reported by the Associated Press, found that "the nation's 521 wildlife refuges suffer from poor leadership, inadequate staffing, and low funding." They would seem to have a valid point. A Congressional investigation has found that Jamie Clark, the Fish and Wildlife Service's director, has taken funds designated for state wildlife programs and held them instead, illegally, in a slush fund for pet projects and foreign countries—including Red China.

The Forest Service is an even greater disaster, and proposing even tighter control of even more land. Under the command of Mike Dombeck, a man with virtually no forestry background, and deputy Chris Wood, the Forest Service has suffered large-scale defections of its "dirt foresters," the "on-the-ground and in-the-trenches" professional managers in our nation's forests, according to Congressional sources.

Under Dombeck and Wood's stewardship, logging in our National Forests has fallen by 75 percent, 90 percent in some forests. The two have orchestrated the logging cutbacks under the pretense of protecting "old-growth" forests . . . but the end result will be the forests' demise. Trees have a natural life span. They die. For new trees to replace them they need sunlight, but the "old growth" shade stunts that growth, turning them into brush.

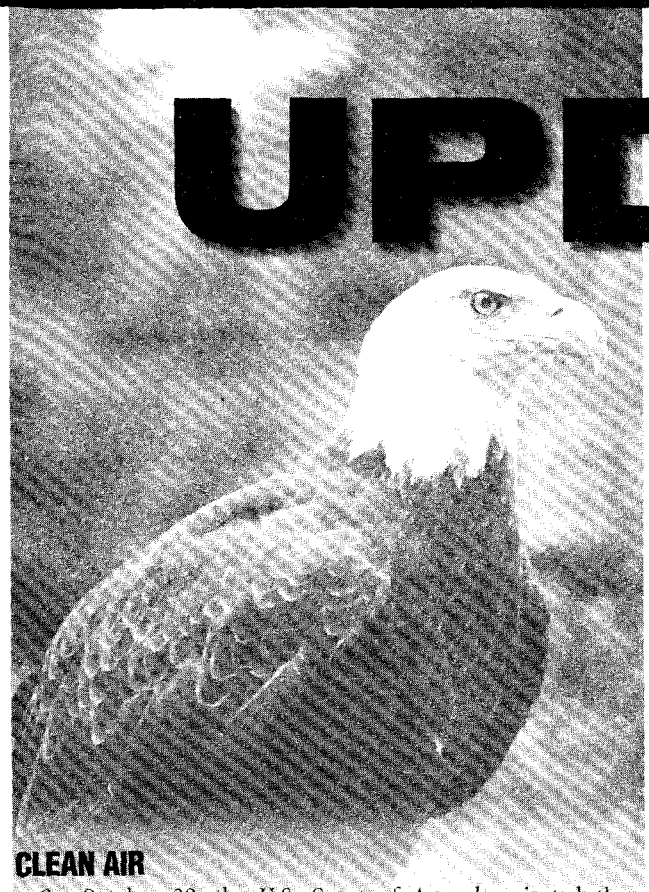
Under the Dombeck/Wood "no logging policy," the only other result, which professional foresters have told us they fear most, is catastrophic forest fires, made super-hot and nearly impossible to extinguish.

The Clinton-Gore administration's scheme to make 40 to 60 million acres of National Forest roadless will aggravate the situation. "No roads" means no logging and no way for firefighters to get to fires.

Not incidentally, the no-logging policy has also had the effect of starving out forest communities. The loss of individual incomes is obvious. Less obvious to those who live outside forest communities is the effect on their schools. When the government took over forest lands, it removed their tax base for school funding. So Congress provided that 25 percent of Forest Service income must be returned to these communities for funding schools. As logging has been restricted, Forest Service income has plummeted . . . and so has school funding.

The federal government is not and never will be a fit manager of land. People—people with a personal, on-the-ground stake in the well-being of the land—are the best land stewards.

Uncle Sam: Sell that land. Use the money to pay down the debt, save Social Security, build a rocket that can actually land something on Mars, finance some stupid health care scheme (strike that last one). Let private owners take care of the land, as the founding fathers originally intended.



UPDATE

on environmental legislation and regulation

By PEOPLE FOR THE USA

The following summary of pending legislation and recent regulatory decisions is provided by People for the USA, a nonprofit 501(c)(6) corporation advocating continued multiple use of public lands.

People for the USA is a grassroots organization with over 120 chapters across Western states and a growing presence in the South and Midwest. Its members are concerned that policies implemented to "protect the environment" are undermining property rights and the economic foundations of many communities. They challenge the notion that society's use of natural resources is "unnatural" or incompatible with effective environment protection.

Annual individual membership is $25. For more information write People for the USA, 301 North Main Street, Pueblo, Colorado, 81003 or e-mail pfw@usa.net.

CLEAN AIR

On October 29, the U.S. Court of Appeals rejected the Environmental Protection Agency's appeal of a May ruling that EPA overstepped its Constitutional authority in writing new ozone and particulate standards. In essence, EPA has to reconsider its standards.

Not so good was President Clinton's unilateral announcement (complete with facial gymnastics) on December 21 of sweeping new "Tier II" standards for autos and light trucks to be implemented by 2007. Nitrogen oxide must be cut 90 percent, from 0.4 grams/mile to 0.07 g/m, sulfur content in gasoline also will have to be cut 90 percent.

Equally historic is federal intervention in the "upstream enforcement" war going on between Eastern and Midwest utilities. First came

ducers are losing 30 percent and Santa Cruz fishermen 60 percent of what they hook to sea lions and harbor seals, which recognize easy pickings. Congress is expected to reconsider the 1994 Marine Mammal Protection Act next spring.

And finally, Down East in Maine, USFWS has released a *Federal Register* proposal to list Atlantic salmon in eight Maine rivers as endangered, to vociferous protests from Maine Governor Angus King (I). Apparently the state's threatened species management plan isn't restrictive enough for Trout Unlimited and the Atlantic Salmon Federation, which despite the *Register*, are suing for emergency action—ala National Wildlife Federation and prairie dogs.

GRAZING

In another iteration of the Green take on Patrick Henry: "Give me wilderness, or I'll kill you!" Public Employees for Environmental Responsibility (PEER) released a late October report claiming grazing at the 1.6-million-acre Mojave National Preserve in southeastern California conflicts with laws to protect threatened desert tortoises. At the time of the release, Congress was going hammer and tongs on the Rangeland "Reform" rider, since passed (barely, with amendments), that would have prevented hopelessly backlogged leases from being

(Green-generated, of course) was covered nationally in a light unfavorable to ORV'ers by *Christian Science Monitor* stringer Todd Wilkinson, who in other writings has advocated imposition of public and private land use rules outside Yellowstone Park for the benefit of grizzlies. No bias here!

REGULATORY/SUPERFUND REFORM

For the zillionth time, "a funding deadlock" wrecked Superfund reform in Congress. In early November, House Ways and Means Chairman Bill Archer (R-Texas) proposed paying for Superfund work with existing corporate income taxes, an idea rejected quickly by Democrats and Transportation Water/Environment subcommittee chair Sherwood Boehlert (R-New York).

RIDERS

Like any bloodbath, there were casualties and survivors of the annual Interior Appropriations bill ($14.9 billion this year) signed by the President, and no real winners.

Dead: A rider to stop Minerals Management Service from implementing even-more-clunky petroleum royalty formulas; a rider to overturn the 77-species biological survey judicial ruling

ider

"Hard Green" is hard to swallow

By JOSEPH BAST

A review of *Hard Green: Saving the Environment from the Environmentalists, a Conservative Manifesto*, by Peter Huber (Basic Books, January 2000)

Five years ago, a senior executive of a major trade association in Washington D.C. told me, in almost reverential tones, that Peter Huber was writing a book that would do for the debate over environmental policy what his 1988 tome, *Liability*, did for the tort reform debate: redefine key concepts and terms, devastate the positions of the Left, and advance a new paradigm for advocates of free enterprise and limited government.

Huber delivered on his promise, though this reviewer found the book a disappointment in some ways.

Dismantling radical environmentalism

Huber is brilliant at dismantling radical environmentalism. Like the late Julian Simon, Huber believes human creativity trumps natural resource depletion and that history proves this to be so. Jay Forrester, whose computer models drive the Limits to Growth school of thought, "counted mouths, but behind every human mouth there cogitates a brain." (10)

Huber exposes the contradictory claims by environmentalists that complexity is "brittle" when it is the result of human design and technology, yet stable when it is the result of blind

-ing

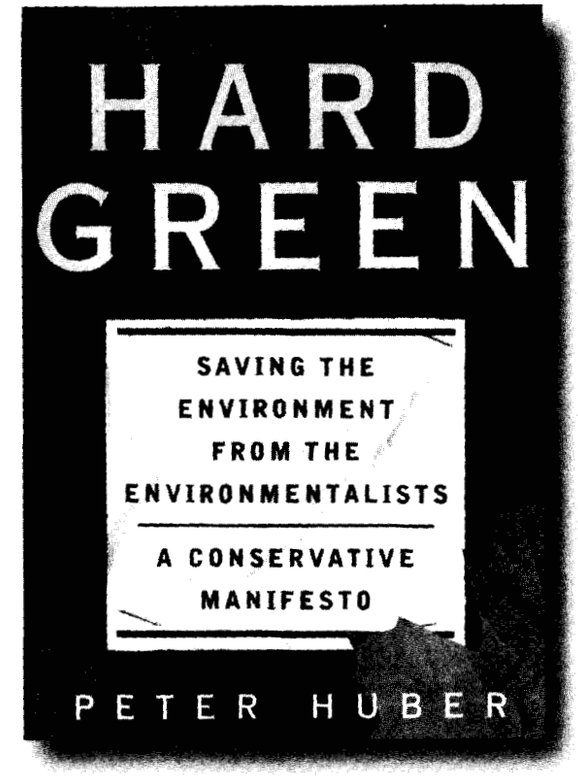
property, not away from it, to keep moving from public toward private, from collective prescription toward private control, from government mandate toward market exchange." (136-7)

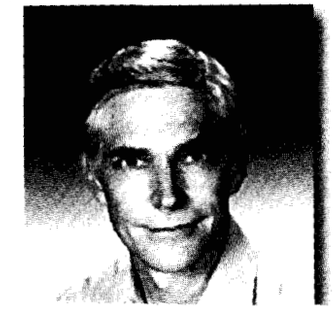
Huber departs occasionally from a school of thought that emphasizes sound science and free-market approaches to environmental protection created by a group of thinkers that includes the late Julian Simon, Richard Stroup, John Baden, Randal O'Toole, Lynn Scarlett, and Terry Anderson. That school of thought, called free-market environmentalism or New Era environmentalism, has earned a place in debates over the future of the environmental movement and, more gradually, in current political debates.

The wilderness exception

Huber's biggest deviation concerns the provision of public goods. He makes sweeping admissions about the market's failure to "attach proper value to public goods: wolf and forest, eagle and ozone layer, whale and ocean." (18) On these subjects Soft Greens "are simply right. They have here an unanswerable case for government intervention of some kind." (18)

The intervention Huber seems to favor is the government "buying up green spaces, river banks, watersheds, and forests" and "setting it aside forever," (132) but perhaps only for large areas or places, such as Yellowstone, that he thinks are symbols of nationhood. (90-91, 157) He





free-market environmentalism. Crops and farms, he says, "are 'green' only in the most

ı declares three new monuments

National Conservation Areas. H.R. 2795, introduced by the Arizona delegation in the House, would have provided protection for the area while preserving existing public uses of the land such as hunting, hiking, and ranching. Stump explained, "the bill protects the area for future generations, while maintaining existing uses at their current level."

Monument designation restricts hunting, fishing, mining, logging, and recreational vehicle use in the areas. Many communities in the areas affected depend on those activities for their livelihood.

For more information...

The full text of Rep. Jim Hansen's H.R. 487 (3 pp.) and Bob Stump's H.R. 2795 (9 pp.) is available through ***PolicyFax***.

Call **312/377-3000** and request documents **#2368607** and **#2368606**.

