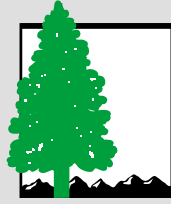


# PERC



# REPORTS

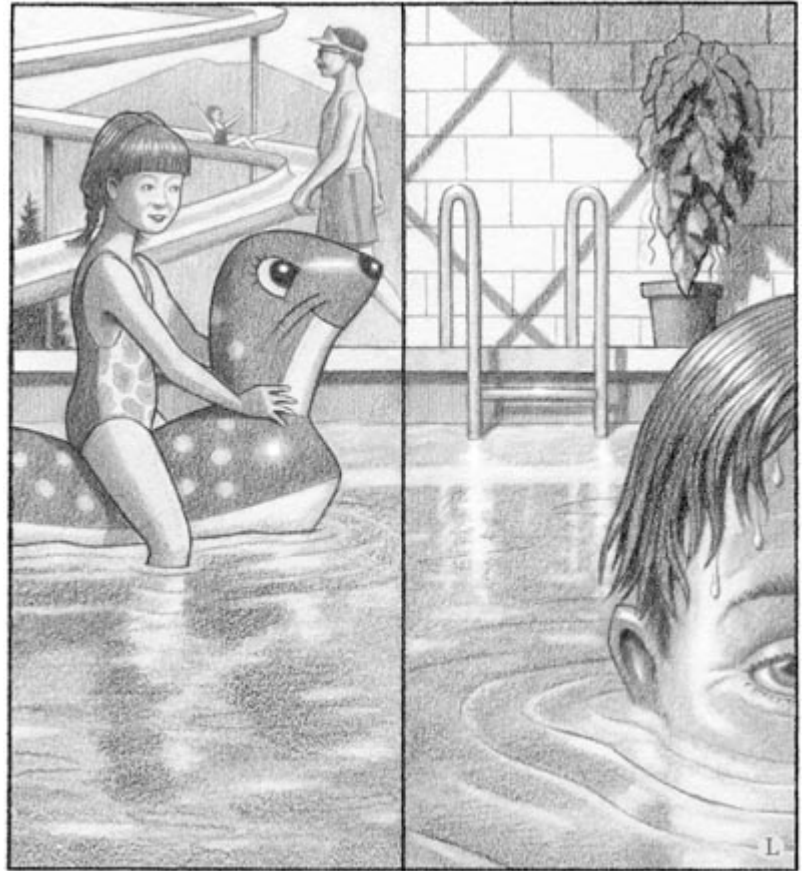
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502 SOUTH 19TH AVENUE, STE 211 BOZEMAN, MONTANA 59718-6827

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# LESSONS OF THE SPRINGS

By Andrew P. Morriss

Much of human history reflects choices between whether to organize activities privately or through government. When I travel, I often come across the visible remnants of such choices. That happened recently at Thermopolis, Wyoming, a small resort community built around the “World’s Largest Hot Spring.”

Water from the nearby Owl Creek Mountains filters through porous rock until it hits an area of geothermal activity, which heats the water. Now containing a rich mixture of minerals and chemicals, the water is forced back up to the surface.

Those desiring a refreshing soak in the Thermopolis waters have three choices: the State Bath House and two privately operated facilities, the Star Plunge and the TePee Spa.

The State Bath House is an impressive stone building, featuring indoor and outdoor pools, changing rooms, and private bathtubs for soaking. It is less impressive up close—the outdoor pool’s paint was peeling and the men’s locker room was long overdue for a paint job. There is no charge for admission, but visitors are allowed to remain in the water for only twenty minutes at a time and must then leave the facility for two hours before returning.

The attendant explained that this is to ensure that everyone has access to the facility and because the state health department has determined that twenty



*Those desiring a refreshing soak in the Thermopolis waters have three choices: the State Bath House and two privately operated facilities, the Star Plunge and the TePee Spa.*

minutes in the 104-degree water is the safe amount for “most” people. Dish towel size towels are provided on request. The attendant told me that during the tourist season 150-200 people use the Bath House a day. No lifeguard is on duty, but since the pools are only three and a half feet deep and large signs warn against “swimming,” there is little need. Switching pools is forbidden.

No additional services or products are sold or rented. The Bath House is open from 8 AM to 5:30 PM Monday to Saturday and noon to 5:30 PM on Sunday.

