



FROM THE EDITOR | NEW IDEAS

Often these days, air and water pollution are difficult to detect, almost imperceptible. But not when it comes to concentrated hog farms. Pigs stink! says Blake Hurst, farmer, writer, and articulate defender of justice. Big hog farms have come to his neighborhood in Atchison County, Missouri. In this issue of PERC Reports, he considers how the county can live with them—fairly.



Americans do not have a lock on the best ways of doing things—certainly not in the area of public land management. Alison Berry, a PERC research fellow, has been studying forestry in Canada, where policies allow local, long-term control of forest management. She shares a case study with us, the story of Harrop and Procter, two small towns in southeastern British Columbia. Her essay, "Tenure



for Timber," is excerpted from a longer paper, Branching Out: Case Studies in Canadian Forest Management, published by PERC and available on the Web at www.perc.org.

Sounds like heresy, but are subsidies for ethanol different from other subsidies? Two credible free market environmentalists suggest that they might be. Jay Lehr, science director for the Heartland Institute, pictured here, supports ethanol. Joseph Bast, president of the institute, supports his view—mostly. The dialogue begins on page 9.



G. Tracy Mehan III has discovered Chuck Leavell, an extraordinary keyboardist who is making waves, and not just sound waves. Leavell's love of forestry has led to two books, an award as National Outstanding Tree Farmer, and a role as a national spokesman for private tree farmers. Mehan, former assistant administrator for water at the Environmental Protection Agency, reports on this steward of the land.



All of our usual feature writers appear in this issue. Linda Platts reports on a big, new green building (Texas Instrument's facility in Richardson, Texas), on Audubon's surprising attitude toward logging, and how upscale restaurants are creating compost for some of California's finest farms and vineyards. Daniel K. Benjamin explains why companies don't lose their reputations because of environmental violations, and Terry Anderson applauds environmental stewardship. Letter-writers keep us on our toes.

You can read PERC Reports on our Web site in both PDF form and in easily accessible php format. You are encouraged to download any articles from www.perc.org. And, of course, please respond with letters.

Jane S. Shaw

Jane S. Shaw | Editor

PERC REPOR

ART DIRECTOR

FDITOR Iane S. Shaw Mandy-Scott Bachelier

EXECUTIVE DIRECTOR Terry L. Anderson SENIOR FELLOWS

Daniel K. Benjamin David D. Haddock P. I. Hill Donald R. Leal Gary D. Libecap Robert E. McCormick Roger E. Meiners Andrew P. Morriss Jane S. Shaw Randy T. Simmons Richard L. Stroup Walter N. Thurman Bruce Yandle

DIRECTOR OF PROGRAMS DIRECTOR OF DEVELOPMENT **DIRECTOR OF RESEARCH** Donald R. Leal **DIRECTOR OF COMMUNICATION** & EDUCATION

Monica Lane Guenther Laura E. Huggins

SENIOR RESEARCH FELLOW Dominic P. Parker RESEARCH FELLOWS

Jane S. Shaw Alison Berry Holly L. Fretwell I. Bishop Grewell Laura E. Huggins

RESEARCH ASSOCIATE Tim Fitzgerald EDITORIAL ASSOCIATE Linda E. Platts **EXECUTIVE ASSISTANT** Michelle L. Johnson ADMINISTRATIVE ASSISTANTS

OFFICE MANAGER Dianna L. Rienhart Jean M. Modesette Iennifer Rusnak

CONFERENCE COORDINATOR PROGRAM COORDINATOR

Carol Ferrie

BOARD OF DIRECTORS

Andrew S Martzloff Chairman

David R Atkinsor

Colleen Lane

Thomas E. Beach Beach Investment Counsel, Inc.

Jean A. Briggs

David G. Cameron

Dana Ranch Co., Inc.

Harlem Valley Investing Co., Inc.

Kimberly O. Dennis

Searle Freedom Trust Dunn Capital Management, Inc.

Joseph N. Ignat Blackburn Capital, LLC

Paul J. Ingrassia Dow Jones Newswires

Frank-Paul King King/Strategic

Dwight E. Lee

Gagnon Securities, LLC

Paula V. Leuschen West Pass Ranch

E. Wayne Nordberg Ingalls & Snyder, LLC

George F. Ohrstrom

Leigh H. Perkins

Vernon L. Smith ICES, George Mason University

John F. Tomlin Conservation Forestry, LLC

PERC REPORTS

March 2006

ISSN 1095-3779 © 2006 BY PERC

LETTERS: Address letters to PERC 2048 Analysis Drive, Suite A, Bozeman, Montana 59718-6829 PHONE: 406.587.9591 OR SHAW@PERC.ORG Include daytime phone number. Letters may be edited. BACK ISSUES: Available in PDF format on our Web site at www.perc.org/publications/perc_reports.php



PHOTO CREDIT: Cover: Fine Art Photographic Library, London/Art Resource, NY. John Frederick I Herring (1795-1865). A Family of Pigs. Location: Burlington Paintings, London, Great Britain.



HOG FARM JUSTICE |
COMMUNITIES SPLIT OVER "CAFOS"

By Blake Hurst

Pigs stink. That fact of life is accepted by all of us who grew up on farms. We went to school after we did the chores and ignored the jibes of the town kids because we knew that pigs helped pay the bills.

But times change, and so has agriculture. Pigs left the scene here in Atchison County, Missouri, as we all concentrated on growing crops and chasing government subsidies, enjoying winters without

chores and the fact that our hair and shoes didn't smell. The changes have led our population to drop by 30 percent in the last two decades and by two-thirds in the last century. In 1920, our county had 100,000 pigs and 16,000 people. The last agriculture census didn't bother to count the pigs, and there are only 6,000 people left in our county.

The same trends are obvious across the Corn Belt, as small hog producers have left the industry in droves, and integrators have increased the size and scale

of the remaining hog units now called CAFOs (concentrated animal feeding operations). From farms that might have 100 sows to units that house 5,800 mother pigs, the industry has changed. As it has, the conflict between pig farmers and their neighbors has increased.

If my 4-H project of eight sows and 100 baby pigs made my schoolmates wrinkle their noses, imagine the smells around a concentration of nearly 6,000 sows and tens of thousands of baby pigs! As a result of huge open lagoons, manure spills of Herculean proportions, and environmental concerns caused by *e coli* bacteria and noxious odors, hog farms are viewed with revulsion by those who live nearby. A cottage industry of environmental organizations, small farm advocates, and animal rights groups has sprung up to oppose the siting

of these large units, and Willie Nelson and Robert Kennedy Jr. are always available for a sound bite or an interview. One result is that Brazil is rapidly increasing hog production, as we've exported parts of our hog industry to places more willing to accept what we no longer will.

But there is more to the story. The main cause of the smell and pollution is also an increasingly valuable—and organic—source of the nitrogen, phosphorous, and potassium that our corn crop needs. And those hogs are some of our best customers. Even with the

boom in ethanol production and the slow but steady increase in farm exports, domestic livestock producers are still the largest users of our corn and soybeans.

My family owns a farm we call the Martin place, where we raise

PERC REPORTS | WWW.PERC.ORG

If my 4-H project of eight

noses, imagine the smells

thousands of baby pigs!

around a concentration of

sows and 100 baby pigs made

my schoolmates wrinkle their

nearly 6,000 sows and tens of

corn and soybeans. Like most farms around here, it has an abandoned barn and empty lots. About a mile from the farm, a large producer of hogs is getting ready to build a 5,800-sow confinement unit. Nobody lives on the Martin place (all my family members' homes are several miles away), so we won't smell the hogs. But we will be close enough to accept manure from the barns. Worth about \$10,000 per year, that manure will far outweigh any prospective loss in property value. But it is important that others, who may feel differently, have some recourse.

A study by the University of Missouri found that the existence of a CAFO decreases property values of nearby farms by about \$100 an acre (Mubarak, Johnson, and Miller 1999). A broader study (Palmquist, Roka, and Vukina 1997) found a 9 percent drop in home values caused by nearby CAFOs.

On the other hand, manure easements available to farmers near these facilities have been shown to increase rental rates. The facilities will buy the corn we raise and will increase local corn prices. The payroll is not large in absolute terms, but it will make a difference. Property taxes will accrue to the school district and other public entities, and local businesses will sell electricity, feed, and all the other things that a large farm must buy. The community really needs these benefits: I graduated with 65 kids in my high school class; my kids had about 30 in their classes; my grandson, 2, will have about 20 unless something changes.

A DILEMMA FOR ATCHISON

Now that our county is in an uproar over the prospective large hog operations, what should we do?

To begin with, hog farms are policed much more closely than they were when farms first started getting larger. They are regulated by the Environmental Protection Agency (which delegates authority to the state of Missouri), and the farm will have to obtain permits from the Missouri Department of Natural Resources as a CAFO. It must hire an engineer who will certify that construction meets state requirements.

The latest hog farms no longer use earthen lagoons, but store the manure in deep concrete pits underneath the buildings. The manure is injected into neighboring fields rather than spread on the ground. Both changes help control the odor and lessen the risk of manure washing into nearby streams.

But it is still hogs, and it still smells.

The traditional way of handling problems like smells is nuisance law. Plaintiffs could sue in the past, but farms were protected if plaintiffs had "come to the nuisance." That is, you couldn't move next to a feedlot and sue the farmer feeding cattle, because you knew what it smelled like when you moved there. Several prominent cases weakened the "come to the nuisance" protection, however.