Or use ***PolicyBot***, Heartland's online research service, at **www.heartland.org** to request the documents in Adobe Acrobat's PDF format.

Lawmakers told *Environment & Climate News* they were surprised and dismayed when Interior Secretary Bruce Babbitt recently abandoned his efforts to work with them and instead asked the President to designate the areas as monuments. The acreage set aside in Arizona is nearly double what was originally discussed with the Arizona delegation.

Said Stump, "the inclusion of an additional 450,000 acres of land which has not even been subject to [illegible]

ical in its presumption that they know better than the people of Arizona how to preserve our lifestyle. I believe that the very things that make these areas unique—their accessibility, remoteness, diverse recreation opportunities, and ranching lifestyles—have been jeopardized by the President's proclamation."

In the letter they sent before President Clinton's announcement, the Arizona lawmakers explain "there is not an immediate threat to these areas that would force the Administration to act precipitously on these designations, particularly when Congress is in recess." Stump added, "less than one-half of one percent of the land designated in these national monuments is private land—even capable of being developed—clearly demonstrating that development is not a real threat."

More designations on wish list

According to the *Washington Times*, Secretary Babbitt may ask President Clinton to name another six sites in California, Montana, Colorado, and Oregon. Those would include the Missouri Breaks along the Missouri River in Montana; Steens Mountain and Soda Mountain in Oregon; Santa Rosa Mountains and Carrizo Plain in California; and 160,000 acres in Montezuma County, Colorado.

Rep. Jim Hansen (R-Utah), chairman of the House Parks Subcommittee, was dismayed by the report. "Once again the President hurts southern Utah for his own political gain," Hansen said. "This kind of abuse of the Antiquities Act has got to end." Hansen has introduced legislation, H.R.1487, which would guarantee public notification of potential monument designations. The bill, approved by the House by a 408-2 vote on September 24, is pending in the Senate.

Sen. Conrad Burns (R-Montana) urged Secretary

Idaho sues U.S. Forest Service

By GRETCHEN RANDALL

"If the Clinton Administration has its way, many of our state's public trust lands could be severely devalued—which directly affects the foundation for school funding in our state," said Idaho Governor Dirk Kempthorne, announcing that he and the state of Idaho have filed suit against the U.S. Forest Service. "I'm extremely concerned about what this proposal could mean for Idaho's children."

The suit, filed on December 30 in the United States District Court for the District of Idaho, alleges the Forest Service failed to give the state sufficient time to respond to President Clinton's proposal to close all road development in current roadless areas. The Clinton proposal would affect 40 million acres of national forests across the country, including over 8 million acres in Idaho.

On January 7, the state followed up with a request to Federal District Judge Edward Lodge that he issue a preliminary injunction against the Forest Service, asking among other things that it delay action on its draft Environmental Impact Statement until the close of the 120-day comment period.

Alan Lance, Attorney General for the state of Idaho, said President

receive information about the roadless areas proposal, including maps or other site information to determine the proposal's likely impact on Idaho, was hampered by the federal government. "Citizens attempting to visit the Forest Service's 'roadless initiative' Web page have discovered that access to information, such as maps and site-specific information, was still 'under development' when the comment period expired."

"What we're asking of the federal government in this lawsuit," Kempthorne explained, "is to open up the process to provide a meaningful dialogue between the states that would have to live with the effects of this proposal. Any significant relationship between the states and the federal government demands nothing less."

The state had requested from the Forest Service an extension of 60 days to provide meaningful comment on the vast proposal. The federal government did not respond. Commented Lance, "the bottom line is that it is impossible for the state, or any Idahoan, to obtain information necessary to understand the Forest Service's proposal."

The Forest Service and other land management agencies,

Superfund

By BONNER R. COHEN

In December 1999, the nation "celebrated" the nineteenth birthday of one of the most ill-conceived environmental laws on the books—Superfund.

Enacted in 1980 to provide a mechanism for the cleanup of heavily contaminated properties, the statute has instead guaranteed that most sites falling under its jurisdiction aren't restored for years. The biggest obstacle is Superfund's self-defeating liability scheme. Designed to ensure the "polluter pays" for cleanup, the liability provisions are so draconian as to be unworkable.

For example, Superfund exposes anyone with any connection to a site to liability for all cleanup costs, even if their activity was legal at the time. Superfund's vast liability net can ensnare people and companies who had nothing to do with contaminating a site, but who may have owned the property or conducted business related to the site.

These "potentially responsible parties" (PRPs), as they are known, try to lessen their own burden by having their attorneys seek out other parties who may have been involved. The result is litigation that can go on for years, during which time the property lies in limbo. Cleanup at a typical litigation-ridden Superfund site costs $25 million and takes 10 to 12 years.

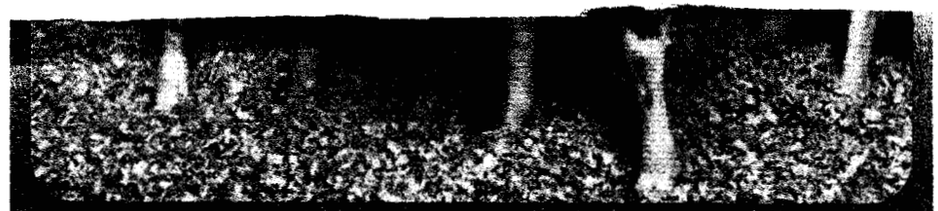
How much has Superfund cost? We don't know and we never will. The Environmental Protection Agency (EPA) recently put the tab at $57 billion, but the agency really has no idea what the program has cost and no interest in finding out—

SUPERFUND continued on page 22

ous. Many characteristics, such as pest and disease resistance, have been routinely introduced into crop plants by traditional methods of sexual reproduction or cell culture procedures. The addition of new or different genes into an organism by more recombinant DNA techniques does not inherently pose new heightened risks relative to the modification of organisms by more traditional methods."

Explaining why he drafted the declaration and launched the effort to bring other scientists on board, Prakash said: "To promote a responsible

BIOTECH continued on page 11



Researchers said they had genetically engineered goats to produce a human protein used to affect blood clotting—and then cloned the goats. The team—at Framingham, Massachusetts-based Genzyme Transgenics Corporation, Tufts University, and Louisiana State University—said their three female goats, shown in this undated photograph, were born last fall. *photo/Reuters*

CDC report warns of sludge danger

By TOM RANDALL

Scientists and medical researchers are raising concerns that municipal sludge spread on farm fields across the U.S. may be responsible for illnesses and even deaths.

Officially known as "Class B biosolids," the sludge is made from human sewage and hospital waste. The U.S. Environmental Protection Agency, which authorized the field-spreading of sludge in its 1993 "Sludge 503" rule, steadfastly defends the sludge as harmless to humans.

But in a recently released report, the Centers for Disease Control found Class B sludge to be the likely cause of a rash of illnesses among sludge handlers in LeSourdsville, Ohio. According to the report, the workers contracted gastro-intestinal diseases through either ingestion or inhalation of pathogens contained in the material.

The CDC report recommends certain safety precautions be taken by workers handling Class B sludge—including the wearing of "protective clothing, boots, goggles, and face shields." It further says sludge-handlers should immediately use on-site showers after completing their work, and gear should be cleaned or discarded after use. Such precautions are not mentioned in EPA's sludge-handling regulations.

A scientist close to the CDC study expressed concern not only for sludge-handlers' safety,

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INSIDE

The Heartland Institute
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risk of biological organisms."

Current tests now measure the total amounts of DDT, and its derivatives DDE and DDD, in soil. The Cornell study suggests that the age of the chemicals in the soil may make them less likely to be absorbed by living organisms. The "biological availability" of the chemicals, according to Alexander, would seem to be a more realistic measure of potential harm to humans, animals, and plants.

Forest Service supervisor quits in Nevada

Claiming she was tired of "fed-bashing," Gloria Flora, supervisor of Humboldt-Toiyabe National Forest, the largest national forest in the lower 48 states, has resigned. She added, "The attitude towards federal employees and federal laws in Nevada is pitiful. The public is largely silent, watching as if this were a spectator sport. This level of anti-federal fervor is simply not acceptable."

One controversy spurring Nevada's "anti-federal fervor" is playing out near Elko, where a mile-and-a-half of dirt road was washed out in a flood on the Jarbridge River four years ago. Locals want the road rebuilt, but the Forest Service says rebuilding it will jeopardize a bull trout population. Locals plan to rebuild the road themselves, even though the Justice Department says doing so would be illegal.

Cardboard sleeve as good as it gets

Starbucks Corp. has called an end to its search for the holy grail of take-out coffee: an environmentally friendly disposable coffee cup.

The company had hoped to develop a single container that could replace the "double cup" or extra paper sleeve it currently uses. According to the *Wall Street Journal*, Starbucks worked with the Alliance for Environmental Innovation to test a new cup design in San Francisco and Washington DC, but "the testing did not give them the results they were looking for," said Alliance Director Jackie Prince-Roberts. Starbucks said for now it will use corrugated sleeves as a "permanent alternative to double-cupping."

Evergreen magazine

Evergreen magazine was founded in 1986. Initial funding came from a small group of Southern Oregon lumber companies interested in promoting wider citizen involvement in the federal government's congressionally mandated forest planning process. In the years since our founding, the magazine has assumed a much wider role, providing credible forums for scientists, policy makers, landowners, and community leaders across North America. The magazine is now thought to be the most widely read publication of its kind in the world.

Among recent *Evergreen* cover stories:

- "Minnesota White Pine: Window on the Past, Bridge to the Future"
- "Should We Let Diseased National Forests Die and Burn? Is Restoration Forestry a Better Idea Than 'Zero Cut'?"
- "Case No. 1 Turns 100—The Federal Government Sold its First Timber Sale in November 1899: A Look Back and a Look Ahead"
- "War in the North Country: The Battle for Control of the Northeast's New Forest"
- "Forestry in Indian Country: Progress and Promise"
- "A Sense of Foreboding: Who Will Control Forestry's Destiny in the Eastern Hardwood Region?"
- "Idaho's Forests at the Crossroads"
- "Montana: Paradise Lost or Paradise Found?"

Among our upcoming issues is a major investigation of logging practices in the United States. Most Americans believe harvesting "destroys" forests, but our four-year on-site study reveals this simply isn't true. What is true is that harvesting techniques vary widely as a reflection of natural disturbance patterns present in different kinds of forests.

Occasionally, landowners do exercise poor judgement when harvesting their timber, but the environmental industry's sweeping claim that "greedy timber barons" are "destroying" forests is bunk.

Please join us!

If you would like to obtain membership information and a free copy of a recent *Evergreen* issue, please see the ad form on page 16 of this issue of *Environment & Climate News*. Or contact Mark McQueen, Director of Development, 5000 Cirrus Drive, Suite 201, Medford, Oregon 97504, phone 541/773-2247. And watch for our Web site—evergreenmagazine.org. We hope to be up and running in April.

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posal which could aggravate the burden of malaria upon your citizens. . . . In our view, setting a deadline for the elimination of DDT . . . unacceptably endangers health in countries with malaria."

"To act ethically," the letter continues, "we must know, with the greatest of certainty, that DDT is unnecessary before we ban it."

Banned from use in the United States 27 years ago, DDT remains the most effective pesticide in preventing the spread of malaria, which every year kills nearly 3 million people, most of whom live in poor, undeveloped countries. According to the World Health Organization, which last year launched a Rollback Malaria campaign, 300 million to 500 million new malaria cases are identified every year.

Malaria has made a dramatic comeback in certain countries in part because many nations, pressured by environmentalists, no longer use DDT for agricultural purposes. The biggest manufacturers and users of the chemical are India, China, and Mexico, the latter promising to cease its use by 2007.

Ecuador has gone against the trend, actually increasing DDT use since 1993. It claims a 60 percent decline in new malaria cases. Bolivia, Paraguay, and Peru, all of which stopped using the chemical six years ago, have seen new cases soar 90 percent.

In an August 27, 1999 report for the *New York Times*, reporter Sheryl Gay Stolberg wrote that the present DDT dilemma developed when the U.N. announced a plan to "eliminate, or greatly reduce, the use of 12 toxic chemicals classified as persistent organic pollutants." DDT is

erenglish.html.