The Star Plunge and TePee Spa offer quite different experiences from the State Bath House. Both feature large pools, water slides, “vapor caves,” multiple pools at different temperatures, sunbathing and picnic

areas, and food and gift shops. Their exteriors are more carnival-like than the State Bath House, but attractively maintained. Both charge admission (\$8 for the entire day from 9 AM to 9 PM) but neither puts any limit on how long one can swim.

The admissions clerk at the Star Plunge was surprised when I asked her about a time limit, telling me, “We figure people can tell when they get hot and they will get out themselves.” Water toys were in abundant use, and the laughter and shouts from both private spas were a sharp contrast to the hushed voices my fellow patrons and I fell into at the State Bath House.

## LESSONS OF THE SPRINGS

There are (at least) five economics lessons here. First, the state facility is a classic example of a state enterprise: overinvestment in capital (that impressive stone building) and underinvestment in maintenance. Building structures wins points for politicians; painting them does not. The private facilities, forced to compete with each other as well as their state competitor, which charges no fees, invested in features that attract customers.

Second, because the State Bath House does not charge for admission, it must have an alternative scheme to ration use—in this case the arbitrary limit of 20 minutes together with the two-hour exile between soaks. No such limits are needed by the private facilities. This also means that the Bath House does not have to serve the customer in order to obtain its funds.

Third, the State Bath House follows a typical regulatory “one-size-fits-all” approach. Because bureaucrats determined that “most” people should not stay in the hot water for more than twenty minutes, no one can stay longer than twenty minutes. The private facilities, on the other hand, rely on individuals’ concern for their own comfort to regulate time in the water and provide pools with different temperature levels to enhance that comfort.

Fourth, the State Bath House has a fixed purpose—soaking in the mineral waters for “health” benefits. (The medical virtues of hot springs were touted in the late 1800s when the hot springs first began to be

exploited, but any private business that made health claims for them today would quickly run into trouble with federal regulators.) As early as 1900, the private facilities were installing slides and evolving into more diversified experiences.

Finally, the State Bath House’s hours suit its employees, but, as can be seen from the extended hours offered by the private competitors, they are obviously inadequate to meet the public demand.

By itself, the Thermopolis State Bath House probably does little harm to the economy or our freedom. Yet it is a striking reminder of how deeply socialist institutions are embedded into our economy.

State enterprises are shockingly widespread in America, from public schools to airports. Each suffers from the same problems as the State Bath House. The crumbling infrastructure of urban public schools, the arbitrary rationing that slows down air travel, the poor service at universities’ monopoly textbook stores, the one-size-fits-all approach of virtually every state and federal regulator—all testify to government ownership or control.

I look forward to returning to Thermopolis someday for a truly “free” soak—a swim in a free enterprise system that will have become so pervasive that it has crowded out the regimented State Bath House.

*Andrew Morriss spends as much time as he can in the West. He is a Senior Associate of PERC and Associate Dean for Academic Affairs and Galen J. Roush Professor of Business Law and Regulation at Case Western Reserve University School of Law.*

## TAKING ANOTHER LOOK

# DDT: AN ISSUE OF PROPERTY RIGHTS

By Roger E. Meiners and Andrew P. Morriss

Over the years, DDT<sup>1</sup> has acquired an almost Satanic image. Yet the overuse of DDT, rather than the product itself, was what caused significant environmental harm. Rather than condemning the product—which remains critical to the elimination

of malaria and so to human welfare—we should understand its history, and in particular, the U.S. government’s policy of promoting and subsidizing the use of DDT.

When DDT was released for civilian use after

World War II, it was recognized as effective and generally benign to humans. It was so popular it was even thrown instead of rice at some weddings (Whorton 1974, 248). Production soared.

Producers of DDT and other new pesticides had the best of all possible worlds. Regulation was limited to concerns about efficacy, not safety. The Federal Insecticide, Fungicide, and Rodenticide Act, enacted in 1947, gave the U.S. Department of Agriculture (USDA) weak powers to require proof that a pesticide was effective and required manufacturers to register their products. However, it denied the department the ability to refuse to register a product (Morriss 1997, 139). Thus, producers had no significant limitation on their ability to manufacture and sell effective pesticides. State regulation was preempted in many areas, and the federal regulatory agency was sympathetic.

The USDA began to promote widespread spraying with DDT and other pesticides (see Bosso 1987, 81–106). USDA conducted research and promotion of pesticides through its extension service and experiment stations. Members of Congress were happy to spend taxpayers' money to subsidize agricultural production through spraying, especially because it won the favor of chemical producers, too. A genuine sense of mission bolstered the powerful special interests at work—pesticides would boost food production, helping to end hunger.