RIGHTS TO FARM AND RIGHTS TO SUE

This opening of the gates to lawsuits led to the passage of state "right-to-farm" laws in the late 1970s, which granted farmers some protection from nuisance suits. Missouri's law, however, gives a one-year window for nuisance suits, so a new facility would be vulnerable to suit from disgruntled neighbors.

These right-to-farm laws do restrict the rights of property owners near farming operations—but not completely. At least that is what the Supreme Court of Iowa found in the 1998 case *Bormann v. Board of Supervisors*. Iowa's right-to-farm law allowed for the establishment of an "agricultural area" which, once established, gave nearly blanket immunity from nuisance suits. The Bormanns, farmers in the area, and their farming neighbors petitioned to establish such a district, received the designation, and were promptly sued. In the ensuing appeal, the Iowa court made several findings.

First, the court found that Iowa law had indeed given the Bormanns a right to farm, essentially, an easement that allowed the passage of odors onto their neighbors' property. Second, the court found that the easement was a protected property right. And, third, the granting of the easement was a "taking" under the Fifth and Fourteenth Amendments and so compensation was owed the plaintiffs. In this case, no compensation was ordered, since the case was a test and no nuisance existed. The case has been cited since, however, and the protection that right-to-farm laws give farmers has been considerably reduced as a result.

A case decided in Iowa since *Bormann* that arrives at a decision that seems fair to all parties, *Gacke v. Pork Xtra, L.L.C.*, was a nuisance suit filed by the Gackes against a neighboring hog operation. The court applied *Bormann* and agreed that there was a taking. But the court also found, following U.S. Supreme Court precedent, that the Iowa

The traditional way of handling problems like smells is nuisance law. But farms were protected if plaintiffs had "come to the nuisance." That is, you couldn't move next to a feedlot and sue the farmer feeding cattle.



legislature did have the ability to limit legal actions against agriculture operations. So the court awarded damages to the Gackes for the loss of value of their property, but did not allow punitive damages or grant an injunction to close down the CAFO. The Gackes were made whole, and the CAFO was allowed to continue as an existing business.

COUNTY HEALTH ORDINANCES

Other attempts to restrict hog farms have been tried. One is to keep them out through zoning, but Missouri law does not allow that. About a decade ago, a state senator in Missouri, Harold Caskey, had the inspiration to regulate hog farms through county health ordinances. Counties have always used health ordinances for public sanitation and the like, but until then they had never been used to regulate agriculture. Fourteen counties in Missouri now have health ordinances aimed at animal agriculture, and only one of those counties has ever issued a permit for a new or expanded livestock facility.

Opponents of the CAFO in our county are lobbying the county commission for this kind of health ordinance. We'll no doubt be inundated with outside groups who both favor and oppose the ordinance, and the fight will pit neighbor against neighbor. It won't be much fun.

Opponents like their chances with the county commission, as emotion often carries the day and they don't want to subject their case to the rigor of a court by filing a nuisance suit. When a health ordinance is passed, the CAFO owners just move elsewhere.

In my view, the siting of hog farms is a decision best made on a case-by-case basis, and that can only occur justly if suing against nuisance is effective. The proper siting of a CAFO is highly dependent upon local conditions. The traditional land use in the area, the distance from neighbors, the distance from streams, the soil types, and the reputation of the owner should all be considered by the court. In our county, for example, it would matter to the court that we are not rapidly urbanizing. Only four building permits were issued in our entire county last year.

Missouri's right-to-farm law needs to be amended so that the courts or arbitrators can hear both sides and decide whether a CAFO is a nuisance. If neighboring property owners suffer a loss in property

value, that cost should be borne by the person causing the loss. If the neighbors feel that the facility would be a nuisance, then injunctive relief should be sought before construction begins.

At the same time, hog farmers need some protection from large punitive judgments. Without that protection, we'll rapidly move hog production offshore. Agriculture is the lifeblood of places like Atchison County, Missouri. There are places where hog farms shouldn't go, and the law and custom should take that into account. But there are still places that can host these facilities with little risk and many benefits to the surrounding communities. The best way to solve these conflicts is still the traditional way, with the use of common law nuisance to allocate the various rights between the competing interests.

REFERENCES

Mubarak, Hamed, Thomas G. Johnson, and Kathleen K. Miller. 1999. The Impacts of Animal Feeding Operations on Rural Land Values. Report R-99-02 (Executive Summary).
 Columbia, MO: College of Agriculture, University of Missouri-Columbia, May.
 Palmquist, Raymond B., Fritz M. Roka, and Tomislav Vukina. 1997. Hog Operations,
 Environmental Effects and Residential Property Values. Land Economics 73(February):
 114-124.

CASES CITED

Bormann v. Board of Supervisors, 584 N.W.2d 309 (Sup. Ct., Iowa, 1998). Gacke v. Pork Xtra, L.L.C., 684 N.W.2d 168 (Sup. Ct., Iowa, 2004).

Blake Hurst, a contributing writer for the American Enterprise, grows flowers, corn, and soybeans in northwest Missouri with his wife Julie. He appreciates the information provided for this article by Roger Meiners, Andrew Morriss, and Bruce Yandle.

This United Hog Systems feeding operation in Marshall, Missouri, resembles the one that is likely to be built in Atchison County, Missouri.





The forests of North America represent enormous natural bounty, yet in the United States this bounty is being squandered. Forests managed by the U.S. Forest Service face catastrophic wildfire, insect infestation, and invasion by alien species. Taxpayers lose money on them while the Forest Service itself suffers from "analysis paralysis" according

to Forest Service Chief Dale Bosworth.

Last year, I began investigating forestry outside the United States to find innovations that might improve public forest management in our country. I found strikingly different approaches just north of the border, in Canada. Canada's forest policies create opportunities for a variety of interests to be represented in public forest management. In particular, community-based forestry as practiced in Canada could be applied in the United States as well.

Unlike the United States, where 59 percent of the forestland is privately owned, most forestland in Canada is public, with 70 percent of the forestland managed by provincial governments (see Figure 1). These forests passed from the British Crown to the Canadian colonies when they assumed responsibility for government (Drushka 2003, 30). Provincial forests are commonly referred to as Crown lands.

Timber harvests from provincial forestland are managed primarily through long-term leases and licenses, also called tenures. Unlike timber sales in the United States, which give a private company the right to log a specified forest stand, Canadian timber tenures transfer major responsibilities to private companies or organizations for long periods. The tenure holder pays annual rents and harvesting fees set by the province and must comply with environmental regulations. Forest management, including planning, timber harvesting, reforestation, and maintenance, is generally the responsibility of the tenure holder.

Timber tenures generate revenues for the provinces, in contrast to the U.S. national forests, which operate at a cost to taxpayers. For example, timber management in British Columbia generates US\$2.35 for every dollar spent (British Columbia Ministry of Forests 2001-2002), while the U.S. Forest Service loses US\$0.36 for each dollar spent on timber management.1

Canadian timber tenures allow companies, nonprofit organizations, and communities to manage forests for a variety of goals. Although the majority of tenures are held by large, industrial forest companies, a growing minority is held by community organizations and indigenous groups. British Columbia, in fact, offers a tenure specifically designed to allow local governments, community organizations, or indigenous groups to manage the forests around them.

The popularity of these Community Forest Agreements in British Columbia is growing. As of January 2006, 11 pilot agreements had been issued. Two of these have completed their pilot periods; one of the two has been awarded a 25-year license, and the other is negotiating an agreement.2 Furthermore, 90 communities have requested information about the CFA program.

HARROP-PROCTER COMMUNITY FOREST

The Community Forest Agreement held by the villages of Harrop and Procter in southeastern British Columbia illustrates how these tenures can promote innovative forest management. Harrop and Procter have a total of 700 year-round residents, a rural economy, and a sizeable summer tourist industry. Since the mid-1970s the communities have tried to protect the forests around them, partly because the nearby Crown forest is the main source of the towns' agricultural and domestic water. Residents rely largely on untreated surface water, and they fear that industrial logging could force the installation of costly chlorination and filtration systems. The community also wants to protect the wildlife around it, and many people worry that logging will disturb scenic views (Harrop-Procter Community Forest n.d.).

When the towns failed to get the forests protected as part of a provincial park, they decided to take matters into their own hands. They formed the Harrop-Procter Watershed Protection Society. Initially, they tried to prevent any logging in the watershed, but soon realized that a Community Forest Agreement was a better approach.

In 1999 Harrop-Procter received a Community Forest Pilot Agreement over 27,000 acres (11,000 hectares) of Crown forests and formed the Harrop-Procter Community Co-op to take over forest operations and economic development. The co-op's first priority in forest management is protection of the towns' drinking water. To work toward this goal, Harrop-Procter has successfully negotiated with the provincial

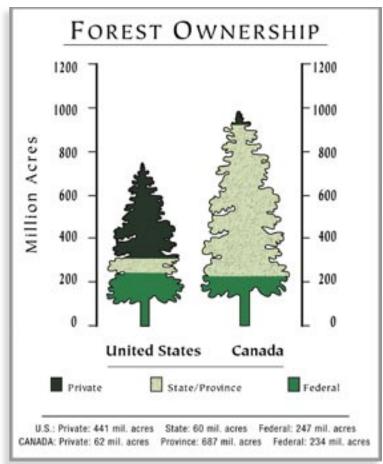


FIGURE 1: FOREST OWNERSHIP IN CANADA & U.S. SOURCE: USDA FOREST SERVICE

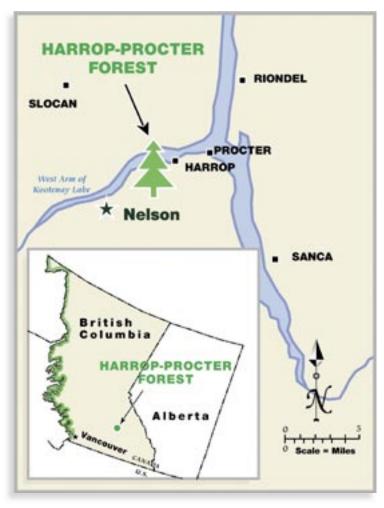


FIGURE 2: HARROP-PROCTER

government to reduce logging intensity in the area, thereby reducing impacts on the watershed (Anderson and Horter 2002).