The 12-page letter is also available through ***PolicyFax***; call **312/377-3000** and request document **#2364407**.

Citing ethical considerations, DDT's allies, including the American Society of Tropical Medicine and Hygiene and the Malaria Foundation International, oppose any firm deadline for a DDT ban because it would hurt poor countries the most. Any such ban, they argue, should be postponed until an equally effective—and equally affordable—substitute can be developed. DDT's advocates warn that any rush to judgment on a replacement for DDT would be disastrous, because mosquitoes are known to quickly develop immunity to pesticides and drugs used in treating the disease.

Some countries have nevertheless turned to using pyrethroids, a more expensive and less effective alternative. According to an EPA official, the cost of spraying one house with DDT ranges between $1.60 to $8.50, compared with $4.20 to $24 using pyrethroids.

"The DDT-malaria issue is a stark illustration of the conflict between the developed and developing world," wrote Lorraine Mooney in the September 9 *Wall Street Journal*. "For the sake of a possible environmental threat to birds of prey in the 'civilized' world, millions of people in developing countries are dying. This must stop."

The DDT controversy first erupted in 1962, following the release of Rachel Carson's book, *Silent Spring*. Carson described how robins were poisoned after eating worms that fed on the leaves of Dutch elm trees sprayed with DDT. A fearful public forced changes that led to the creation of the U.S. Environmental Protection Agency and DDT's ban in 1972. Birds once threatened with extinction, including the American bald eagle, osprey, and peregrine falcon, have made remarkable comebacks in the U.S. since the ban was implemented.

using their private lands, and for refusing to pay any compensation when they did.

The unrest culminated in a giant rally in Austin, where the state capitol was ringed by a miles-long procession of tractors, pickup trucks, flatbeds, and marchers. "Remember the Alamo" and references to the Fifth Amendment to the whelming importance of the property rights issue in his election, but political pundits and columnists across the country have remarked on it.

But political ambition knows few principles, and it appears that George W. Bush's lust for the Presidency has caused him to abanmildly, shocked and dismayed to see Bush enthusiastically promote such an attack on private property ownership.

Bush's position is even more disturbing because it appears to demonstrate such a desperate desire to gain support from any direction, that the Governor has lost sight of the fact that space where brave Americans gave their lives to live free and own their own lands. Remember the Alamo, Dubya!

Governor Bush might even take note of the auto license plates in New Hampshire as he races from speech to speech and reflect on the meaning of "Live free or die."

The great windmill scam

Introduction By S. FRED SINGER

Not all Scandinavians are enamored with wind energy. What follows is an edited version of a stinging indictment by Iens Elliott Nyegaard, originally published in the Swedish journal Elbranchen (June 1999) and due for publication in the Danish Engineering Society weekly Ingenioren.

The emperor's new machines

By IENS ELLIOT NYEGAARD

The Danish 1968-generation introduced the Great International Windmill Scam. this whirling craze, a luxury-consumption of capital, energy, raw materials, and valuable landscapes. Then it was just a matter of cult objects for pseudo-religious fringe groups.

Costly, unpredictable, unreliable generation of a few kWh is of no importance to windmilling's political instigators. They want to set up highly visible political symbols. Symbols telling the less knowledgeable, "See, your courageous politicians are saving you" from wholly imaginary dangers! Behind this shameful play-acting they then fleece the populace with new "green taxes."

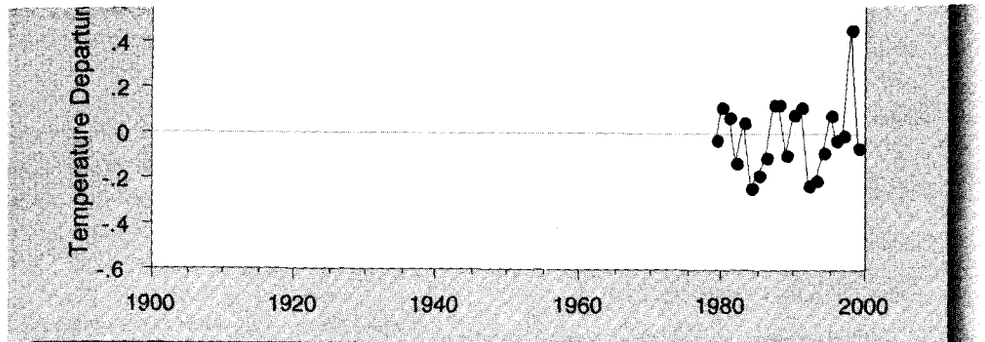
The windmill industry is the cuckoo's chick of Danish industry—totally and fatally dependent upon the subsidies set off for the erection of political symbols. This has been clearly pointed out by the advisor to the Danish government, the Norwegian environmental economist, Professor Finn R. Forsund of Oslo University, in an interview printed in *Politiken* 2/1/95.

Not one windmill in the world can show accounts—honest accounts—in black. All run on subsides, rather than on wind.

Windmilling rests—unstably—on four basic, false premises:

- "Windmills can replace other forms of electricity generation." **No, *never***. If you build for a certain effect from windmills, you must, at the same time, build for precisely the same effect from conventional power stations—which you then must keep idling, ready for immediate cut-in when windmills fail. And fail they do. Not even in the very windiest positions does any windmill give more than a third of installed effect—a fourth is the average.

WINDMILL continued on next page



Various versions of the global temperature record: Surface (top) and lower atmosphere records, from weather balloons (middle) and as derived from satellites (bottom).

January's Y2K lesson taught many of us that what is said in Washington isn't necessarily what *is*, depending what the meaning of "is" is. In the case of the nation's or the globe's temperature, our government has chosen to trumpet one particular climate history out of several available versions. Not surprisingly, the one they choose to tell us about is the hottest, and the rest are not remarkable at all.

But the heated pronouncement, which actually came from the National Climatic Data Center (NCDC) is not a result of cooking the books. Instead, it is a result of very selective reading.

The particularly hot data set is known as the could look it up." The NASA data are at www.giss.nasa.gov/data; the NCDC CD history is at ftp.ncdc.noaa.gov/pub; and the satellite record is at ftp://vortex.atmos.uah.edu/msu.

However you view it, our governments have been less than truthful in telling the whole story about the heat of 1999. What do you expect? After all, it is the year 2K.

According to Nature *magazine, University of Virginia environmental sciences professor Patrick J. Michaels is probably the nation's most popular lecturer on the subject of climate change. Michaels is the author of* Sound and Fury: The Science and Politics of Global Warming.

WINDMILL from page 4

- "The windmill is the decentralized power supply of "the little man." **No.** International capital and politically favored investors score the profits.
- "Windmills save us from an energy crisis." **Nonsense.** The world has available energy for all future needs. All so-called "energy-crises" are made by politicians.
- "Windmills will help to prevent a climate catastrophe caused by CO_2". **Rubbish.** In the best case, the CO_2-talk is an unproven theory. Increases in the CO_2 content of the atmosphere may be seen as beneficial to the world.

Apart from wastage of capital, energy, and raw materials, windmilling wastes a finite resource: valuable landscapes. People who have windmills forced upon them are robbed both of intangible—-quiet, views—and tangible possessions. Nothing stops infrasound, which according to topography and air conditions—temperature and humidity—can spread for miles.

Property values are reduced through a de-facto expropriation—to make way for private profits—without legal possibilities of redress. Leading North German property agents went public in the autumn of 1997 to state that the general property value drop in windmill-hit areas is 20 to 30 percent. Similar reports have come in from the UK and Denmark.

Since 1945, there has been a European consensus on an overriding planning principle: Coasts, high ground, and certain valuable landscapes shall be kept free of industry. True industries, on which hinge our welfare, are given special industrial zones. A political need for windmills as political symbols has caused this sound principle to be increasingly disregarded.

Windmills are often placed in areas with a weak electricity distribution net, which then is forced to accept a local, unpredictable electricity generation. Net and transformers must be strengthened—an expensive business. Electricity producers and distributors, who are forced by law to pay for windmill-electricity, have huge extra costs of close onto [$250 million] annually! The loss to Germany is about [$125,000] per windmill per year . . . and there are now over 7,000 windmills in that country. These losses correspond closely to calculations for the UK, Denmark and Sweden.

Non-green, true nature-conservancy groups have taken up the fight against subsidy-windmilling. In Germany, Bundesverband Landschaftsschutz assists more than 300 local "Citizens Initiatives" against the terror. In the UK, Country Guardian, Campaign for the Protection of Rural Wales, The National Trust, and many local committees stand up together against the rape of the landscape. Over 80 percent of new applications are stopped by them.

In Denmark, we now have Windmill Neighbors, very active. In Sweden, local initiatives have come together in the Swedish Landscape Protection Society, which had over 5,000 members after its first month of existence, and many more now.

Windmilling turns our best landscapes into ultra-low productivity industrial landscapes—all for the sake of the erection, at our cost, of superfluous political symbols intended to advertise a perverse policy directed against us.

S. Fred Singer is president of the Science and Environmental Policy Project. This commentary is reprinted from the January 22 edition of SEPP's "The Week that Was," available on the group's Web site at http://www.sepp.org/weekwas/2000/Jan22.htm.

This situation is unique in human events. The Kyoto Protocol is the most expensive and intrusive treaty the United States has ever signed. And it is driven not by history (as most treaties are), but by a weather forecast. Remember that, beginning a mere 7.9 years from now, the protocol would require the United States to reduce its net emissions of carbon dioxide and methane by nearly 40 percent below where they would be if we just continued on as we have since 1990. The expense is enormous.

How reliable is the climate change forecast in question? That seemingly obvious question has spurred one of the most acrimonious scientific and political debates in the history of environmental protection. The answer lies in the history of the forecasts.

It is fairly easy to calculate the mean temperature of the Earth from a knowledge of basic physics and a measurement of the sun's output. But that calculation is meaningless because it treats the planet as a point in space. Rather, climate is a local phenomenon, and any calculation of the myriad elements that make it up—such as temperature, rainfall, storminess and the like—requires an ability to simulate what is happening over our heads, rather than simply treating the Earth as a uniform dot.

The only way we know how to approximate this dynamic is to simulate the behavior of the atmosphere and its attendent circulation systems—jet streams, trade winds, and so forth. These are what make the weather, and the sum of weather is what makes the climate. The computer tools we use are models of the climate's general circulation—General Circulation Models, or GCMs.

GCMs take the known and merely guessed physics of the atmosphere and attempt to radiation, while black dirt absorbs almost all of it.

Some interesting history:

- 25 years ago, we didn't really know how much the sun heated the Earth. Textbooks at that time give a value that is about 5 percent more than it turned out to be.
- 20 years ago, we thought the Earth absorbed a whopping 40 percent more of the sun's energy than it actually does.
- 10 years ago we didn't know whether the Earth's clouds warmed or cooled the planet (it turns out they are net coolers).
- And to this day, we still don't know what the "natural" amount of cloudiness is.

Things are even murkier when it comes to the greenhouse effect. This very real phenomenon arises from some of the atmosphere's constituents—mainly water vapor and carbon dioxide—absorbing some of the heat from the Earth's surface and preventing it from going directly out to space at the rate that it would go if they weren't there. As a result they warm the bottom of the atmosphere (and cool the top).

The greenhouse effect keeps the surface of the planet about 60°F warmer than it would be without these gases. About 55°F of that warming comes from water vapor, and most of the rest from carbon dioxide.

Through the burning of fossil fuels, human beings have increased the CO_2 content of the atmosphere by about one-third above its mean value since the last glaciation (about 11,000 years ago). Our other greenhouse emissions, such as methane and the chlorofluorocarbon refrigerants, nearly double the effect from CO_2, resulting in an absorbing carbon dioxide at increasing rates, resulting in a greener planet.

How reliable is the climate change forecast in question? That seemingly obvious question has spurred one of the most acrimonious scientific and political debates in the history of environmental protection. The answer lies in the history of the forecasts.

As a result of these (and other) missteps, most GCMs initially predicted way too much warming.