The first spray programs were conducted where the perceived benefits of spraying were largest, such as controlling malaria. As the program expanded, spraying was conducted where the benefits were smaller or localized, such as controlling gypsy moths. When spraying harmed wildlife and domestic animals, the USDA did not have to compensate the owners, and so it failed to consider the full costs of the spraying. The USDA knew little about the effects of widespread dispersion of many of the chemicals it promoted and subsidized, partly because Congress directed funds for spraying but not research on environmental impacts. And because federal regulation was aimed at preempting state regulation, the federal government discouraged states and localities from controlling pesticide use.

Acreage restrictions imposed on major crop

production also gave farmers incentives to increase chemical usage. These cropland set-asides began in the 1930s. By 1961 the USDA was paying farmers to retire 53 million acres from production, an area larger than Minnesota (Bovard 1989, 85). The number of acres farmers could plant was controlled, but farmers could use all the fertilizer, insecticides, and herbicides they wanted.

Crop price supports also encouraged farmers to squeeze more output from their land by using more chemicals. The USDA also promoted intensive chemical use and would do nothing to help organic farming or nonchemical farming methods (Bovard 1989, 217).

By the end of the 1950s, government spray programs began to provoke public opposition as their impact on animals and wildlife began to be noticed. In Alabama, for example, the legislature withdrew its funding for fire ant spraying in 1959, fearing that the spraying could eliminate up to 75 percent of the state's wildlife. The USDA continued to spray, but the Alabama program gradually wound down.

The first major challenge to government spraying occurred in New York. Millions of acres in the eastern part of the state, including Long Island, were subject to aerial spraying in the mid-1950s to eradicate the gypsy moth. DDT was mixed in oil so it would stick to the trees, and sprays blanketed the area.<sup>2</sup>

Residents complained about the scum that coated cars, swimming pools, and houses. Of greater concern were reports of large fish kills and charges that DDT, consumed by cows, would contaminate milk. Organic farmers were angry because, by definition, they no longer had organic crops.

In 1957, Robert Cushman Murphy, curator-emeritus of the Museum of Natural History, led a group of Long Island residents in filing suit against the USDA to enjoin the spraying program. Murphy and other plaintiffs charged that the spraying program deprived them “of property and possibly lives without due process of law and [took] their private property for public use without just compensation.”<sup>3</sup>

Murphy argued that DDT is a poison that could damage humans, animals, birds, and insects and that it made the food from gardens unsafe to eat. It made land unsuitable for organic cultivation. He argued

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## DDT: AN ISSUE OF PROPERTY RIGHTS

that there was no public emergency that could justify the spraying program, especially since no trees in Long Island were infected with the gypsy moth and, even if they were, it would be best to let nature take its course.

The judge reviewed the program. While he found that the spray irritated some people and damaged some wildlife, he decided that its benefits justified the harm. In 1955 the National Plant Board, representing all 48 states, had passed a resolution urging the USDA to eradicate the gypsy moth. USDA experts also testified that there was no evidence of illness caused by DDT. Since the public benefit was great and plaintiffs had failed to show a threat of irreparable damage to them greater than that caused by the gypsy moth, the judge refused to stop the spraying.

Murphy didn't give up. He was back in federal district court again the next year, armed with more evidence of dangers from DDT exposure. Dropping the claim of a violation of the Constitution for an uncompensated taking, the plaintiffs argued that the aircraft and the spray it deposited were common law trespass on their land. They argued that they had the right to not have their property sprayed because it destroyed their ability to farm organically and it harmed wildlife.

Again, the court dismissed their claims, holding this time that they really only complained of "annoyance" rather than damage. That bother was offset by a valid exercise of the government's police power. "The rights of individuals are not limitless. Individuals must yield to the requirements of the public as a whole."<sup>4</sup> Murphy appealed, but the Second Circuit Court of Appeals made short shrift of his argument.<sup>5</sup>

How could this have happened? Cases from the 1950s indicate that people who sprayed pesticides were liable for damage caused by pesticide drift. A farmer (and a sprayer hired by the farmer) could be held liable for spray that was accidentally dumped on a neighbor's property or that drifted onto a neighbor's property if it damaged crops, livestock, or persons.<sup>6</sup> No bad intention was needed, and usually it did not

exist, because neither the farmer or the spray pilot had reason to waste money by dumping spray on the property of another or dropping the spray when it was windy.<sup>7</sup>