Because Harrop-Procter does not intend to maximize returns from timber, it must generate revenue through alternative sources. It is the only timber tenure holder in British Columbia that is actively marketing non-timber forest products and one of the few that sell value-added wood products. Every effort is made to use ecosystem-based forestry techniques and to process forest products locally. The co-op supports two businesses: Sunshine Bay Botanicals and Harrop-Procter Forest Products.

Sunshine Bay Botanicals sells dried herbs, teas, and tinctures created from forest-harvested and organically farmed herbs. Harrop-Procter Forest Products sells everything from rough-cut lumber to kitchen cabinets, all marketed as "wood with a conscience." Future efforts are aimed at creating an ecotourism business, further developing non-timber forest products, incorporating more local processing of timber, and marketing more value-added wood products.

The community forest has also secured development grants and funding from venture capitalists. Harrop-Procter cuts down on management costs by relying heavily on volunteers, who supply as much as 350 hours of work per month (Anderson and Horter 2002).

Harrop-Procter is an example of innovation in public forest management. Decisions are made based on local values, and the local communities stand to benefit from responsible forest management.

Time will be the test of whether the Harrop-Procter Community Forest can sustain itself in the long-run. The key may be the inclusion of non-timber forest products such as recreation and forest-grown herbs in its agreement with the province. This is unusual in the Canadian timber tenure system, which is based primarily on logging. It is important for community forests that do not want to concentrate on timber production to be able to generate revenue from other sources

A Lesson for the U.S.

Canada's experiment with community forest agreements should be carefully watched by the United States. A growing number of community organizations in the United States are exploring the possibilities of community-based forestry—although at the moment there is little opportunity for experimentation within the federal forest system.

A framework for introducing new forest management policies in the United States has been offered by Daniel Kemmis (2004), senior fellow in public policy at the Center for the Rocky Mountain West at the University of Montana. Kemmis suggests reconstituting the now-defunct Region 7 of the Forest Service, which was eliminated when the ten Forest Service regions were reorganized in 1965. Instead of a geographical region, the new Region 7 would be a grouping of discontinuous areas where alternative approaches to federal forest management could be applied on an experimental basis. These could include Canadian policies of forest management. After an initial pilot period, these programs could be evaluated and adjusted as necessary.

This example does not mean that forest management is ideal in Canada. The annual allowable cut—the minimum amount of timber required of each forest by the provinces—discourages forestry that does not include intensive logging. Ecosystem-based and community-based forests struggle to achieve their goals while also meeting their annual cut rates. Nevertheless, the combination of long-term areabased tenures and the provinces' openness to allowing those tenures to be held by nonprofit community-based organizations offers a new approach. Perhaps greater knowledge of the Canadian examples will raise awareness in the United States and help both forests and communities in the United States.

ENDNOTES

- Personal communication with Holly Fretwell, PERC research fellow, January 2006.
 Forest Service data are the average for 1998-2001.
- Email communication with Ron Greschner, senior timber tenures forester, British Columbia Ministry of Forests and Range, January 6, 2006.

REFERENCES

Anderson, Noba Gmeiner, and Will Horter. 2002. Connecting Lands and People: Community Forests in British Columbia. October. Online: www.dogwoodinitiative.org/documents/CFReport/cfreport.pdf (cited January 24, 2006).

British Columbia Ministry of Forests. 2001–2002. 2001/02 *Annual Report: A New Era Update*. Online: www.for.gov.bc.ca/hfd/pubs/docs/mr/annual/ar_2001-02/11FORWEB. pdf (cited January 24, 2006).

Drushka, Ken. 2003. Canada's Forests: A History. Montreal, Canada: McGill-Queens University Press.

Harrop-Procter Community Forest. N.d. The Evolution of the Harrop-Procter Watershed Protection Society. Online: www.hpcommunityforestorg/about/evolution.html (cited January 24, 2006).

Kemmis, Daniel. 2004. Constitutional Conflicts on Public Lands: Re-examining the Governing Framework of the Public Lands. University of Colorado Law Review 75(Fall): 1127–1132.

Alison Berry is a research fellow with PERC. Her essay Branching Out: Case Studies in Canadian Forestry has just been published by PERC and is available at www.perc.org.

As a citizen, I don't like

distort markets. But as a

ethanol as a "win-win"

consumers alike.

subsidies or regulations that

scientist, I've long supported

proposition for farmers and

Ethanol—the gasoline substitute made
by distilling corn or other
vegetation—has long been
the subject of intense debate.
According to its critics, ethanol does
little to improve air quality and may actually
contribute to smog, it costs taxpayers billions
of dollars in subsidies, and it doesn't do much
to reduce our dependence on foreign oil.

Ethanol's defenders say its environmental effects are more positive than negative, the so-called subsidies are mostly federal and state tax breaks, and as the cost of making ethanol falls while the cost of fossil fuels remains high, ethanol could substantially reduce the nation's

oil consumption and even overtake gasoline as the preferred transportation fuel.

Ethanol was in the news recently when General Motors, Chevron, the state of California, and other partners announced at the Los Angeles Auto Show a plan to greatly expand the use of E85—a motor fuel composed of 85 percent ethanol. GM already has manufactured 1.5 million "flexible fuel vehicles" able to run on E85, but they seldom do because the fuel is not widely available. Chevron announced plans to provide the fuel at selected gas stations, and Pacific Ethanol, another partner, announced plans to build four ethanol plants in California during the next two years.

I've observed this debate for many years as a citizen and as a scientist. As a citizen, I don't like subsidies or regulations that distort markets. But as a scientist, I've long supported ethanol as a "win-win" proposition for farmers and consumers alike.

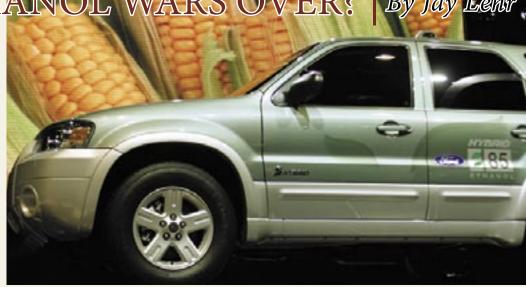
I view the recent announcements as evidence that ethanol has reached a tipping point, and that the debate over the fuel may be over. Ethanol's advocates have won.

Many people are surprised to learn that Henry Ford used ethanol to power his first automobiles. Decades later it became cheaper to pump oil from the ground than to distill ethanol from plant matter. Now history is reversing itself as oil prices climb and improvements in production processes make ethanol the more affordable choice.

Ethanol is called an oxygenate because it is 35 percent oxygen by weight. When mixed with gasoline it

allows the fuel to burn more cleanly, thus enhancing octane. Some ethanol opponents complain that fuel filters must be changed more frequently, and they are indeed correct because ethanol loosens deposits and residues, making engines cleaner. It's not a bad thing.

For many years, ethanol opponents claimed that the energy needed to make a gallon of ethanol was greater than the energy value of the ethanol. More recent studies show a positive balance of between 25 percent and 50 percent. Continual improvements in the chemical engineering of the ethanol manufacturing process will ensure that



additional gains are made in the future.

Currently nearly all ethanol is made from corn, but it can be made from any easily grown plant material or even municipal waste. While the price of corn can be volatile at times, it will rarely affect the price of the ethanol. This is so because a major portion of income from economic production of ethanol is the Dry Distilled Grain (DDG) that remains as animal feed once the starch is removed from the corn for fermentation. When corn prices go up, so does the value of the DDG.

A bushel of corn will produce 2.7 gallons of ethanol with 17 pounds of feed left over, enough to create four beef steaks or eight quarts of milk. The price of corn has been under \$2.00 a bushel for some time. Average yields per acre through the nation range between 140 bushels and 160 bushels. Continued agronomic improvements will lead to yields above 200, which are already common in some areas.

Currently most ethanol plants burn natural gas, whose price has skyrocketed in recent years. Cheaper energy is available from burning

kernel corn itself. As corn furnaces already on the market expand into ethanol plants, production costs will drop significantly.

One can argue that the industry may no longer need subsidies without at the same time denying that the industry would not have emerged without them. Similarly, ethanol may provide too small a share of our total transportation fuel needs today to significantly improve the nation's energy security, but if the industry continues to grow and gradually supplant gasoline, perhaps a longer time frame will show that the subsidies were worthwhile.

In conclusion, unlike the much hyped and subsidized wind and solar power, ethanol is an alternative fuel with genuine promise of social and economic benefits. Its foes and proponents alike would do well to set aside their past disagreements and start planning for a fast-growing, environmentally sustainable, and unsubsidized industry.