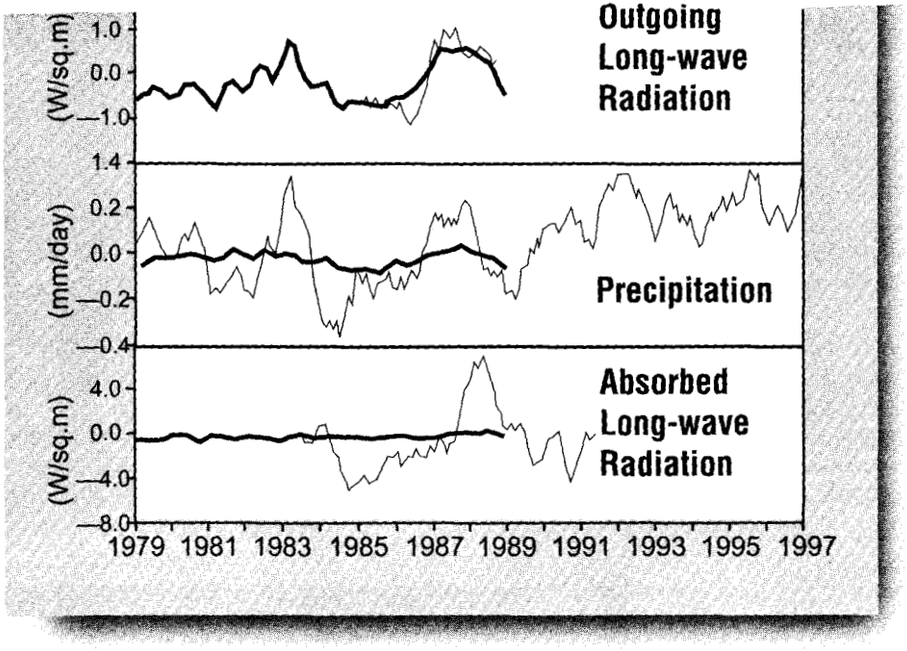
When the United Nations first began (somewhat arrogantly, some of us think) making pronoucements about the "consensus" of scientists, in 1990, the average GCM predicted global warming of 7.6°F for doubled CO_2. This figure also roughly corresponds to the predicted warming by the year 2100. Scientists like the writer of this article howled in protest (and laughter), because these models also predicted that we should have already warmed 3.2°F by 1990, and the observed warming was a mere 0.9°F, or sulfate dust from the combustion of coal. The same critics pointed out repeatedly that this explanation didn't stand up to some very simple logical tests.

In 2001, the United Nations is going to issue another forecast. Here's where it stands as of this writing: Using the "average" guess for greenhouse and sulfate emissions in the next century, the warming stays down at 3.6°F. This is less than half the value predicted by the average GCM a mere 10 years earlier (corrected thanks, in part, to my colleagues' and my relentless public criticism of the forecasts) and only about 80 percent of what served as the basis for this notorious treaty.

Further, it is now apparent that most of this warming is taking place in the coldest, deadliest air of winter. As a result, some of the blatant idealogues participating in the U.N. process—mainly (unfortunately) our own U.S. representatives—are rumored to be most upset because they know that this warming is too small and too benign to ever persuade the required 67 U.S. senators to ratify the Kyoto Protocol. Our gossip lines are squawking that some people are desperate to jimmy the future emissions scenarios so that the models predict more warming.

We hope this doesn't shock our readers. But now you know the history of the world's only computer-predicted environmental catastrophe. Needless to say, it does not inspire confidence in either our science or our leaders.

According to Nature *magazine, University of Virginia environmental sciences professor Patrick J. Michaels is probably the nation's most popular lecturer on the subject of climate change. Michaels is the author of* Sound and Fury: The Science and Politics of Global Warming.



years in the tropics as well as over the globe.

The accompanying figure shows the comparison between observations and model outputs for the tropics. On the bright side, three of five observed parameters are well modeled: the amount of water vapor (our main greenhouse gas), tropospheric temperature (the temperature of the lower atmosphere), and outgoing long-wave radiation (the heat the Earth emits back out into space).

But the simulated precipitation change ranges from 0.03 to 0.10 millimeters per day (which averages to 0.06 mm), while the observed range in precipitation is a factor of three to four larger. The models also underestimate the amount of change in the absorbed long-wave radiation.

How can the models predict atmospheric temperature change correctly when precipitation, an important factor influencing temperature change, is so far off the mark? There are only three possibilities: Either the observations are wrong, or the

[illegible] precipitation change is a good way to diagnose modeling errors and offers some hope of building credible climate models in the future.

Back to science.

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Soden, B.J., 2000. The sensitivity of the tropical hydrological cycle to ENSO, *Journal of Climate*, in press.

Sallie Baliunas, Ph.D., and Willie Soon, Ph.D., are colleagues at the Harvard-Smithsonian Center for Astrophysics. This bimonthly contribution to Environment & Climate News *is made possible by the George C. Marshall Institute, Washington, DC, where Baliunas is senior scientist and Soon is a visiting fellow.*

Fast-forward ebb and flow

Sea levels can rise and fall rapidly

By ROBERT E. DAVIS, PH.D.

The common description of global sea-level changes is a simple one.

When most of the planet is cold (during an ice age, for example), a lot of water is locked up in the form of ice, and the regions of permanent ice expand. Sea levels are low during these periods. During warming, the ice melts, and sea levels rise. As with global warming, for example. Or so the theory goes.

But one researcher is challenging the Conventional Wisdom. Robert Baker of Australia's University of New England hypothesized recently in the journal *Marine Biology* that major sea-level changes are actually the norm.

Baker performed carbon-dating tests and height measurements of worm coatings on rocks that, though now above sea level, were at one time submerged. Using these observations, Baker surmised that sea levels have not been steadily rising since the Ice Age, but in fact underwent rapid changes about 3,000 to 5,000 years ago. More specifically, Baker contends sea levels could have fallen by about one meter in just 10 to 50 years.

His studies also suggest sea levels were actually once higher than they are today.

These results are controversial in the oceanographic community. Nonetheless, science must address the observations of rapidly falling sea levels within the past 5,000 years.

Reference:

Baker, R., 2000. *Marine Biology*, in press.

Robert E. Davis is an associate professor of environmental science at the University of Virginia.

gradient weakens.

Wallace and colleagues examined changes in the earlier vortex expansion.

EARTH TRACK

Each month, Earth Track *updates the global averaged monthly satellite measurements of the Earth's temperature. These numbers are important because they are real—not projections, forecasts, or guesses. Global climate change policy proposals are often based on projected temperatures, rather than actual measurements—though forecasts and reality differ markedly. As the observed data show, there was no net warming between 1979, when the satellite record began, and prior to 1998's large El Niño. As you can see, we have returned to near normal from 1998's warm anomaly.*

This monthly temperature update compares satellite observations with the surface values projected by the climate models that formed the basis for the 1992 Framework Convention on Climate Change (the Rio treaty). Newer models produce less current warming, but it is these earlier ones that remain the basis for the treaty.

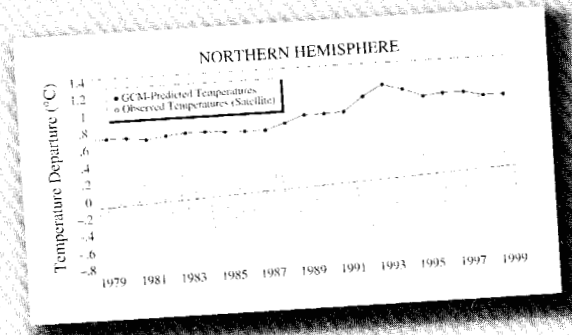
Global satellite measurements are made from a series of orbiting platforms that sense the average temperature in various atmospheric layers. Here, we present the lowest level, which matches nearly perfectly with the mean temperatures measured by weather balloons in the layer between 5,000 and 28,000 feet. The satellite measurements are considered accurate to within 0.01°C.

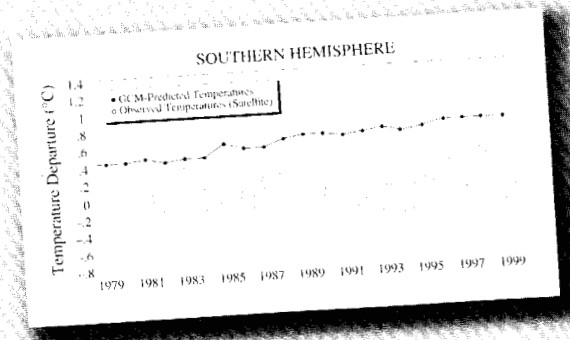
Comparing surface projections and layer temperatures is difficult, but the satellite provides great improvement over the surface record by supplying data over the entire planet.

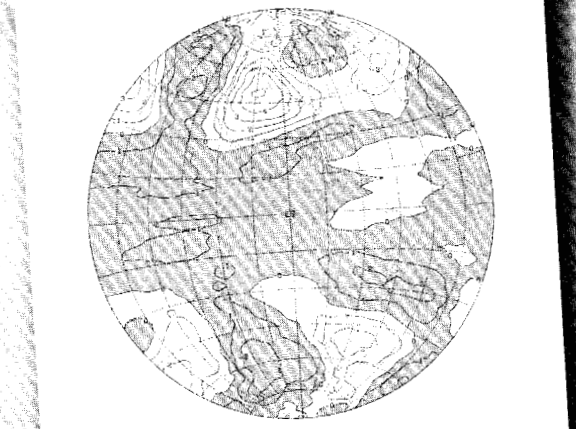
NOVEMBER 1999

Global temperatures were 0.15°C below normal. In the Northern Hemisphere, 0.041°C above normal, largely because of high temperatures centered over North America. The Southern Hemisphere was still very cold, with a departure of 0.34°C.

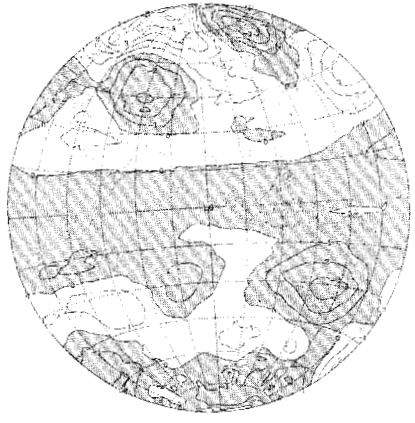
Below: Satellite (open circles) and predicted temperatures (closed circles) by the model that was the basis for the Rio treaty on climate change. The positive trend in the Northern Hemisphere is statistically significant.







Satellite-sensed temperatures for the Western Hemisphere (top) and Eastern Hemisphere (bottom) for November 1999. Areas of below-normal temperature are shaded.



Increased carbon dioxide brings an abundance of tropical treats

Springtime signals the start of the cycle of life, with the promise of the fruits of our labors in the offing. Let's take a moment to consider the healthful culinary splendor an enhanced carbon dioxide (CO_2) world promises us.

Of course, we celebrated the mango's future just last month. Now, a review of numerous studies reports that a near-doubling of CO_2 increased the dry weight of mango trees' old and new leaves and branches and roots. The dry weight of the total fruit increased by 18 percent---almost entirely in its flesh.

The article, by the University of Florida's Bruce Schaffer and several colleagues in Australia, explored the possibilities of several other fruits under elevated CO_2 conditions, among them:

Avocado. Avocado plants increase their net CO_2 assimilation significantly as the CO_2 increases. The elevated CO_2 increased the dry weight of leaves, new branches, trunks, and roots of the avocado plants.

Banana. Like the avocado plants, banana trees went bananas for elevated CO_2 levels. Net CO_2 assimilation in banana trees increased with higher concentrations of CO_2, and following six months of CO_2 enrichment (1,000 ppm vs. 350 ppm), the dry weight of the leaves increased by 131 percent, the root dry weight increased by 191 percent, and the total dry weight of the entire banana trees increased by 139 percent. The elevated CO_2 more than doubled the size of the banana trees.