Quite a number of cases concerned spraying that drifted and killed bees; liability was regularly imposed.<sup>8</sup> Other cases concerned spray that infected dairy milk with unacceptable levels of pesticide.<sup>9</sup> If one was careless and sprayed too much because directions from the manufacturer were not followed, the action rose to the level of negligence per se.<sup>10</sup> Completely contrary to what happened to the organic growers on Long Island, farmers won cases when pesticide sprays from neighboring farmers made them ineligible for "organic" certification, even though the level of pesticides on the crops was within federal standards for human consumption.<sup>11</sup>

The difference in Murphy's case was that governments are not held to the same standard of care that private property owners are. Governments are not required to make sure that their actions do not inflict harm on their neighbors' property. There is no doubt that the plaintiffs could have won injunctive relief against a private party who chartered a plane and sprayed even a harmless substance on the plaintiffs' land. But compared to the "public interest," as articulated

by the federal government, the plaintiffs could not hope to prevail without more dramatic harm.

Federal regulations generally override property rights and common law protections. As a result, the battle over pesticides was played out in the public and political arena, beginning in 1962 with the publication of Rachel Carson's dramatic plea, *Silent Spring*. DDT was eventually banned in the U.S. and most other countries, becoming an international symbol of environmental degradation. These bans, which deprive malaria fighters of a vital tool, were the direct result of the government's failure to respect property rights.

### Notes

1. The full name of the chemical is dichlorodiphenyltrichloroethane.
2. For more details, see Dunlap (1981, 87–91).
3. *Murphy v. Benson*, 151 F.Supp. 786 (E.D.N.Y.,

*Residents complained  
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1957), 789.

4. *Murphy v. Benson*, 164 F.Supp. 120 (E.D.N.Y., 1958), 128.

5. *Murphy v. Benson*, 270 F.2d 419 (2<sup>nd</sup> Cir., 1959).

6. For example, see *Crouse v. Wilbur-Ellis Co.*, 77 Ariz. 359, 272 P.2d 352 (1954).

7. *Faire v. Burke*, 363 Mo. 562, 252 S.W.2d 289 (1952).

8. See *Lundberg v. Bolon*, 194 P.2d 454 (Supreme Court, Arizona, 1948).

9. *Smith v. Okerson*, 73 A.2d 857 (Superior Court, New Jersey, 1950).

10. *Bennett v. Larsen*, 348 N.W.2d 540 (Supreme Court, Wisconsin, 1984).

11. For example, see *Langan v. Valicopters, Inc.*, 5678 P.2d 218 (Supreme Court, Washington, 1977).

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*Roger E. Meiners and Andrew P. Morriss are Senior Associates of PERC. This article is excerpted from "Pesticides and Property Rights" (PERC Policy Series, PS-22). Their discussion of the resurgence of malaria, stemming in part from the ban on DDT, appeared in the June 2001 issue of PERC Reports.*

## THE GROWING ROLE OF PRIVATE OWNERS

# MANAGING WILDLIFE IN SOUTHERN AFRICA

By Kay Muir-Leresche and Robert H. Nelson

In most of the world the ownership of wildlife lies in the hands of governments. State agencies typically regulate closely the use of wildlife, including the amount of hunting permitted and at what times and places.

However, in the southern African nations of Zimbabwe, South Africa, Namibia and Botswana, an important experiment has been taking place over the past forty years (G. Child 1995). To a considerable degree, these nations have legalized and privatized the use of wildlife—encouraging hunting, tourism, and the sale of meat, hides, and horns. Formally the wild-

*To a considerable degree, these nations have legalized and privatized the use of wildlife—encouraging hunting, tourism, and the sale of meat, hides, and horns.*

life remains without an owner (*res nullius*) or state-owned, but if certain conditions are met the owners of private land have the full rights to control the use of wildlife on their land.

The experience of Zimbabwe illustrates this development. Unfortunately, the violence of recent months in that country, caused by the government's refusal to protect property rights, may well undermine this extraordinary progress in wildlife management.

In Zimbabwe, before the mid-1960s, farmers were not allowed to hunt, cull, or sell venison. They relied

## MANAGING WILDLIFE

heavily on the Department of National Parks and Wildlife Management for control of problem animals and had no incentive to encourage wildlife. Many game animals were killed in order to control the tsetse fly, which wild animals were believed to host (Murindagomo 1997, 433).