Jay Lehr, Ph.D., is Science Director for the Heartland Institute, a nonprofit public policy research organization. He is also the editor of The Water Encyclopedia and other major science reference books.

A KERNEL OF SUPPORT Are subsidies for ethanol somehow different from other subsidies—in other words, not all that bad?

FOR ETHANOL?

FREE MARKET ENVIRONMENTALISTS DEBATE THE TAX BREAKS

Are subsidies for ethanol somehow different from other subsidies—in other words, not all that bad? One free market environmentalist, Joseph L. Bast, president of the Heartland

Institute, ventures the thought that most subsidies for ethanol take the form of a tax cut for some people, although not the public at large. Removing the tax breaks would raise taxes, something that he as a libertarian opposes. Heartland's science director, Jay Lehr, writes (page 9) that ethanol's critics and supporters should agree that ethanol is here to stay . . . and no longer needs subsidies.

Other free market environmentalists are shocked at this way of framing the issue. The following comments, which come from an environmental list-serve, have been edited and are published with the participants' approval.

The participants in this dialogue are: Joseph L. Bast, president, Heartland Institute; Thomas Tanton, senior fellow, Institute for Energy Research; Jonathan Adler, associate professor, Case Western University Law School; Joel Schwartz, visiting fellow, American Enterprise Institute; Roy Cordato, vice president for research, John Locke Foundation; Fred L. Smith, Jr., president, Competitive Enterprise Institute; David Hogberg, research associate and director, GreenWatch, Capital Research Center; and Myron Ebell, director of global warming and international environmental policy, Competitive Enterprise Institute.

JOSEPH BAST:

Ethanol is an issue that increasingly divides free market environmentalists. The original position—opposing ethanol—was easy to take. The market for ethanol was solely the result of government subsidies paid to a small number of special interests, and it had dubious or negative environmental effects. But changes during the past decade have led some of us to wonder if it isn't time for a more nuanced approach.

In past discussions on ethanol, James Taylor (editor of *Environment and Climate News*) and I have discussed the following: Does ethanol benefit or harm air quality? (We think it's probably a wash.) Are new, more efficient technologies and economies of scale making ethanol a better deal for consumers and the environment? (From what I read they definitely are.) Finally, because the "ethanol subsidy" is mostly a tax cut, is it something libertarians ought to object to? (I don't.)

In January, a new partnership to spur greater use of ethanol was announced (see Jay Lehr's article on page 9). It includes the construction of new ethanol plants in California, which will probably increase the efficiency of ethanol production by several percentage points. Although ethanol cannot now be sent through pipelines because it attracts water (it is hygroscopic), and must be trucked instead, that should not be a concern in a couple of years when these new plants come on line. At that time, combined with higher oil prices, ethanol may be price-competitive with oil even without the tax breaks. At least this is the current theory. I'd love to know if that's true.

THOMAS TANTON:

The ethanol tax credit shouldn't be considered a tax cut but rather

a tax transfer. The rest of us are paying for the taxes not paid by the ethanol producers.

The hygroscopic nature of ethanol will continue to be a problem, and perhaps more so with increased production and use because more reliance on pipelines will be necessary. Avoiding long distances is part of the reason that California is encouraging in-state production.

We shouldn't necessarily assume that oil prices will increase monotonically.

Technology in the production of gasoline (without ethanol) and combustion for automobiles continues to improve, and the environmental benefits of ethanol continue to diminish. The market for ethanol seems to be an artificial one brought about by poorly thought-out regulations.

Jonathan Adler:

I think that Joe is largely correct about ethanol. Future environmental effects are probably a wash, although increased ethanol use will have different effects in different places. I would suspect, for example, that the net benefits from increased ethanol use will be much greater in cooler parts of the country; in areas with hot summers and big ozone problems, ethanol may have net negative effects.

On the tax break, however, I oppose it. One, it is a market distortion that results in less efficient resource allocation. Two, it rewards rent-seeking and penalizes ethanol's competitors. Three, insofar as gasoline taxes are proxies for user fees on roads, I see no basis for giving ethanol a special advantage.

Joel Schwartz:

Ethanol is a net loser for air quality in any area that reaches temperatures above about 90 degrees F during the summer, as Donald Stedman of the University of Denver and research supported by the California Air Resources Board have shown. With ethanol you're increasing ozone-forming emissions from a large source of volatile organic compounds (VOCs) on days when ozone is already likely to be at its highest.

Free market environmentalists should not oppose ethanol. But they should oppose ethanol subsidies (along with petroleum subsidies!). If ethanol were worth producing and putting in gasoline on its own merits, subsidies would be unnecessary. The subsidies for ethanol are truly massive. It's not just the federal gasoline tax subsidy for ethanol (51 cents per gallon of ethanol added to gasoline). A few states add an additional per-gallon subsidy. Some states also have other tax subsidies for building ethanol plants. And of course there's the farm subsidy for growing the corn. Add to this the fact that ethanol has about 30 percent less energy per gallon than gasoline, which makes the subsidy per unit of energy even worse. I don't see why free market environmentalists would even consider supporting ethanol subsidies.

Joseph Bast:

I am so opposed to subsidies of all kinds that I failed to explicitly state it in my original message. We all agree that free market environ-

mentalists ought to oppose subsidies to ethanol and, as Joel says, to any other fuel.

But a tax break is, arguably, not a subsidy. And we should balance the cost against alleged benefits, not to justify the subsidies but to find out whether the net cost (or benefit) is big enough for this to be a major public policy issue, rather than just a theoretical concern.

ROY CORDATO:

This issue of "tax breaks as subsidy" is a thorny one for libertarians—one that I have had to come to grips with in dealing with so-called economic development policy at the state level. To attract businesses or promote specific industries, state governments offer huge tax incentives. While we may not want to call these "subsidies," they can and should be opposed. They are an attempt to use the taxing power—in this case in a negative way—to generate a politically determined outcome.

Whatever they are called, the issue of whether they are harming people depends on whether others are being taxed more to make up for the lost revenue. In North Carolina our general assembly has passed very large tax increases for the last four years while doling out huge tax breaks, including record-breaking incentive packages to companies like Dell Computers. At the Locke Foundation we always advocate for lower across-the-board taxes on business in place of the targeted central planning embodied in the "tax incentive" approach.

Fred L. Smith Jr.:

The metric for freedom is not taxes but resource distortions. The impact of political interference in a free society is the extent to which resources are diverted to special interests from the uses that free people would prefer. How they are "paid for" is not of primary concern. They aren't free and will be paid for via taxes, borrowing, or inflation. These distortions are not easily measured (especially for regulatory and subsidy interventions), but it is better to measure the right thing roughly than to measure the wrong thing exactly.

Obsession with taxes has been one of the problems that have made it so easy for the Republican Party to falter. Republicans regulate, distort the economy and spend taxpayer money, but as long as they can reduce at least some taxes, they seem to feel that everything is okay. Rethinking this issue is overdue. In principle all taxes are worrisome but increasingly I favor a flat tax with no deductions—not for housing, not for state taxes, and not even for charitable donations. In my view, a flat-tax world would provide far fewer opportunities for

political intervention.

In brief, I do not think libertarianism has a clear answer on tax policy other than simpler is better than more complex, and less is better than more. The more relevant question for us is the extent to which policies interfere with our economic liberties.

MYRON EBELL:

The idea that tax breaks for some are better than no tax breaks for anyone may somehow be squareable with libertarianism but it is utterly repugnant to the broad idea of equality under the law. Its practical effects can only be to increase faction and to promote the interests of an elite against the people. Or to put it more bluntly, promoting tax breaks for special interests is un-American and unconstitutional. As John Adams said, ours is to be a government of laws and not of men. The chief example he gave of a government of men was one that bestowed favors on some citizens that were denied to others.

JOEL SCHWARTZ:

Jay Lehr says "ethanol could substantially reduce the nation's oil consumption" (see page 9). I did a back-of-the-envelope estimate and it looks as though only about 17 percent of U.S. gasoline consumption could be replaced by ethanol if the entire 2004 U.S. corn crop were devoted to ethanol production. (It's not clear what people and livestock would do for food if such a switch were to occur. Not to mention the run-up in commodity prices if large fractions of U.S. crop production were devoted to motor fuel.)

Even if ethanol could displace a substantial portion of gasoline, it doesn't seem likely that this would increase our energy security. If ethanol displaces petroleum, it will displace petroleum from the highest-cost producers. Ethanol would displace U.S. petroleum production, rather than Middle East petroleum production.

Whether the net energy balance for ethanol production is negative or positive is still a matter of debate, although the energy balance is improving as technology advances. In any case, the issue is irrelevant if you believe that use of ethanol as a motor fuel should be determined by market forces without government intervention. All that matters is whether potential producers can deliver a gallon of ethanol at a price consumers are willing to pay. Net energy balance will influence this, but only as an input to producers' market decisions.

Joseph Bast:

Jay and I don't "support ethanol mandates or subsidies"; we sup-









JOSEPH BAST THOMAS TANTON

JONATHAN H. ADLER

JOEL SCHWARTZ

port ending them. Jay's piece falls short of calling for ending the mandates, although I think it is implied by his last sentence.