Macadamia. These Hawaiian delicacies went nuts for CO_2 as it jumped from 350 ppm to 600 ppm, increasing the dry weight of new leaves, trunks, and roots. Six months of elevated CO_2 increased the dry weight of the husk, the shell, the kernel, and the total nut. The nuts were 25 percent bigger thanks to only six months of elevated CO_2.

For subtropical and tropical fruit crops, Schaffer says:

"Increased atmospheric CO_2 concentrations [in amounts that] far exceed the anticipated rate of increase for the next 50 years appear to enhance carbon assimilation of subtropical and tropical fruit crops, provided there are no sink restrictions. Therefore, these species should benefit from predicted increases in atmospheric CO_2 concentrations."

Which means more food for a hungry world, Schaffer explains:

"Productivity of subtropical and tropical fruit crops should increase as a result of increased global CO_2 concentrations."

CO_2's largesse extends to all manner of flora:

"Thus, a global increase in atmospheric CO_2 concentrations should increase productivity of branched, woody, subtropical, and tropical species."

Exotic flavor, important vitamins, antioxidant protection---with atmospheric CO_2 levels on the rise, this new millennium may well be an era of eating better and being healthier!

Reference:
Schaffer, B., et al., 1999. Atmospheric CO_2 enrichment, root restriction, photosynthesis, and dry-matter partitioning in subtropical and tropical fruit crops. *Horticultural Science,* **34**, 1033–1037.

The United Nations and the Clinton-Gore administration seek to regulate all human activity under the Framework Convention on Climate Change, signed in Rio de Janeiro, Brazil, in 1992. The Rio Treaty, as is well known, seeks to limit greenhouse gas emissions—particularly carbon dioxide from human industrial activity—in order to "prevent dangerous interference with the climate," in the words of the Treaty.

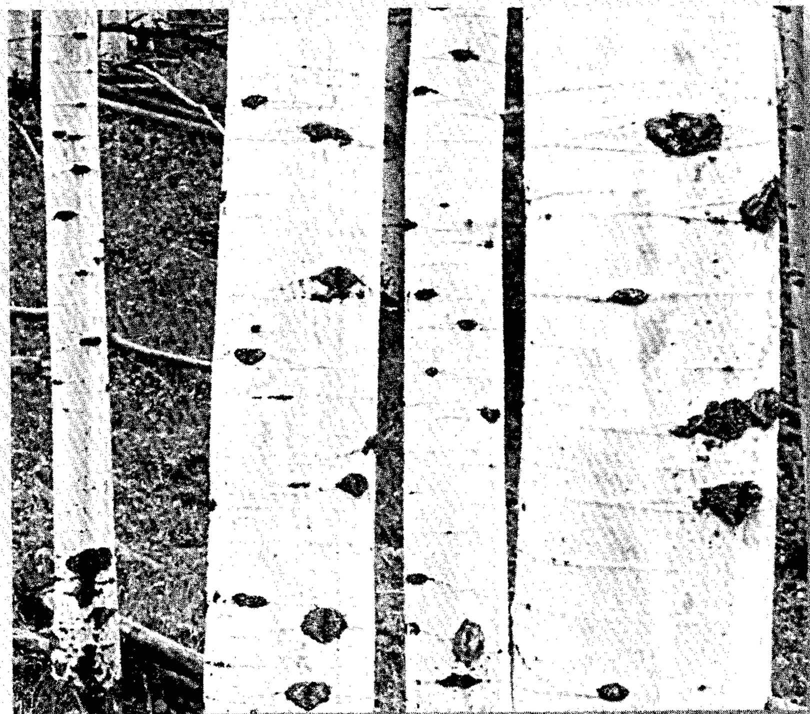
No finding has been made that any particular level of greenhouse gases in the atmosphere constitutes "dangerous interference with the cli- know there will be fierce resistance to their regulatory ambitions in the United States, since all of their prescriptions in the climate change arena involve eliminating the use of fossil fuels by the most fossil fuel-intensive society on Earth. The administration and the U.N. also know that temperature and weather observations do not support the vision of apocalyptic global warming that is the driver of the Rio Treaty, the vision Vice President Al Gore outlines in Chapter 4 ("Buddha's Breath") of his book, *Earth in the Balance*.

[illegible] minions understand his exposure, however. In a recent White House document titled "New Climate Science Findings" we find the following:

"A study of Antarctic ice cores published in the March 12, 1999 issue of *Science* compared changes in temperature and levels of atmospheric carbon dioxide during several ice ages. The study showed that as the Earth began to warm due to minor changes in its orbit, carbon was released from the ocean into the air, raising atmospheric CO_2 levels *that then greatly magni-*

intrusive power grab secure in the knowledge that their use of fossil fuels is as natural as breathing, and is greening the Earth in the process.

Fredrick Palmer, in addition to being President of Greening Earth Society, is General Manager and Chief Executive Officer of Western Fuels Association Inc., a not-for-profit fuel supply cooperative comprised of consumer-owned electric utilities.



Engineering for a better tree

By GRETCHEN RANDALL

According to *Science News*, wood harvested from trees that have been genetically engineered could make paper less costly and more environmentally friendly to produce.

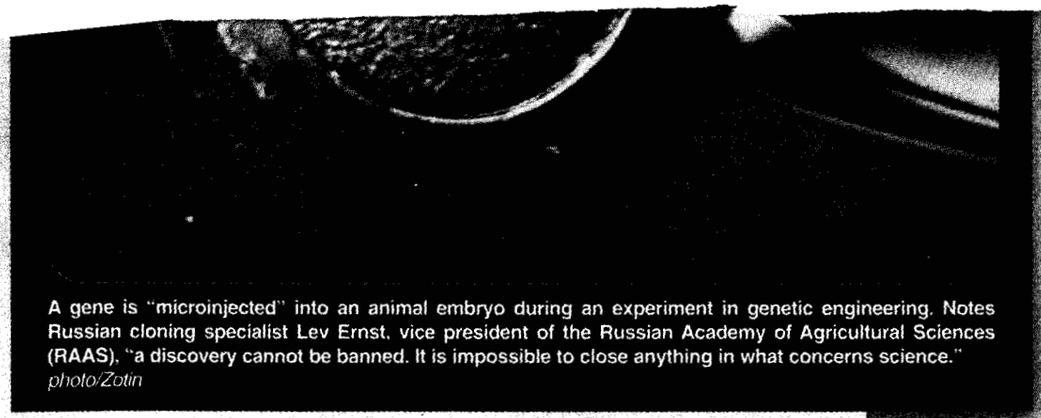
For more information...

WWW ...on Dr. Chiang's work, visit the Web site of MTU's Wood Science Research department, **http://forestry.mtu.edu/woodscience/pbrc/**.

Vincent L. Chiang and his colleagues at the Michigan Technological University in Houghton, Michigan have reduced lignin, a polymer that holds cells together, in aspens. The genetically engineered trees were found to grow faster and contain more cellulose, the material used in making paper, than regular aspens. In addition, the additional cellulose was found to aid the structural stability of the trees.

Chiang chose aspens because they are fast growing and popular in the Midwest for their wood pulp. He is now testing his process on other types of trees.

Cutting the lignin content in wood could also make it more practical to produce ethanol from wood, according to Tom Jeffries, director of the Department of Agriculture Forest Service's Forest Products Laboratory in Madison, Wisconsin.



A gene is "microinjected" into an animal embryo during an experiment in genetic engineering. Notes Russian cloning specialist Lev Ernst, vice president of the Russian Academy of Agricultural Sciences (RAAS), "a discovery cannot be banned. It is impossible to close anything in what concerns science."
photo/Zotin

Genetically modified medicine

By GRETCHEN RANDALL

Though controversy surrounds the use of genetically modified seeds for growing such food staples as corn and soybeans, GM techniques are standard practice in medicine—and have been for decades.

In 1982, Eli Lilly and Company of Indianapolis, Indiana developed the first human insulin of recombinant DNA origin. Through this technology, which requires the identification and then reproduction of a specific desired gene, scientists can create insulin identical to the hormone produced by the human body.

Doyia Chadwick of Eli Lilly told *Environment & Climate News* the genetically modified insulin is superior to animal-source insulin, made from ground-up pig and cow pancreas glands. Human insulin produced by genetic engineering boasts high levels of purity, since it is made under lab conditions, and the supply is unlimited.

Recombinant DNA technology has led to the development of other important therapies, such as human growth hormone. Lilly's Humatrope is an amino acid sequence identical to that of the human growth hormone of the pituitary gland. It is used as a drug in pediatric patients whose own bodies do not produce enough growth hormone.

Even Celebrex, a drug recently introduced to reduce pain and inflammation from arthritis, has its roots in biotechnology. Though not made from recombinant DNA technology, its development depended on biotechnology techniques, according to a Searle spokesperson.

1990, is chemically identical to rennin in the calf stomach, said Hardy, but it has the advantages of being pure, consistently available, and highly effective in cheese making.

Said Hardy, "I personally like to think that my cheese is being made with a highly pure product, made under highly controlled conditions, rather than an extremely crude product obtained from a slaughterhouse source."

Engineering for health

Cheese is just one example of today's biotechnology. Clinical trials of a hepatitis vaccine were initiated earlier this summer, according to Dr. Hardy. He noted that the ability to engineer vaccines into food products would especially benefit people in less-developed countries, where access to refrigerated vaccines is difficult.

Dr. Charles Arntzen, CEO of the Ithaca, New York-based Boyce Thompson Institute for Plant Research Inc., has developed plant-based vaccines and conducted clinical trials at two medical schools in the U.S. Three studies have been completed. According to Dr. Arntzen, those studies "found a human immune response when volunteers simply ate raw potatoes which were engineered to contain a vaccine." Although the idea is in the early stages of research, such "prototype plants" may in the future offer a unique and highly effective mechanism for delivering vaccines.

Other research is being conducted into the possibility of enhancing vitamin levels through transgenic plants. Oil seeds with elevated vitamin E may help reduce heart disease. Rice with extra vitamin A

Boyce Thompson Institute for Plant Research (BTI), a private not-for-profit organization dedicated to the study of plants and associated organisms. Point your browser to **http://birch.cit.cornell.edu/research/biotech/biotech.html**. The Natural Agricultural Biotechnology Council also has a Web site, at **http://www.cals.cornell.edu/extension/nabc/**.

Engineering a better environment

The next phase of plant engineering may make it possible to produce viable substitutes for petrochemicals and other petroleum-based products.

"Biologically produced products can also provide the chemical industry with much greater diversity than available from the comparatively limited, highly reduced hydrocarbon structures found in crude oil," Dr. John Ohlrogge told *Environment & Climate News*. The Michigan State University professor added, "my laboratory is working closely with industrial chemists to develop plants which will provide the feed stocks for new types of polyurethanes, nylon with stronger and more flexible fibers, and biodegradable lubricants."

The development of such plants could reduce the country's need for imported petroleum and stimulate new demand for U.S. crop production. According to Dr. Ohlrogge, "to produce in crops the monomers for current U.S. nylon manufacture would involve 10 to 20 million acres and create over $2 billion annually in new farm income. Farmers will benefit and the chemical industry will benefit. More of our products will be based on renewable and biodegradable resources that do not contribute to landfill overflow and higher atmospheric CO_2 levels."

PROPERTY

of Representatives in 1999 that would
federal lands in the Shivwits Plateau/Parashant Canyon as

photo/Jack Kurtz

Congressmen ap

By GRETCHEN RANDALL

Four western Congressmen have asked the U.S. Supreme Court to determine whether members of Congress can sue the Clinton-Gore administration for violating the Constitution. The petition to review was filed on December 2.

Responding to a lawsuit first filed in December 1997, a federal district court and a federal court of appeals have ruled that members of Congress have no legal standing to sue the President for violating the Constitution. Representatives Helen Chenoweth-Hage (R-Idaho), Bob Schaffer (R-Colorado), Richard W. Pombo (R-California), and Don Young (R-Alaska) have petitioned the Supreme Court to take up the lower courts' rulings.

The Congressmen are being represented by attorneys with the Mountain States Legal Foundation (MSLF), a non-profit public interest legal center.