Yet cattle ranching has always been economically marginal in much of Zimbabwe's semi-arid rangelands. The ranching industry for many years depended on government subsidies. Excessive cattle stocking, encouraged by the government, often degraded rangeland.

One proposed early solution was to use the rangelands for producing wild game for meat. Some observers argued that wild animals were better adapted to Zimbabwe habitat and that game could result in more meat (and higher profits) than cattle operations were showing (Dasman and Mossman 1961).

So in 1961, a new Conservation Act allowed large-scale commercial farmers to obtain permits to harvest wildlife for meat. However, capturing and killing widely dispersed wildlife populations proved expensive, and other problems, such as the absence of established channels of distribution, made wild-game meat production unprofitable (Muir 1989).

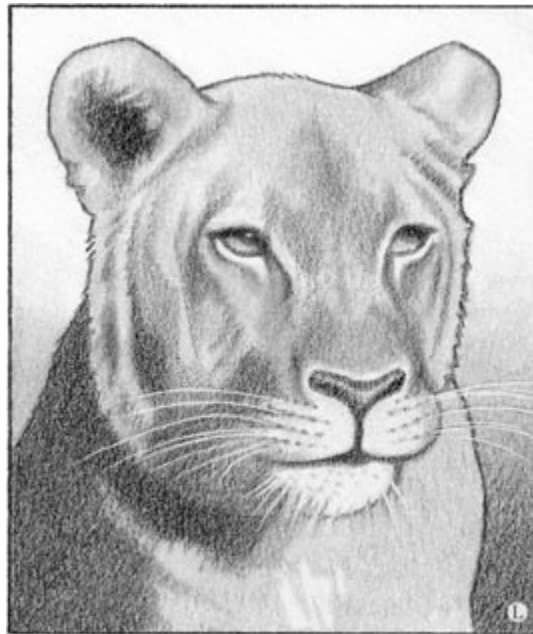
A more promising approach then emerged—safari hunting. For much of the twentieth century safari hunting was associated primarily with Kenya and other parts of east Africa, but a safari industry began growing rapidly in Zimbabwe in the 1960s. By 1974, one study found 17 ranchers actively managing their ranches for safari hunting, with another 150 ranchers showing interest (B. Child 1988, 178).

Safari hunting does not depend on large numbers of animals as much as the presence of trophy animals. It thus offered the possibility of large revenues with low demands on both the land and the wildlife—and less harmful environmental impact on semi-arid rangelands. At the same time, the transfer of responsibility for wildlife on private land from the state to the landholder would free the Department of Natural Parks and Wildlife Management to con-

centrate on wildlife research and its protected areas.

In 1975, the Parks and Wildlife Act delegated to large-scale commercial farmers management control of safari hunting, harvesting, and other wildlife activities on their lands. Commercial farmers were designated as the “appropriate authority” for deciding the wildlife use of the land. The owner could now decide the time and place of hunting, the number of animals to be hunted, the age and sex of the animals, minimum acceptable trophy sizes, and other conditions of hunting. A private rancher might choose to run safari operations or might instead choose to lease the hunting rights to an independent safari operator. Also, the Department of National Parks and Wildlife Management established detailed training programs and tight licensing

requirements for hunting guides. Today, the guides of Zimbabwe are often said to be the best qualified in Africa.



The principal author of the 1975 act, then the director of the Department of National Parks and Wildlife Management, Graham Child, stated that with the exception of specially protected animals, “land holders are better placed than anyone else to conserve their wildlife” (quoted in B. Child 1988, 179–80). The government abolished most license fees and allowed landowners to charge for hunting and fishing as well.

In some areas of Zimbabwe, commercial wildlife operations were more profitable than cattle raising by the 1980s. Ranchers located near the Matetsi Safari area in northwest Zimbabwe especially benefit from tourism because they are near Victoria Falls and Hwange National Park. Most ranchers who converted to wildlife operations experienced significant financial gains.

One ranch in the northwest, the Rosslyn Ranch, was originally managed for cattle, beginning in 1948. Poor financial returns led the owners to convert to wildlife ranching in 1967. Wildlife populations expanded in four years by as much as 50 percent. In terms of meat production alone, the ranch proved viable, but the growing revenues from safari operations gave the greatest boost to profitability. (After 1972, the ranch area was taken over by the Rhodesian gov-



ernment and incorporated into the Matetsi Safari area, where it is now regularly leased as state-owned land to safari operators) (B. Child, 1988, 305–10).