We call for removing the subsidies to ethanol producers because Jay's analysis shows the product no longer needs them. But if the subsidy is 51 cents per gallon, that doesn't mean I support a new 51-cent a gallon tax on ethanol. I don't think libertarians ever ought to be talked into supporting higher taxes in the name of some mythical "level playing field" defined by incumbents. The very idea that taxes on you should be higher because otherwise I have to pay higher taxes is obnoxious and even ridiculous. It's the rationale used to tax the Internet and the VoIP (Voice-over Internet Protocol).

Crops that are used to produce ethanol are still available as feed for livestock, and corn is probably only a transitional feedstock for ethanol, both points made in Jay's piece. Ethanol will contribute more to the U.S. fuel supply than drilling in the Arctic National Wildlife Refuge, which many libertarians have become quite skilled at defending on national security and domestic supply grounds.

ROY CORDATO:

As Fred Smith indicated earlier, this is about the power, scope, and influence of government over private decision making. Government can and does increase its power and control by selectively invoking its authority to tax. This is why a Steve Forbes-type flat tax is a political impossibility. Politicians realize that the power not to tax—selectively—can be used to expand the size of government just as easily as the power to tax. That is how government works.

JOSEPH BAST:

Roy's point is that politicians pander to farmers and the growing ethanol industry by giving them subsidies that oil companies and refiners don't get—it's not in the interest of politicians to reduce taxes on both types of fuels. I think this supports my argument that taxes more often get cut when interest groups organize to demand preferential treatment on their products or industry, rather than from broad pressure to lower taxes on everyone. I'm not making a normative case for selective tax abatement, only observing the reality of how tax cuts and credits come about.

FRED SMITH:

I don't think that argument stands up empirically. The one example of substantive tax reform (the Tax Reform Act of 1986) started out as a typical "grease the squeaky wheel" effort catering to special inter-

ests, but somehow Congress eliminated many (not all, unfortunately) special provisions and also lowered rates. But nothing substantive has happened since—and this suggests that we should reconsider whether pragmatic approaches work. (Recall one of the many wonderful statements by Stan Evans: "The trouble with pragmatism in politics is that it doesn't work!")

DAVID HOGBERG:

When most libertarians argue that a particular tax credit should be removed, they follow that with the argument that there should be a reduction in overall taxes. Let's get rid of the tax credit for ethanol and then reduce the federal tax for gas.

In theory, the gas tax is a great way to finance highways. Last time I checked, though, the gas tax brought in more revenue than was spent on highways—thus Congress spends the gas tax on things other than highways. Another great reason for reducing it.

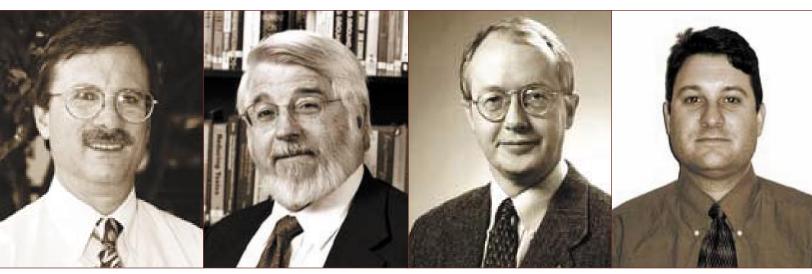
And the government shouldn't try to engineer the economy by playing favorites.

Joseph Bast:

So your plan for reducing taxes, David, is removing a particular tax credit and following that with a reduction in overall taxes? The number of times this has happened is so few that some of us have the dates tattooed on our arms. Maybe Fred Smith is right: Libertarians and conservatives need to rethink how taxes rise and fall. Until then, I'll stay in the "no new taxes" column. Starve the beast; don't debate whose tax is more or less "fair" than someone else's. No tax is fair.

The fact that motor fuel taxes are diverted to non-highway uses is an argument for ending our reliance on them. Starve the beast and force a switch to tolls and privatization.

Of course, government shouldn't engineer the economy with tax credits—or taxes, regulations, direct subsidies, income redistribution, public ownership of assets, or public provision of services. Let's try to reduce or eliminate all of them. So let's not start with calls for raising taxes on ethanol! Finally, let's stop bashing ethanol with whatever lame arguments and excuses we can find. It's here to stay, and we just look foolish trying to deny its role in the country's energy and agricultural policies.



ROY E. CORDATO FRED L. SMITH JR. MYRON EBELL DAVID HOGBERG



THE MANY SIDES OF CHUCK LEAVELL

I discovered Chuck Leavell pretty late in the game. Having heard an interview and a few cuts from his 2001 CD, Forever Blue: Solo Piano, on

National Public Radio, I immediately fell for it. Somehow I had missed the fact that he was keyboardist for the Allman Brothers Band in the 1970s and for the Rolling Stones since 1982, not to mention Eric Clapton, George Harrison, the Black Crowes, and the Indigo Girls. (Maybe law school does that to you.)

Forever Blue, Leavell's first solo album, features the artist playing ten tunes—seven original compositions and three old favorites such as "Georgia on My Mind" and "Ashokan Farewell." Great stuff even if your default position is more

akin to Glenn Gould playing Bach's Goldberg Variations. While listening, I did not pay much attention to the text printed on the inside of the case: "PLANT A TREE."

I did not know until recently that Leavell is a serious forester. He and Rose Lane Leavell, his wife of thirty years, manage family property, some 2,200 acres, an award-winning pine and hunting enterprise in Georgia named Charlane Plantation. They are justifiably proud of being chosen as the National Outstanding Tree Farmers for 1999 (out of 50,000 family forest landowners).

In a profile of Leavell in the Wall Street Journal ("Tree Growin' Man," January 25, 2006), Holman W. Jenkins, Jr., describes the difficulties that Chuck and his wife faced after inheriting their original 1,200 acres from Rose Lane's grandmother. The estate taxes were so burdensome that they had to sell a parcel of land that had been in her family for 100 years in order to make a down payment to the Internal Revenue Service. They spent the next 15 years paying off the balance.

A Passion For Forestry

On the cover of Forever Green, Mick Jagger claims that "Chuck is always talking about trees on tour . . . sometimes it drives me crazy!" But Jagger concedes that Leavell's "passion for forestry is undeniable, and he's made some strong contributions to the environment through that passion."

What I missed, the advocates of "free-market environmentalism" had not. PERC featured Leavell at its 25th anniversary bash.

The White House invited him to address its Conference on Cooperative Conservation in August of 2005. Gale Norton, Secretary of the Interior, recognized the Leavells for Citizen Stewardship. And the environmental group Environmental Defense featured Chuck Leavell on its Web site recently. The Washington Post dubbed Leavell the "Bono of Trees."

Leavell, along with coauthor Mary Welch, wrote a book on forestry, Forever Green: The History and Hope of the American Forest, released the same year as his CD Forever Blue. The book covers every conceivable aspect of forestry and the challenges of reforesting America, including the Leavells' struggle to overcome the disincentives of estate (read "death") taxes in their efforts to preserve privately-owned forest lands.

Chuck Leavell is a model of private stewardship of the kind be-

loved by free-market environmentalists of all stripes. The only off-note in his beautiful life story is that he recently employed his fame and well-earned credentials as a conservationist to urge government subsidies for private forest owners. Like so many Americans, he does not see the peril to his own deeply held values inherent in the political allocation of economic wealth.

Leavell's combination of forestry and musi-

cianship became known to me when I served on a panel of reviewers of children's books on the environment

for a foundation's annual awards program. I had to review 58 different titles and rank them accordingly.

I admit to some trepidation in undertaking this task. As the father of seven children, I am always sensitive to strains of environmentalism that view people as a blight on the earth or neglect the tradeoffs between the stewardship of nature and making a living. In the past, such ideas often crept into course materials. Instead of teaching kids the hydrologic cycle, the books treated

them to a discussion of overconsumption in the developed world. The link between economic growth and human health and environmental quality was rarely discussed—or was rejected outright.

I was pleasantly surprised as I reviewed the submitted publications. Despite occasional lapses, most of the books were blessedly free of cant or agitprop. (Given the very young target audience, the economic tradeoff issue was probably beyond the grasp of the readers, anyway.)

These books were more sophisticated versions of the nature books I remember as a child, with vivid prose, superb artwork, and terrific photography. Swamps were now wetlands (a good thing in my view), and the narratives followed the natural cycles of animal species with greater attention to detail.

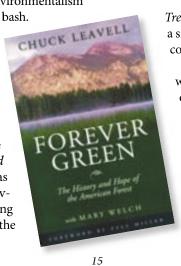
> Halfway through the stack of books there appeared *The* Tree Farmer by Chuck Leavell and Nicholas Cravotta. With a simple, but not simplistic, story line, this book describes a conversation between a boy and his grandfather.

"We grow trees," responds the grandfather to the boy's wonder at seeing the family farm with no chickens, cows, or pigs. He explains the planting, trimming, caring, and cutting of trees. The boy is incredulous: "You cut them down? But why? How could you?"