The constitutional battle began in early 1997, when the President's Council on Environmental Quality (CEQ) put a notice in the *Federal Register* announcing plans to create the American Heritage Rivers Initiative (AHRI) by Presidential proclamation. The initiative would allow rivers to be designated for "natural, historic, cultural, social, economic, and ecological diversity." The administration initially allowed just 20 days for public comment, but opposition in Congress and from citizens across the country extended the deadline an additional 60 days.

The House Resources Committee held an oversight hearing on July 15, 1997. Katy McGinty, head of CEQ, testi-

...which has not even been subject to public discussion, illustrates the Secretary's contempt for Arizona's citizens. I am disappointed that the Administration is cynBabbitt not to abandon the public process in Montana. "The attitude that allows federal officials to walk all over the opinions and wishes of local residents must stop."

...peal to Supreme Court on AHRI

fied but refused to commit to a proposed provision that would allow private landowners to opt out of an AHRI designation. She also rejected a proposed provision prohibiting federal employees of the program from intervening in local zoning.

On September 11, 1997 President Clinton signed an executive order launching the AHRI.

For more information...

...on the case, *Chenoweth et al. vs. Clinton et al.*,

WWW visit the Mountain States Legal Foundation's Web site at **http://www.mountainstateslegal.com/.**

Three months later, on December 10, the four congressmen filed a lawsuit alleging "AHRI violates the commerce clause of the Constitution whereby only the Congress has the authority to regulate interstate commerce," according to Schaffer. He added, "additionally, the AHRI violates the 10th Amendment, which guarantees state sovereignty, and the property clause, which protects private property from seizure without compensation. The initiative also fails to conform to the procedural protections of the National Environment Policy Act (NEPA)."

Co-plaintiff Chenoweth-Hage added, "President Clinton seeks to do with this program what he has absolutely no authority to do: Place federal officials in charge of the economic and ecological future of the nation's rivers. In testimony before a hearing I chaired, the total absence of any Presidential authority to place American rivers under federal control was clear, yet the White House presses on, saying, essentially, 'Sue us.' So we have."

In May 1998, the Colorado General Assembly adopted a resolution requesting "that no rivers in Colorado be designated as Heritage Rivers under the AHRI, and [we further] hereby request the Congress of the United States to withhold funding for the implementation of the American Heritage Rivers Initiative."

Many affected associations nationwide, including the Colorado Cattlemen's Association, Lower South Platte Water Conservancy District, and the Colorado Farm Bureau, joined the Congressmen in expressing their opposition to the AHRI. Ray Christensen, public affairs director for the Colorado Farm Bureau, said, "Colorado is already having so many problems with the Endangered Species Act, and wild and scenic rivers program. Why on Earth would we want to create another federal program like this, especially when it does not address property rights protection?"

William Perry Pendley, president and chief legal officer for the Mountain States Legal Foundation, agrees. The case "presents a vitally important matter of public policy," he says. "Who may sue to stop a President who violates the Constitution?"

Clinton's roadless areas proposal represented "an abrupt departure from the Forest Service's previous efforts to manage land in a collaborative manner with affected state and local governments." He said the goal of the lawsuit is to provide the people of Idaho a reasonable time to review and understand the Forest Service's proposal.

Lance said the state's efforts to ...according to law, typically extend the comment period to allow time for the public to obtain necessary information to serve as the basis for meaningful comment. "In this case . . . the state was left with no choice but to take the Forest Service to federal court to provide the information and time to comment on this very important issue," Lance explained.

Anti-logging activists gear up

By GRETCHEN RANDALL

The U.S. Forest Service is required to provide a comment period for citizens to respond to its Notice of Intent to prevent use of 40 million acres of roadless areas in National Forests. Environmental groups such as The Wilderness Society and Sierra Club have urged their members to respond during the comment period.

Forest Guardians, a New Mexico-based anti-logging environmentalist group, recommends its members include the following points in their comments:

- Prohibit not only "commercial logging," but also any other removal of living or dead trees from roadless areas.
- Protect roadless areas from off-road recreation vehicle use, mining, and other "environmentally damaging" activities.
- Issue a nationwide directive that immediately prohibits road building and logging in all National Forest roadless areas.
- Create no exemptions, especially the Tongass National Forest in Alaska.
- Immediately provide interim protection from logging, road building, mining, and other harmful activity for any non-inventoried areas of 1000 acres.

While its Web site claims Forest Guardians use "cutting-edge science to challenge misguided federal agency actions" that threaten public lands, the site offers little evidence of sound science at work.

evolutionary processes take place over millions of years. Why is it, he asks, that "everything about genetic diversity that is good in the canopies of the rain forest is bad in the laboratory beakers of Monstanto and Genentech"? (43)

Environmentalists, writes Huber, believe capitalism cannot control pollution because the solution—to "privatize" pollution by issuing tradeable permits to create emissions—requires expanding the embrace of private property rights, taboo according to the movement's Marxist intellectuals. Yet privatizing pollution, correctly done, "neither expand[s] the private sector's right to pollute nor expand[s] the public sector's power to regulate. The upshot is less private pollution and a diminished public sector, too." (123)

Environmentalists believe being frugal in one's lifestyle "trickles up" to fewer natural resources used, fewer mines worked or wells pumped, and therefore less impact on the natural world. But Huber points out that in the real world, being frugal has no net effect on natural resource consumption because others will use what the ascetic leaves untouched. Be frugal if you like, Huber says, but don't kid yourself that your self-sacrifice is saving the environment.

The "hard green" alternative

Huber's new conservationism, which he calls "Hard Green," champions human ingenuity against the ideology of limits; privatizing pollution; limiting government power; expanding public and private protection of wilderness areas; and increasing reliance on technologies such as nuclear power and genetic engineering that reduce the human impact on the planet's surface.

As we grow richer, according to Huber, our aesthetic sense grows finer and we tolerate less pollution and place a higher value on preserving open space. Since markets are by far the best way to create wealth, it follows that markets are green, too. All that is necessary for the future to be both wealthy and green, according to Huber, is "to keep things heading toward

would prohibit all economic activities other than recreation on such land. (93) He implies that this won't interfere with economic growth or individual freedom since only "uneconomic" resources would be set aside. (99)

Huber's "wilderness exception" is based on flawed reasoning. He gives us no clue as to how big a piece of land must be before it requires government ownership, and his appeal to some sort of economy of scale in forestry is never made explicit or defended.

Just because wilderness is preserved for aesthetic reasons rather than economic utility doesn't mean markets can't deliver the optimum amount of preservation. If for-profit organizations won't do the job, nonprofit groups can and often do step in. And isn't the notion of an "uneconomic" resource an oxymoron? Of course it is.

Forestry experts such as Alston Chase, Karl Hesse Jr., and Randal O'Toole, along with millions of acres of burned and insect-infested forests on public lands, have shown conclusively that government is not good at choosing what lands to conserve or what forestry techniques to use. Huber is flippant: "doing nothing is the paramount objective of conservation" and "nothing is the one thing that big government is capable of doing quite well. . . ." (xxiv)

Millions of people live and work in close proximity to nature, and apparently a large part of the about-to-retire Baby Boom generation plans to retire to homes in rural areas. Telling these people that they can make a living by digging deep or flying high won't ease the pain or erase the injustice of their eviction, a prescription Huber avoids making outright but which many readers will understand to be justified by his reasoning.

The little hard green tent

Who will be attracted to the Hard Green creed? Not ranchers, farmers, miners, loggers, well-diggers, and others who currently make up an important part of the movement for

superficial and misleading possible way." (106) Ranchers, loggers, and well-diggers must be expelled from public lands because "it is much easier [for whom?] and politically far more stable [for whom?] to designate particular places for conservation alone."(93)

People of faith won't want to become "Hard Green" because doing so means they must become Darwinists. (79) The Left won't appreciate having their most cherished values and goals reduced to the aesthetic judgement of the least sophisticated observer, or being called "completely, laughably, ridiculously, preposterously wrong." (62) And worse. (193) Even economists won't much appreciate Huber's references to "simple-minded economic theory" and "the omniscient, cost-internalizing economist-in-the-sky." (22)

Conclusion

In conclusion, there is much in this book that is original, important, and persuasive. The author's colorful writing style and quick wit, while they make for entertaining reading, are sure to offend readers who might otherwise be drawn into the sound science/free-market camp. Huber's wilderness exception and other deviations from free-market environmentalism seem unnecessary and indefensible to this reviewer.

Rather than attract the broad and ideologically diverse audience he seeks, Huber's lapses from sound science and common sense are likely to alienate important parts of the movement that already is trying to "save the environment from the environmentalists."

Joseph Bast is president of The Heartland Institute and coauthor of Eco-Sanity: A Common-Sense Guide to Environmentalism *(Madison Books, 1993, second edition 1995).*

... states (New York, Connecticut, Massachusetts, Pennsylvania) to force Midwest coal utilities to clean up. Then in early November came an EPA/Department of Justice lawsuit against 17 "grandfathered" Midwest plants that had improved their facilities—this somehow "ungrandfathers" those plants, putting them under huge liability and gazillion-dollar fines. Then, on December 17, EPA ordered 392 Midwest plants to cut emissions—while EPA data show that only 5 percent of Northeast "air loadings" are of Midwest origin.

CLIMATE CHANGE

The Energy Department reported in late October that emissions of greenhouse gases rose an insignificant amount while the economy grew 3.9 percent. Industrial emissions overall fell 1.3 percent—but that is because of a reduction in auto, chemical, and steel production.

Meanwhile, OPEC's (the oil guys) 11 member countries complained at the inconclusive Fall negotiations in Bonn that they would be bankrupted by a global warming treaty and the accompanying tax structure, with a loss of $63 billion per year—$25 billion in Saudi Arabia alone. Ford Motor Co. has parted ways with the Global Climate Coalition, which opposes implementation of the Kyoto treaty, joining British Petroleum and Dutch Shell as rank-breakers. Ford chair William C. Ford Jr. has "long been active in environmental causes," according to the *New York Times*.

FISH

In early November the Pacific Fishery Management Council "slashed" catch quotas by more than 50 percent for four kinds of Pacific Ocean rockfish and cod, a move expected to hurt coastal communities badly enough that Governor Gray Davis (D-California) asked President Clinton for disaster assistance.

Also in the Northwest, the Puget Sound bull trout has been listed as threatened in western Washington, which as the *Seattle Post-Intelligencer* speculated, will make it "even harder" on loggers and local governments. Mike Bader of the Turner-funded Alliance for the Wild Rockies: "We're certainly pleased."

Meantime, West Coast fish folks say booming sea lion populations are devouring much of their fresh-caught salmon. Monterey Bay provoided and cattle completely locked out. Guess what? The permits in the Mojave for 2000 had expired October 31. Preserve Superintendent Mary Martin said the report is based on misinformation.

LAND BUYS

On October 18, the David and Lucille Packard Foundation (second largest in America) announced a five year/$175 million open-space grant program for California. In Washington on October 20, Microsoft billionaire Paul Allen donated the last $3.4 million needed to take the Loomis State Forest out of timber production. Final tag: $16.5 million.

PORK

Press reports on a Utah purchase headlined The Nature Conservancy (TNC) as the prime mover in a $3.4 million buy of 404 acres near Salt Lake. TNC's actual buy-in was $800,000, while $2 million was federal money. Imagine $450 million in guaranteed funds a year . . . OINK!

PROPERTY RIGHTS

While the property rights issue has been fairly quiet on the national front, in Africa it hasn't, according to an Associated Press wire item. The Zimbabwean government, led by strongman Robert Mugabe, is proposing to get rid of a "stupid" clause in that country's constitution that (gasp!) guarantees compensation to landowners for appropriated lands. Until seven years ago, the government had to abide by "willing seller" rules, but the parliament changed that, too. Now the matter of fair payment will be put up to a referendum on a new national constitution. Appropriation is being done to resettle poor blacks on lands owned by the white minority. Anyone care to bet on which way the referendum vote will go?

RECREATION

While the temporary ban on snow machines in Denali Park has been ruled illegal on procedural grounds, the National Park Service is promulgating a proposal to permanently bar snowcats from the 2-million-acre "old park core," which the Wilderness Society's Al Smith said "they should have done all along."

In Colorado, a popular ORV area near Jamestown has been closed by Boulder County commissioners. The controversy in spotted owl country; a r... prohibiting grizzly bear reintroduction in the Northwest.

Wounded: The rider keeping old BLM grazing leases in effect until the Environmental Assessment backlog is cleared. A rider overturning the Leshy mill-site "interpretation" only will protect existing mines. Any new mine no longer has a right to lands for tailings management—instead it will have to buy and trade land the government wants in order to get what it needs.

Just faking it: A rider overturning a court ban on certain overburden disposal methods in West Virginia. That'll be back next year, according to lead sponsor Sen. Robert Byrd (D-West Virginia).

STATES' RIGHTS

In better news, a U.S. District Court ruling (affecting only Resource Conservation and Recovery Act (RCRA) hazardous materials cases in Missouri) has ordered the U.S. EPA to stop "overfiling" on enforcement cases. In *Harmon Industries v. Carol Browner*, Harmon (a railroad supplier) found in 1987 it was illegally disposing of hazardous material, quit the practice, and reported its mistake to the Missouri Department of Natural Resources. DNR felt Harmon's corrective actions were sufficient and agreed to release the company from RCRA liability. That wasn't good enough for EPA, which ended up fining Harmon $586,000. The judge ruled that RCRA doesn't give "EPA the specific authority to override the state." If EPA wants to "overfile," it must first revoke the state's program.

Utah Land Grab, Part MCDXXIV

On November 1, Utah Governor Mike Leavitt (R) wrote Interior Secretary Bruce Babbitt recommending changes in the Grand Staircase-Escalante National Monument proposed management plan. Leavitt wants four aspects of the plan clarified as they either conflict with state positions, are too restrictive, or are too unclear. The plan does not protect RS-2477 rights adequately, and may interfere with state water rights and wildlife programs. Further, according to the *Salt Lake Tribune*, Leavitt is of the mind that the plan "unreasonably" restricts the state's ability to promote tourism and movie-making—pretty much the only multiple uses left for the communities directly dependent on the monument for their future. Hmmm. Can't mine, can't graze, can't play? What's left?

report to be the best work done on the subject to date.

A second investigation is underway involving illnesses contracted by United Mine Workers members working with Class B sludge in Pennsylvania. The material is also suspected in the deaths several years ago of a boy in Pennsylvania and a New Hampshire man.

A spokesperson for Northfield, Illinois-based Kraft Foods, Inc. said the company refuses to accept food products grown on sludge-covered farm fields.

In Kern County, California, county supervisors voted to phase out the dumping of all but "exceptional-quality" sludge—one grade above Class A. Neither "exceptional quality" nor Class A sludge has been linked to pathogen hazards. "It frightens me . . . what we don't know about biosolids and what scientists may learn tomorrow," Supervisor Pete Parra told *The Bakersfield Californian.*

Sludge exposed in Chicago

Over 20,000 tons of potentially disease-causing sludge is produced every year by the Metropolitan Water Reclamation District of Greater Chicago. Over 60 farm fields used for the disposal of sludge were identified in a recent *Chicago Sun-Times* investigation.

Officials at EPA, the Water Reclamation District, and Wheelabrator Technologies Inc.—whose BioGro division is a prime sludge contractor for the district—strenuously deny the material poses a threat to human health. All dismissed the CDC report as irrelevant to their operations.

In a wide-ranging meeting with the *Sun-Times,* top Water Reclamation District officials

published in a recent [illegible] British science journal *Nature,* he began raising concerns about the dangers of Class B sludge as early as 1996.

For more information...

"Influence of environmental changes on degradation of chiral pollutants in soils," the report by David Lewis and colleagues published in the October 1999 issue of *Nature,* is available through ***PolicyFax.***

Call **312/377-3000** and request document **#2315141.**

Or use ***PolicyBot,*** Heartland's online research service, at **www.heartland.org** to request the document.

At the time of Rubin's testimony, Lewis was investigating the death of Connor, who was exposed to Class B sludge near his home in Greenland, New Hampshire and became ill, along with other residents of the town, with flu-like symptoms.

"Medical records of Shayne Connor [who died in 1995] and Tony Behun [an 11-year-old Pennsylvania boy who died within days of riding his motorcycle on a sludge-covered field in 1994] are consistent with exposure to a combination of chemical and biological hazards associated with sludge," Lewis said. "In both cases, workers handling the sludge experienced similar symptoms, including nausea, vomiting, severe headaches, sore throats, skin symptoms.

"In Shayne's case, the plant that produced the sludge responded to worker complaints by building enclosures to protect them from noxious gases emitted by the material. In Tony's case, workers who were getting ill requested a Centers for Disease Control investigation [which is now being carried out]."

harassment and other job-related discrimination by EPA officials. He has already won two lawsuits against the agency, and a third suit is pending. EPA has since ordered him to cease even his private research on sludge.

This report is based on a Chicago Sun-Times investigation by Frank Main and Tom Randall.

26-year-old Shayne Connor, left, shown here with his family, died in 1995 after exposure to Class B sludge near his home in Greenland, New Hampshire. EPA microbiologist David Lewis has warned agency officials for years that municipal sludge can harbor chemical and biological hazards.

Call PolicyFax at 512/[illegible]-3000.
Request document #2305110 *Why Car Scrappage Programs Should Be Scrapped.*

Or use ***PolicyBot***, Heartland's online research service, at **www.heartland.org** to request the document.

TNRCC contends motorists will use the money to purchase a new, or almost new, vehicle. The scrappage proposal claims to target gross-polluting vehicles, which it says tend to be older vehicles.

According to CARE, however, a vehicle's age has little or no bearing on its pollution status. For example, it contends, 10 percent of the vehicles across all model years cause 50 percent of the pollution. Even a new car, if not properly maintained and repaired, will pollute. CARE further contends that most of the 10 percent gross-polluting vehicles need only minor repairs and maintenance, such as tune-ups, to bring them up to standards.

gross-polluting vehicles.

"If the TNRCC wishes to work with Texans, rather than the U.S. EPA, to develop a rational, pro-environment, pro-motoring consumer alternative to scrappage, then a working model is already underway in Arizona," noted Sandy Bass-Cors, CARE executive director.

Arizona repealed its vehicle scrappage program and passed a "Repair, Retrofit & Upgrade" program to repair and maintain vehicles while allowing lower-income motorists to keep their affordable transportation. The state appropriated funds for targeted counties, focusing its efforts on vehicles at least 12 years old.

Warned Bass-Cors, "the TNRCC Vehicle Scrappage Program will earn Texas nothing more than paper reductions in pollution, while foisting an inefficient program on the backs of hard-working, tax-paying Texas motorists.

"Although the new TNRCC car/truck scrappage program will not require the state to fully purchase each vehicle from the motorists, Texas tax dollars will be used because TNRCC will utilize its staff to oversee this government-endorsed burden," she concluded.

According to Bass-Cors, CARE's member companies have nearly 2,000 locations in Texas to service and repair vehicles. CARE counts among its members such high-profile auto aftermarket firms as NAPA, Midas, CARQUEST, AutoZone, Advance Auto, and O'Reilly's.

Smog-eating car introduced

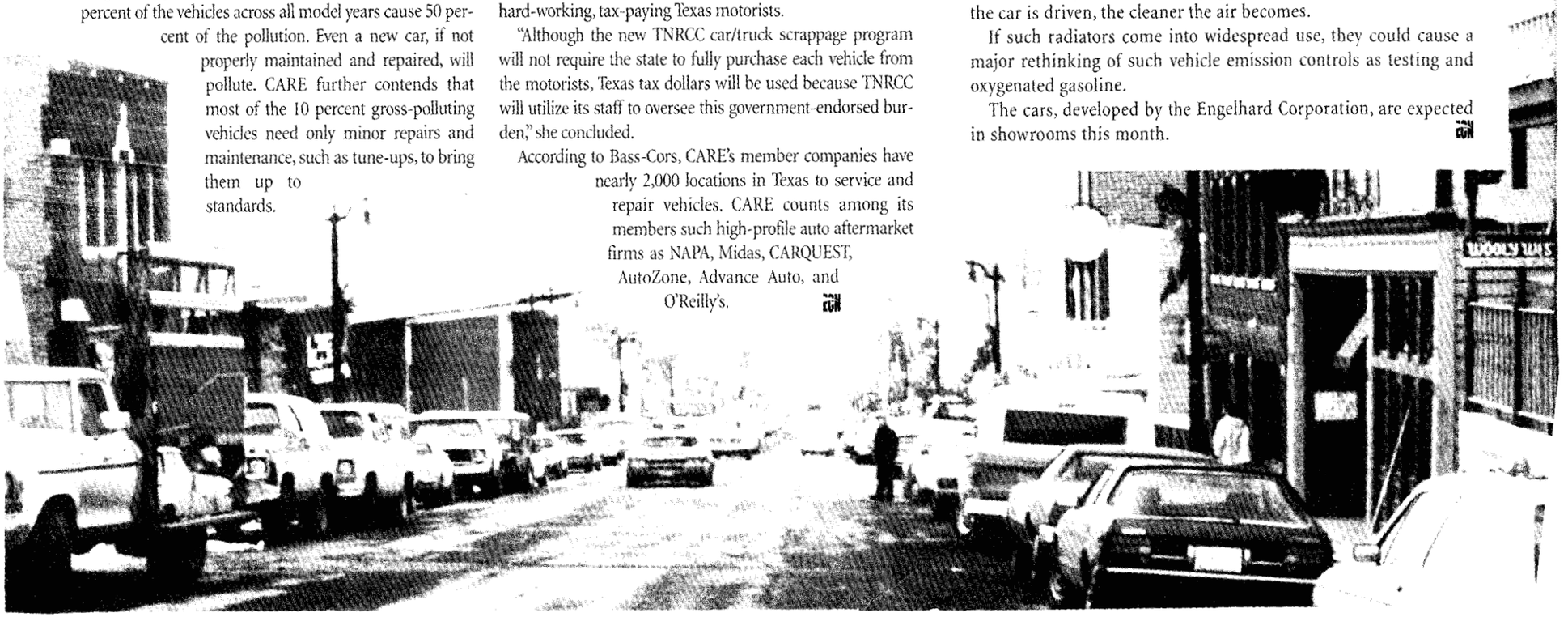
By TOM RANDALL

According to Swedish car maker Volvo, car owners may soon be able to *reduce* smog by driving. The company has announced that its new S80 luxury sedans will feature a new radiator that will actually "eat" ozone, thanks to a special coating called Premair™.

As air passes through the specially coated radiator, ozone, a prime component of smog, is converted into oxygen. The company claims that on hot days, when ozone levels are normally highest, the radiator will actually eat more ozone than would be created by a modern, catalytic-convertor-equipped car. In other words, the more the car is driven, the cleaner the air becomes.

If such radiators come into widespread use, they could cause a major rethinking of such vehicle emission controls as testing and oxygenated gasoline.

The cars, developed by the Engelhard Corporation, are expected in showrooms this month.



The group accused Boise Cascade of "deforesting the Pacific Northwest," and with threatening Cascada Chile's plans, which have been endorsed by Chile's national environmental

photo/Mark Mobley-Vail Fire Department

Conservation bill faces rough road in 2000

By MIKE HARDIMAN

The embattled Conservation and Reinvestment Act of 1999 (H.R. 701/S. 25) will have a rougher road to travel on its way through the legislative process than its supporters expected.

CARA was approved by a 37-12 vote by the House Resources Committee on November 10 in a raucous, bitter four-hour markup. Only 13 of the committee's 28 Republicans voted for the bill, and nearly all voted for one or more of the numerous amendments offered during the session. CARA sponsor and Committee Chairman Don Young (R-Alaska) tried for nine months to gain majority GOP support, but fell short and relied on unanimous Democratic support to fight off amendments and win committee approval.

DON YOUNG

Following the Resources Committee vote, the House leadership decided to require further review of CARA by both the House Budget Committee and the House Agriculture Committee. It is not known when those committees will take up the bill.