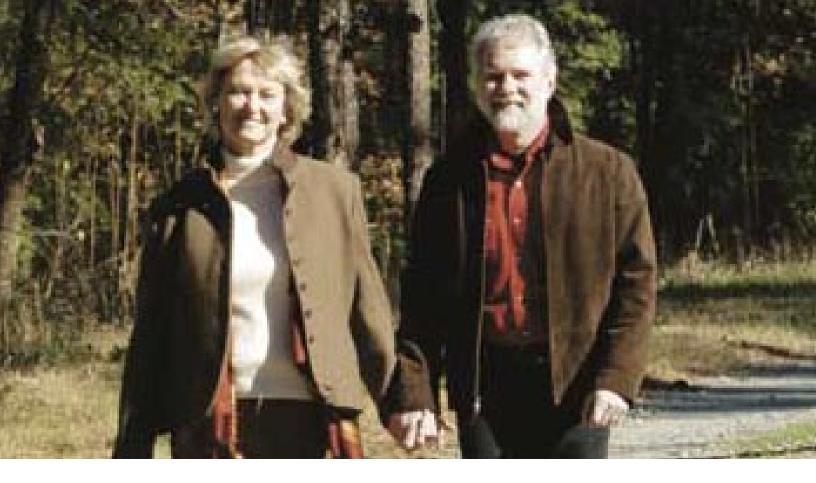


The grandfather responds that the tree will be made into a crib to protect a baby "and gently carry her as she dreams." (The narrative is accompanied by an image of a large tree branch shaped in the









Chuck Leavell and Rose Lane

Leavell, his wife of thirty years,

manage family property, some

2,200 acres, an award-winning

pine and hunting enterprise in

Georgia, Charlane Plantation.

form of a baby's bed. The illustrations by Rebecca Bleau are vibrant.) The old man then makes the same point about the tree providing a family a home and offers a litany of things—a baseball bat, a chair, a newspaper, a piano—that will be made from the wood of the tree.

Indeed, the piano and other instruments "will live on in the sweetness of music, reflecting the rhythm, harmony and melody of life."

The final passages emphasize the need for self-giving by the steward of the tree farm. "And I, too . . . have given of myself. I am a steward of this land and have worked hard with respect and love to care for the trees," says the grandfather. "We must remember to give of ourselves as the forest has given to us."

This story reflects Leavell's view of stewardship as a multi-generational commitment. "My family, my trees and my music are the most important elements of my life," he maintains in publicity material announcing the book. "Now that I am about to become a grandfather for the first time, I want to put my passions about forestry into words for the next generation. I've always said that we don't inherit the land from our parents—we borrow it from our children."

I wish he would leave it at that. But Leavell argues, as reported in Jenkins' *Wall Street Journal* column, that private foresters are squeezed by rising property taxes, which are driven by real estate development and subsidized lumber from Canadian public forests. To address this problem, he recommends that tree farmers receive a larger share of farm subsidies. Leavell cites the ecological services provided by tree farmers—better water quality, carbon sequestra-

tion, wildlife habitat—to justify his support for increased subsidies for tree planting.

But farm subsidies, even with the new conservation dollars mandated in the recent farm bill, are a net loser for the environment, at

least for traditional agriculture. They create incentives for farming on marginal lands, increased use of fertilizers and pesticides, and elimination of habitat—and aggravate the federal deficit

tat—and aggravate the federal deficit.

And wealthy farmers receive most of the subsidies. The wealthiest 10 per cent of U. S. farmers receive 72 percent of the subsidies, says H. Sterling Burnettt of the National Center for Policy Analysis. Subsidies for tree farming would probably be allocated in a simi-

larly distorted way. Leavell is on much

stronger ground when he argues that government should do less rather than more, as in eliminating death taxes.

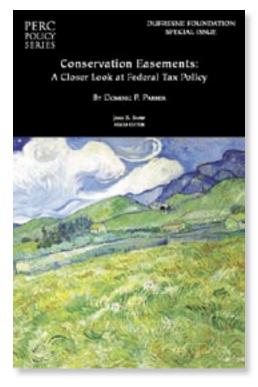
Despite this lapse, Chuck and Rose Lane Leavell are model citizens and stewards of nature. Their deeply ethical approach to reconciling the needs of human beings with their love of nature is expressed with great poignancy and power in a lovely book for children and grandchildren. And after you read the book, you can return to Leavell's equally powerful music.

G. Tracy Mehan III was assistant administrator for water at the U.S. Environmental Protection Agency. He is currently a principal with the Cadmus Group, Inc., an environmental consulting firm in Arlington, Va. He may be contacted at gmehan@cadmusgroup.com.



In my Stanford Graduate School of Business course on environmental entrepreneurship, I emphasize how important it is for any entrepreneur, especially an environmental one, to have a clear business plan. Although this should be obvious to MBA students, it tends to be a revelation because they think the environment is different. The importance of a sound business plan is particularly relevant to land conservation. As Dominic Parker points out in his recent PERC Policy Series essay on conservation easements (Parker 2005), the number of land trusts has grown exponentially in the past few decades. Private land conservation has become a competitive industry with firms competing for donations and for land to conserve.

The primary measure of conservation success has been the number of acres under easement, but such a measure raises the question: Are we really getting the conservation we want? Conservation easements are tax-advantaged and, as Parker discusses in his PERC paper, the public benefit from an easement should be commensurate with the cost of forgone tax revenues that easements entail. This point is particularly important in the wake of the Enron debacle, as Congress is carefully scrutinizing management of both for-profit and not-for-profit organizations.



Let me illustrate the problem with an example. Suppose a land trust takes an easement on a 50-acre, "u-pick" produce farm that is not unlike surrounding land. In return for the easement, the owner gets a tax deduction.

Does an easement that keeps the land in agriculture generate public conservation benefits? If the parcel is in an urban area, 50 acres might make a significant additional contribution to conservation values such as open space or wildlife habitat. But if it is in an area with lots of other open space, the contribution may be trivial. Of course, the tax deduction might help keep the farm in business, but this would be a private good to the farm owner, not the public; thus its public benefit (the reason behind the tax deduction) is far from clear. In the future, the less obvious the public benefits the more likely private land conservation will undergo significant scrutiny. Policy makers are likely to say that private conservation needs more regulation.

Skeptical of "improved" regulation, Dominic Parker suggested elimination of tax support for easements, replacing them with outright grants for land conservation coupled with private matching funds. At least this approach would require that conservation grantees be more specific about what conservation they are producing.

Real environmental entrepreneurs, however, will go a step further by bringing sound business principles to the conservation table. For example, Conservation Forestry, LLC, a new for-profit conservation venture, is working with the Nature Conservancy to combine the conservancy's expertise in easements with profitable timber and land management. The company's mission is to "align private equity with conservation capital" in a way that "provides superior risk adjusted rates of return . . . while leveraging the goals of . . . conservation."

Moving private conservation from the charitable, tax-supported sector into the for-profit sector will require astute business acumen. With that will come more conservation at a lower cost with less governmental regulation. Sounds like free market environmentalism.

REFERENCE

Parker, Dominic P. 2005. Conservation Easements: A Closer Look at Federal Tax Policy. PERC Policy Series PS-34. Bozeman, MT: PERC, October. Online: www.perc.org/perc.php?subsection=6&id=743.

In addition to being PERC's executive director, Terry L. Anderson is a bow hunter. In this "On Target" column he is a straight shooter in confronting issues surrounding free market environmentalism. Contact him at perc@perc.org.



Many people might have withdrawn

damage, as a matter of principle. But

their business after the Exxon Valdez oil

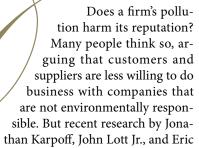
spill or after other cases of environmental

there is no evidence of them having done

it in fact. People do not seem willing to

pay much for principles.

ECONOMIST, n. a scoundrel whose faulty vision sees things as they really are, not as they ought to be. —after Ambrose Bierce



Wehrly (2005) presents compelling evidence that this is not so: The only adverse consequences suffered by firms who violate environmental regulations stem from the ensuing legal penalties and cleanup and compliance costs.

Conventional wisdom argues that when firms violate environmental rules, customers and suppliers who value environmental amenities will punish the polluters through the marketplace. Some customers, for example, will stop doing business with polluters, while

potential employees may refuse to work for them, and suppliers may even decline to sell their goods to them. Hence, it is argued, polluters will face lower revenues and higher costs. The resulting lower profits are called a "reputational penalty." For a publicly owned polluter, any such reputational penalty should be manifest in a lower share price for the company's stock (Klein and Leffler 1981).

To determine whether firms suffer reputational penalties when they violate environmental laws and regulations, Karpoff et al. examined the consequences of 478 environmental violations by publicly traded companies for the years 1980 to 2000. They found that although the companies' share prices dropped measurably (about 1.5 to 2 percent) when the companies were charged with such violations, all of this decline is attributable to the direct legal penalties and the remediation and compliance costs imposed on them by regulators. Because the firms' stock prices did not fall in excess of the legal penalties, the researchers concluded that the firms' reputations were unsullied.

At first blush, the finding that firms suffer no lasting reputational damages when they violate environmental laws seems at odds with other research showing that many types of illegal activity (and even mistakes) can have serious adverse consequences for firms' reputations. For example, false advertising, the sale of unsafe products, fraud, and financial misrepresentation all have been shown to damage firms' reputations, as manifest in sharply lower stock prices (see, for example, Peltzman 1981). Why is it that firms seemingly can violate one set of laws without reputational damage, even though violating other laws has serious adverse reputational effects? Karpoff et al. suggest that the answer has to do with who is harmed when the rules are broken.

When a firm sells unsafe products, its current and prospective customers are harmed. These customers have clear self-interested motives in protecting themselves by withdrawing business from the firm. Similarly, when suppliers are defrauded or employees are exposed to unsafe working conditions, they have compelling self-interest to stop doing business with the miscreant, or at least to insist on prices or wages that are higher to compensate them for the risks they face.

In contrast, most violations of environmental regulations have no direct adverse effect on customers, suppliers, or employees. There is no doubt that the *Exxon Valdez* oil spill was devastating for the birds, mammals, and sea life in and around Prince William Sound. But the only Exxon customers who might have been harmed were a few hundred local fishermen, and no employees were injured, nor were any Exxon suppliers harmed. As a practical matter then, no one had any reasons of direct self-interest to withdraw patronage from Exxon.

Of course many people *might* have withdrawn their business in this and other cases of environmental damage, as a matter of principle. But the key finding of Karpoff et al. is that whatever people might have done, there is no evidence of them having done it in fact.

Several striking implications follow from this research. First, if we are going to rely on environmental rules and regulations to pro-

tect the environment, we must recognize that firms can be expected to respond only to legal penalties, including compliance and cleanup costs. There should be no reasonable expectation that environmentally conscious customers, employees, or suppliers will influence environmental outcomes. Second, these results also suggest that the popularity of "green" buildings and "green" products over the last few years is likely

to be short-lived, except to the extent that such items offer direct financial benefits to purchasers. People do not seem willing to pay much for principles.

Finally, and perhaps most importantly, these results remind us once again that what matters for decision making are the consequences for the parties making the decisions. It is pleasant to imagine that people might do the right thing because it is the right thing, rather than because it is in their self-interest to do it. But this research reminds us that pleasant thoughts typically are lousy foundations for good public policy. If we want firms to take into account the full costs of their decisions, they must bear those costs.

REFERENCES

Karpoff, Jonathan M., John R. Lott, Jr., and Eric W. Wehrly. 2005. The Reputational Penalties for Environmental Violations: Empirical Evidence. *Journal of Law & Economics* (October): 653–75.

Klein, Benjamin, and Keith B. Leffler. 1981. The Role of Market Forces in Assuring Contractual Performance. *Journal of Political Economy* (August): 615–41.

Peltzman, Sam. 1981. The Effects of FTC Advertising Regulation. Journal of Law & Economics (December): 403–48.

Daniel K. Benjamin is a PERC senior fellow and professor of economics at Clemson University. This column, "Tangents—Where Research and Policy Meet," investigates policy implications of recent academic research. He can be reached at wahoo@clemson.edu.



Deep in the heart of Texas one of America's leading technology firms is just putting the final touches on one of the nation's greenest buildings. A new fabrication plant that produces the wafers used in semiconductors has been built for 30 percent less than an older plant constructed in the early 1990s. It also promises to deliver a 20 percent reduction in water use and a 35 percent reduction in energy consumption.

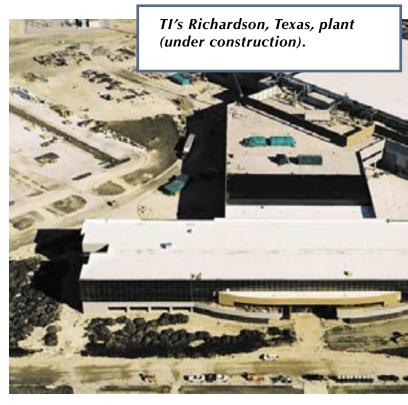
Texas Instruments executives were tempted to build overseas in China, Taiwan, or Singapore to take advantage of low wages, subsidies, and tax incentives. The world of semiconductors is not only cutting-edge technology, but also cutthroat competition where the smallest advantage can mean big profits. Before any decision was made on where to locate the plant, TI's design group had to come up with solid evidence that it could reduce not only the up-front capital costs of a new plant in the United States but also the lifetime operating expenses of the plant. A reduction in those costs would mean that the company could operate out of Richardson, Texas, and still remain competitive. It would also mean 1,000 new jobs for the area and benefits to the company from being located conveniently near the TI design facility rather than half-way around the world.

From the outside to the inside, the new plant has been redesigned to meet and even improve upon the standards set by TI executives. Every system was examined and rethought, from heating and cooling to air purification, from water reuse and recycling to natural lighting and no-flush urinals. On the outside the roof is a reflective white, the parking lot is surfaced with a reflective coating, and the landscaping consists of drought-resistant native plants with a rain-storage pond for irrigation.

This intensive examination of the facility led the designers to ask about the highly energy-intensive tools used to create the wafers for the semiconductors. For the first time, designers went to the tool manufacturers, asking for more energy-efficient tools that also produced less heat in an environment that must be kept at exact temperature and humidity levels for production purposes. Their requests led the tool manufacturer to rethink the existing tools. As a result a new generation of tools is now installed at the Richardson plant.

While green buildings have not always lived up to their billing, expectations are running sky-high at Texas Instruments and also at Amory Lovins' Rocky Mountain Institute, which consulted on the design. The proof will come in the next year as the plant goes into operation. If expectations are met, it may be the beginning of a revolution that will power more efficient design and give American companies a new competitive advantage in the marketplace.

—Dallas Morning News



THE UPSIDE OF LOGGING

A recent issue of *Audubon* magazine arrived with a somewhat unexpected message on the front: "Log Your Land." Needless to say, the article contained a few qualifiers rather than simply suggesting landowners dash into the woods with their chainsaws. It focused on rural areas of New York state where land that had once been cleared for farms is now covered with second-growth mature forests. In fact, it says forested areas of the state are two-and-a-half times larger today than in the late 1800s.

Basically, this would seem like good news for those concerned with birds and wildlife habitat; however, land surveys reveal that the average size of these woodlots—as the forested areas are called—has shrunk from about 24 acres to 18 acres. As people move away from cities and extend the bounds of exurbia, woodlot owners have been shaving off a few acres here and there for new homes and development. As a result they have been reaping good prices and profiting from their land.

Scientists refer to this process as fragmentation, which is not beneficial to most wildlife. More roads and traffic, more driveways and lights, more expanses of green lawn—these are not conducive to most wildlife. While acknowledging the rights of the property owners, *Audubon* suggests that managing the land so that it can be logged would be an alternative to selling it off. The logging would





provide a steady, long-term income stream, although admittedly not the immediate flush of money that comes from a land sale.

More and more frequently landowners report answering the doorbell to find an eager urbanite asking if any lots are available; or just as likely an independent logger wanting to contract to cut their trees, giving them a good chunk of change. The organization generally opposes both these alternatives. In most cases it would oppose land sales and also warns that some logging practices are harmful. And the practice of high grading still exists. Not to paint all loggers with the same brush, this occurs when a logger takes all of the most profitable trees and leaves behind those that are commercially worthless or too small to be saleable for many years to come. It is both unattractive and not ecologically sound management.

Instead, the example cited in the magazine is of an owner who consulted with a professional forester. In this way, he found out what trees should be cut when, and also what other treatments of the forest might actually benefit the wildlife and the vegetation. Some open areas would allow forage to grow and also certain new seedlings to sprout. Dead trees can provide home for a variety of animals and enrich the soil as they decay. Certain brush and bushes also provide food and habitat. What is best for the land could be unique to each site depending on what is currently living there and how adjoining land is put to use.

According to *Audubon*, owners can log their land and provide both high-quality wildlife habitat as well as income without having to sell off or subdivide the land.

-Audubon magazine

FOUR COURSE COMPOST

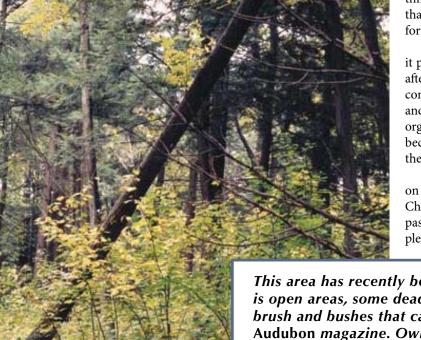
Some of the finest restaurants in San Francisco are serving up delicious Northern California wines and vegetables that were produced with the help of scraps from their customers' plates. From Scoma's on Fisherman's Wharf, reportedly San Francisco's busiest restaurant, to the Slanted Door in the Ferry Building, an acclaimed Vietnamese eatery, at least 2,000 restaurants in San Francisco and Oakland are sending their scraps to market.

Rather than tossing tons of kitchen waste into their dumpsters, they are hauling them to Vacaville where Jepson Prairie Organics turns them into compost, or as some customers call it, "black gold." Everything from crab shells to onion peels is put through a 90-day process that results in what is officially named "Four Course" compost. It sells for \$7 to \$10 per cubic yard.

For many farms and vineyards in Napa and Sonoma counties it provides exactly the rich nutrients needed to recondition the soil after harvest. The manager of Madrone Vineyards says the 300 tons of compost that she used this past year resulted in enhanced crop yields and vine growth. At Inman Family Wines, where the grapes are grown organically, Kathleen Inman mixes corn meal gluten with the compost because it acts as a natural herbicide to kill grass and weeds around the vines, yet is friendly to birds and animals.

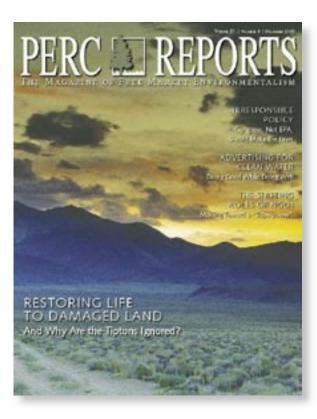
While there is no guarantee from the restaurants that foods raised on their scraps will end up back in the restaurant, it is often the case. Charles Phan, executive chef at the Slanted Door, says that if the wine passes the taste test, then it goes on his wine list, thus making a complete loop from kitchen to farm and then back to the dinner table.