The bill's opponents, including property rights organizations, taxpayer advocacy groups, and others, will encourage the two committees to act on what they regard as the bill's shortcomings. The American Land Rights Association (ALRA), National Taxpayers Union, and Americans for Tax Reform testified against the bill, and are joined by many others in opposition, including the American Farm Bureau Federation.

For more information...

...and regular updates on the status of CARA,

WWW visit the Web site of the American Land Rights Association at **http://www.landrights.org/**.

"Not one acre of private property anywhere in the country is safe," warned ALRA Executive Director Chuck Cushman. "CARA dedicates $450 million per year to the states for land acquisition, and they are permitted unlimited power to condemn land and force people off their property. The federal government then helps itself to an additional annual $450 million for land acquisition. Families, small businesses, and farmers without the means to put up with regulatory harassment will be pressured into selling whether they want to or not."

"This bill has very little to do with the environment and a lot to do with old-fashioned pork barrel spending," Cushman continued. The state of Alaska, home of H.R. 701 sponsor Young, is slated to receive $166 million annually—$272 per person per year for fifteen years. And Louisiana, home of S. 25 sponsor Senator Mary Landrieu, will receive $313 million per year, a substantial benefit for one of the nation's poorest states.

Most hunting organizations currently support CARA. However, a major figure in the sportsmen's community has expressed his concern about the influence animal rights groups may have on CARA funds, and he is actively lobbying sportsmen to oppose the bill.

Ray Arnett is a former president of the National Wildlife Federation, and a former executive director of the National Rifle Association. He was also a high-ranking official in the Interior Department during the Reagan administration. In a letter to members of the Congressional Sportsmen's Caucus, Arnett wrote:

"Animal rights extremists have already taken aim at the Pittman-Robertson fund in an effort to deny access for hunting and fishing. One of the goals within the Animal Protection Institute's (API) effort to abolish hunting is to 'change the constituency of power within our wildlife management agencies and the funding sources that maintain these government agencies.'

Arnett continued,

"CARA fits perfectly into the plans of API, since it will provide a revenue source outside of the sportsmen-paid excise taxes to fund Pittman-Robertson. There is no question that animal rights activists will target for acquisition fish and game clubs, leases, and other private land where the taking of renewable wildlife resources is permitted. Once the land is purchased and under government control, these well-funded, anti-sportsmen groups will lobby Congress and government agencies for the elimination of any consumptive use of wildlife resources."

Congressman Ralph Regula, chairman of the Appropriations Committee's Subcommittee on Interior, has also expressed his strong opposition to CARA. In a December 3 interview with the trade newsletter *Federal Parks and Recreation*, he said "[CARA's] a mistake. An entitlement is not the way for us to be going. When the Park Service talks about a $5 billion maintenance backlog and the Forest Service has a similar $5 billion backlog, when 30 percent of the land in this country is owned by the federal government, I don't think it's necessary to acquire more land. When we have a $5 trillion national debt, why should we take $450 million per year and give it to states, nearly every one of which has a surplus?"

Mike Hardiman is a Washington, DC-based lobbyist for the American Land Rights Association.

...ate property.

email nucleus@freeourparks.org
A not-for-profit organization fighting for free and equal access to our public lands.

...local and state issues but also networks nationwide with property rights groups and resource providers. Current projects include zoning and wetlands issues.

Other Links

- **Adams Report**
  http://www.adamsreport.com
- **Alaska Forest Association**
  http://www.akforest.org
- **American Farm Bureau Federation**
  http://www.fb.com
- **American Forest & Paper Association**
  http://www.afandpa.org
- **American Loggers Solidarity**
  http://www.olypen.com/solidarity
- **American Sheep Industry Association**
  http://www.sheepindustry.org
- **Blue Ribbon Coalition**
  http://www.sharetrails.org
- **California Forestry Association**
  http://www.foresthealth.org
- **Columbia River Alliance**
  http://www.teleport.com/~cra/
- **Common Sense for Maine Forest**
  http://www.mainecommonsense.com
- **Communities for a Great Northwest**
  http://www.digicus.com/cgnw/
- **Concerned Alaskans for Resources and the Environment (C.A.R.E.)**
  http://www.ktn.net/care/
- **Douglas Timber Operators**
  http://www.dougtimber.com
- **Family Business First**
  http://www.batnet.com/woodcom/fbf.html
- **Landowners Association of North Dakota (LAND)**
  http://www.geocities.com/CapitolHill/Lobby/9297/
- **Michigan Rights Alliance**
  http://www.mirights.org
- **Minnesota Landowners Rights Alliance**
  http://www.rrv.net/mlra/
- **Montana Resource Providers Coalition**
  http://www.digicus.com/mrpc/
- **National Endangered Species Act Reform Coalition (NESARC)**
  http://www.nesarc.org
- **Off-Road Network**
  http://www.off-road.com
- **Oregon Lands Coalition**
  http://www.speaksoftly.com/olc/
- **The Outdoor Recreation Network (ORN)**
  http://www.outdoorwire.com
- **Plan-It3**
  http://www.plan-it3.org
- **RanchersNet**
  http://www.ranchers.net
- **Right of Way**
  http://www.rightofway.com
- **RS-2477 Rights-of-Way**
  http://www.rs2477roads.com
- **Take Back Arkansas**
  http://www.users.nwark.com/~tbark/
- **T.R.E.E.S - Coastal Chapter**
  http://www.harborside.com/forest/
- **Washington Forest Protection Association**
  http://www.washingtonforests.com
- **Western Counties' Resources Policy Institute (WCRPI)**
  http://www.westerncounties.org

Federal Government

- **American Heritage Rivers Initiative**
  http://www.epa.gov/OWOW/heritage/rivers.html
- **Army Corps of Engineers**
  http://www.usace.army.mil/
- **Bureau of Land Management (BLM)**
  http://www.blm.gov
- **Bureau of Reclamation**
  http://www.usbr.gov
- **Council on Environmental Quality**
  http://www.whitehouse.gov/CEQ/
- **Environment Protection Agency (EPA)**
  http://www.epa.gov
- **Federal Register**
  http://www.nara.gov/fedreg/
- **General Accounting Office (GAO)**
  http://www.gao.gov
- **Interior Columbia River Basin Ecosystem Management Project**
  http://www.icbemp.gov
- **National Park Service**
  http://www.nps.gov
- **US Department of Agriculture (USDA)**
  http://www.usda.gov/usda.htm
- **US Fish & Wildlife Service (FWS)**
  http://www.fws.gov
- **US Forest Service (USFS)**
  http://www.fs.fed.us
- **US House Resources Committee**
  http://www.house.gov/resources
- **US Man & Biosphere**
  http://ice.ucdavis.edu/mab/
- **US Senate Energy and Natural Resources Committee**
  http://www.senate.gov/~energy/

List developed by the American Land Rights Association. Many more links are available at its Web site, www.landrights.org.

Superfund: The Case for ... Environmental Leadership (15 pp.); **#2333304** Superfund: A History of Failure (2 pp.); and **#2333305** (2 pp.).

Or use ***PolicyBot***, Heartland's online research service, at **www.heartland.org**; search the topic/subtopic Environment - Hazardous Waste/Superfund.

EPA makes things worse

EPA makes an already-deplorable situation even worse by its grossly inefficient administration of the Superfund program. There is massive duplication of work carried out by EPA employees in the agency's Washington headquarters and in its ten regional offices. Typically, people caught up in Superfund's liability web are billed by EPA attorneys and other "environmental protection specialists" in the agency's Office of Off-Site Remediation Enforcement in Washington, and also by attorneys and "environmental protection specialists" in the regional office that oversees the site in question. (The term "environmental protection specialists" covers EPA employees who are neither attorneys nor scientists.)

The double-billing of PRPs—complete with two sets of attorneys charging for the same work and two sets of "environmental protection specialists" following suit—is a practice the agency has been carrying on for years. It contributes nothing to the restoration of a contaminated site, but simply adds to the waste the program imposes on the rest of the country.

Little bang for the buck

All the sacrifices imposed by Superfund are being made for few, if any, public-health benefits. According to a landmark study published in the October 28, 1999 issue of the British science journal *Nature*, there are serious gaps in EPA's knowledge of how the chemicals it regulates interact with the environment.

Because EPA has ignored an area of science known as chirality, its data on industrial chemicals are in many cases completely worthless, the study says. Chiral chemicals have molecules that come in mirror-image twins. How these molecules react when they encounter pollution-degrading microbes in the soil determines whether they become harmful or benign.

Without knowing how chiral chemicals will be affected by their encounter with microbes in the soil, "environmental measures aimed at reducing the effects of pollutants are being formulated largely in the dark," notes the study's lead author, EPA scientist David Lewis. For nearly two decades, this science gap has allowed EPA to impose Superfund cleanup standards that are scientifically flawed and have contributed immeasurably to the cost of this misbegotten program.

Whither Superfund reform?

As awful as Superfund is, however, efforts to reform the program have gone nowhere. Superfund serves the narrow interests of some very powerful parties. These include EPA, which jealously guards the powers Superfund has bestowed on it; lawyers and consultants, who make a fortune leading bewildered clients through Superfund's maze of regulations; the companies that conduct cleanups, who have profited handsomely from Superfund's stringent cleanup standards; and the big, Washington-based environmental groups, which share EPA's interest in maintaining a tight federal grip over local communities.

In fiscal year 1999, EPA spent $1.5 billion administering the Superfund program. One in every five dollars the agency spends on "environmental protection" goes to the failure that is Superfund.

Bonner R. Cohen is a senior fellow at the Lexington Institute in Arlington, Virginia.

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ducted by the Harvard Center for Risk Analysis (HCRA) at Harvard School of Public Health, finds advantages and disadvantages for each. Environmentally, natural gas is better at reducing particulate and NO_x pollution. Diesel is better for reducing greenhouse gases.

Diesel is the fuel of choice now, but concerns about particulate pollution in diesel exhaust have prompted a move toward alternatives. The HCRA analysis finds that natural gas reduces emissions of fine particulates, those smaller than 2.5 microns. But natural gas may generate more ultrafine particles, less than .1 micron, than does diesel. Several studies indicate that ultrafine particles may have an even more dramatic impact on health than those in the fine category.

The HCRA study finds that because natural gas is primarily methane, a relatively simple molecule, it combusts more completely than do many other fuels, producing fewer emissions of several types, particularly NO_x, an important

Environmentally, natural gas is better at reducing particulate and NO_x pollution. Diesel is better for reducing greenhouse gases.

fuel overall than they would if converted to natural gas. The HCRA study suggests that converting heavy trucks and buses from diesel to natural gas would increase emissions of CO_2, a significant greenhouse gas.

In addition, the study finds that more widespread use of natural gas would likely increase the escape of methane into the atmosphere.

WWW find the full HCRA report on the Internet at **http://www.hsph.harvard.edu/press/releases.**

stabilize CO_2 and other greenhouse gas emissions. They are using tax incentives and emission standards to encourage the use of new, cleaner-burning, diesel fuels. European vehicle manufacturers appear to be increasing their application of "green" diesel technology that captures significant amounts of particulates.

The study finds that diesel has additional advantages, unrelated to the environment, over natural gas. Natural gas, which is a more flammable and explosive fuel to handle and store, presents a greater safety risk than does diesel. Diesel has a short-term cost advantage, but natural gas might end up with roughly the same costs if engines and refueling infrastructure become common.

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"Where We Live" is a day-long conference on "sprawl" featuring the nation's leading free-market thinkers on the issue as well as advocates of "smart growth," taking place in Chicago on April 26, 2000. The conference immediately precedes The Heritage Foundation's annual Resource Bank Meeting and will take advantage of speakers and audience members coming from around the country to attend that event.

The conference is hosted by The Heartland Institute, a 15-year-old nonprofit research organization based in Chicago, and cosponsored by The Heritage Foundation, The Henry Hazlitt Foundation, and PERC (Political Economy Research Center). Presentations will be videotaped and an on-line program will be available at http://www.sprawlconference.org.

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