—Santa Rosa Press Democrat



This area has recently been logged. The result is open areas, some dead trees, and certain brush and bushes that can benefit wildlife, says Audubon magazine. Owners can provide both high-quality wildlife habitat as well as income without selling off or subdividing the land.

Linda E. Platts is PERC's editorial associate and Web site manager (www.perc. org). "Greener Pastures" showcases market approaches to environmental protection and natural resource use. Send your suggestions and comments to her at linda@perc.org.



Keep the Alternatives to Market-Based Hunting

There is some merit in Terry Anderson's thesis ("On Target," December 2005) that unlimited access can lead to a "tragedy of the commons," and I have personally seen some areas of public land that are overcrowded. However, your recommendation of private land with limited access (presumably with market forces setting the price of access) is not the only way to avoid this outcome.

Hunter access can be and often is limited through permit systems or mechanical methods restrictions. This leads to the same quality hunting experiences you describe on private land. I hunted several areas of national forest last fall where I saw few or no other hunters and saw and heard abundant wildlife, including grizzly bears.

Market-based hunting access has its place and, for people who can afford it, offers a viable alternative. But such a system would price many Montana residents out of any opportunity to hunt. The loss of those hunters, and the resultant drop in public support for conservation, would be an outcome equally as tragic as those you describe. Fortunately, in Montana we have significant amounts of both private and public land and can apply multiple approaches to providing access to meet the needs of a broad range of hunters while conserving wildlife across the entire landscape.

> -Chris Smith Chief of Staff, Montana Fish Wildlife and Parks Helena, Montana

TERRY ANDERSON REPLIES:

I agree that there are ways other than markets to prevent the tragedy of the commons. Montana State University economics professor Dave Buschena and I studied weapon restrictions in Colorado. We found that weapon restrictions (limiting weapons to bows and arrows, for example) increase the value of the hunt, which is another way of saying that they reduce the tragedy of the commons.

There are, however, at least two reasons that I think other types of restrictions are not "on target." First, many are extremely inefficient. The managers of a Chesapeake oyster fishery prevented the tragedy of the commons by requiring oystermen to use only sailboats even though power boats were available. Yes, this limited entry by raising the cost, but it made no sense from an efficiency perspective. Similar stories abound from the regulation of other ocean fisheries.

Second, other mechanisms typically do not generate positive incentives for land managers, public or private. If we hunters paid a fee for hunting on Forest Service land as we do for state lands, we might get more attention from the agency; today, Forest Service managers have little incentive to enhance wildlife habitat. The beauty of the market mechanism is that it makes wildlife habitat an asset and therefore rewards the manager for better stewardship.

It may be true that a market-based access system would price some Montanans out of the market, but this is an empirical statement for which there are no data. You are assuming that all access will be high-priced. The same holds for the argument that a market would reduce support for hunting. Some counterevidence to both of these claims comes from the southeastern United States where there is little public land and where market-based access is prevalent. The hunting culture is arguably stronger there than here, and fees vary from very high to quite low, depending on quality. It does not appear that hunting is on the decline as a result of markets.

You are certainly correct in pointing out that we have the opportunity in Montana to try many options. I was trying to emphasize the market option because too many sportsmen and women ignore it and put their heads in the sand thinking it will go away. The pressure for high-quality recreation on private land is growing, and it will lead to more market opportunities for the landowner. As Montanans, we would do well to find ways to be a part of that solution rather than ignoring or trying to prohibit it.

Making Congress Accountable

David Schoenbrod ("Irresponsible Environmental Policy," December 2005) effectively points out that despite the U.S. Constitution's assignment of all legislative powers to Congress, members of Congress have abdicated much of their lawmaking responsibility over environmental issues. A few added points are worth making.

First, the growth of unjustified delegation of Congress's lawmaking powers goes back at least to *U.S. v. Grimand* in 1911. Congress had begun giving administrative agencies power to formulate rules to implement Congress' general policy objectives, and in *Grimand* the Supreme Court gave such rulings the full force of law. Delegation has mushroomed since. Reining in such delegation will require overcoming a great deal of inertia.

Second, congressional delegation of its regulatory powers to executive agencies is a sign that the legislators do not know enough to improve social outcomes. And many times, they don't even know what the real problems are.

Third, political efforts have been underway for years to address this problem. Those efforts focus on the Congressional Responsibility Act, which has been introduced each session of Congress for almost a decade. It would end the legislative delegation by allowing agency regulations to go into effect only if passed by Congress and signed by the president.

—Gary M. Galles Professor of Economics Pepperdine University

DAVID SCHOENBROD REPLIES:

I was consulted in the drafting of the Congressional Responsibility Act bill and supported it during several hearings. But Congress instead enacted the Congressional Review Act. The Congressional Responsibility Act would have required the legislators to vote on agency laws before they could go into effect. The bill that became law gave the legislators the option to vote or not. They almost always decline—to avoid being accountable for controversial choices.

Conservation Easements—Public Goods?

In earlier issues of *PERC Reports* I have read comments that express some reservations about the impact of conservation easements, so I was surprised at the favorable attitude toward them in the June 2005 issue ("How To Avoid Tax Cheating," by Terry L. Anderson and Jon Christensen). One of my many concerns is this: If land trusts were truly altruistically interested in buying land and saving it, either privately or for the public, they would pay the full price to the private landowner. But they don't, because they can gain control through below-market, irrevocable conservation easements, or by brokering deals bankrolled by the public (as with open space initiatives supported by voters).

—Dave Larson Owner/operator, Larson Red Angus Big Timber, Montana

TERRY ANDERSON REPLIES:

You raise two points here. As you will see in my column in this issue (p. 17), I too have some reservations about trusts. Our article, however, took the position that it's wrong to "throw the baby out with the bath."

Your first point is that if trusts were truly altruistic, they would pay full price for the land. But buying the land outright does not make sense in all cases, as research by PERC senior research fellow Dominic Parker (2005) points out. In some—perhaps many—cases, using easements to purchase only a few sticks from the bundle of rights makes more sense than owning all the sticks. Furthermore, Parker's research

suggests that land trusts holding the land do a better job of managing land than we would get under governmental ownership.

Your second point focuses on the role of the public in financing these deals, and I recognize that this is the crux of the free market environmentalism issue. We tried to emphasize in the *PERC Reports* article that tax-supported conservation easements are justified to the extent that the easements produce public goods.

Economists view public goods as goods that benefit many people, but, unlike with private goods, some of the people who benefit cannot be required to pay for the good. Scenic views and open space may fit this category. With these goods, people tend to be "free riders," letting others pay for them even though they themselves benefit. If protecting open space is a public good, economic theory would suggest that there will be too little voluntary support for it.

The free rider problem is one of the main justifications for government intervention. Forcing people to pay (through taxes) overrides their unwillingness to pay and makes possible the full provision of public goods. In the case of conservation easements, allowing tax deductions for those who provide the public goods means that the larger public is helping to support (to "bankroll") the public good.

But when the easement provides mainly private goods (such as preventing development on my neighbor's land), there is no justification for such bankrolling. So when it comes to conservation easements, the extent of the public good is really the issue.

REFERENCE

Parker, Dominic P. 2005. Conservation Easements: A Closer Look at Federal Tax Policy. PERC Policy Series PS-34. Bozeman, MT: PERC, October.



Jane S. Shaw welcomes vigorous debate about controversial environmental topics. Send your letters to her at: PERC Reports, 2048 Analysis Drive, Suite A, Bozeman, MT 59718 or shaw@perc.org.



PAGE 3



Page 6



PAGE 9



PAGE 14



PAGE 20



FEATURES

3 COVER: HOG FARM JUSTICE

Pigs stink. That fact of life is accepted by all of us who grew up on farms. So imagine the smells around a concentration of nearly 6,000 sows and tens of thousands of baby pigs. By Blake Hurst.

VOLUME 24

Number 1 March 2006

6 Tenure for Timber

Last year, I began investigating forestry outside the United States, seeking innovations. I found strikingly different approaches just north of the border, in Canada. By Alison Berry.

9 Are the Ethanol Wars Over?

Are subsidies for ethanol somewhat different from other subsidies—in other words, not all that bad? In this free-flowing dialogue, free market environmentalists debate the issue.

14 Forever Blue, Forever Green

Somehow I had missed the fact that Chuck Leavell was keyboardist for the Allman Brothers Band and, since 1982, for the Rolling Stones. Nor did I know that he is a forester. By G. Tracy Mehan III.

COLUMNS

17 ON TARGET

Environmental entrepreneurs should have a business plan just as any other entrepreneur, but for my business-school students this is a revelation. By Terry L. Anderson.

18 Tangents

Does a firm's pollution harm its reputation? You might think so, but recent research by Jonathan Karpoff, John Lott Jr., and Eric Wehrly argues otherwise. By DANIEL K BENJAMIN.

20 GREENER PASTURES

Texas Instruments goes green; *Audubon* favors logging; and upscale restaurants produce compost for California farms and vineyards. Compiled by Linda E. Platts.

22 Letters to the Editor



2048 Analysis Drive, Suite A Bozeman, MT 59718 Non-Profit Organization
U.S. POSTAGE
PAID
Permit No. 433
Bozeman MT
59718