In 1986, Brian Child surveyed ranchers in the southeastern area (the “lowveld”) of Zimbabwe, asking them the most profitable use of their land. None named cattle ranching by itself. Thirty percent said “mostly cattle, some wildlife.” Forty percent said “mostly wildlife, some cattle,” and 30 percent said “wildlife only.” By 1987, 10 percent of all private farm and ranchland owners were registered as wildlife producers (Muir 1989, 311).

Kreuter and Workman (1994) analyzed 15 large cattle-only operations, 7 wildlife, and 13 mixed ranches in the Midlands Province, where the climate is less arid and the land more productive. Among these, ranches devoted exclusively to wildlife were less financially successful than those with cattle only. However, the mixed ranches had the highest profitability.

By 1995, 18 percent of all Zimbabwe farmers were registered as being in the wildlife business (at least in part). A 1995 survey (achieving 50 percent coverage) of Wildlife Producers Association members showed that their lands held 250,000 wild plains animals, including 10,000 sable, 10,000 zebra and more than 2,000 giraffe (Muir 1998, 9).

Private land has begun to make a major contribution to species diversity in Zimbabwe. By 1994, ninety-four percent of the eland in Zimbabwe were on privately owned commercial farm and ranch lands, 64 percent of the kudu, 63 percent of the giraffe, 56 percent of the cheetah, and 53 percent of both sable and impala. Indeed, private lands contained a majority of every plains game species found in Zimbabwe except zebra, 46 percent of which were found on private lands (Hill 1994). Tsessebe were once threatened throughout Zimbabwe but were able to recover on private ranches, subsequently allowing their restoration to many other private and public lands in Zimbabwe (Zimbabwe Trust 1992, 42).

All in all, except for large and dangerous game, Zimbabwe wildlife is being preserved more through private management for financial gain than by government protection. This happened because of the property right innovations of 1961 and 1975, which have promoted species diversity and sustainable development. We hope that these achievements will not be lost.

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*Kay Muir-Leresche is a Professor of Natural Resource Economics in the Department of Agricultural Economics and Extension at the University of Zimbabwe, Mount Pleasant, Harare, Zimbabwe. Robert H. Nelson is a Professor of Environmental Policy at the School of Public Affairs at the University of Maryland and a Senior Fellow of the Competitive Enterprise Institute, a public policy institute in Washington, D.C. This article is adapted, with permission, from a paper published by the Competitive Enterprise Institute and the International Center for Economic Research in Turin, Italy.*

# GREENER PASTURES

## PRIVATE INITIATIVES

By Linda E. Platts

### GOING TO SEED

Last year, one Utah rancher sold off his cattle and spent the summer watching the grass grow. At summer's end, he harvested the grass for seed and made more money selling the seed than he could have made selling his cattle. Throughout the West, farmers and ranchers who are struggling to stay afloat as they raise grains and beef are eyeing the growing market in native seeds.

Since 1977, when federal law required mines to reclaim their lands with native plants, the demand for native seeds has grown steadily. The U.S. Forest Service and the Bureau of Land Management use huge quantities of seed to restore land damaged by fire, logging, and grazing. Native varieties are particularly desirable because of the fire hazard created by noxious weeds.

Transportation departments have jumped on the native seed bandwagon, using them for low-maintenance landscaping along highways. Rising water prices and water restrictions have also put the squeeze on home and business owners who have increased their use of drought-tolerant native species in their landscaping.

For those on the buying end of the native plant boom, it can be an expensive proposition. Native grass seed can cost as much as 200 times what cultivated grasses cost, and some native flower seeds fetch hundreds of dollars a pound. For those on the selling end, it looks like a gold mine at first blush. However, before turning the cows loose and planting the wheat field with native flowers, farmers need a reality check. Growing native plants for market is not as easy as it might appear. It requires different skills and equipment than those used to grow grains and legumes. And the seed can be hard to collect and then difficult to separate from the chaff. Still more troublesome,

some plants produce viable seed only every other year.

Rather than cut the safety nets to their traditional livelihoods, some landowners are edging their way into the native seed market. They are dedicating a few bare acres at a time to sagebrush, creosote, and lupine. If these plants prove themselves as "cash crops," the western landscape could look quite different in the future.

—Salt Lake Tribune

### HOG HYGIENE

After years of bitter wrangles over the stench coming from large hog farms, a Tulsa inventor says he has found a cost-effective method to stem the odor of animal waste. Not only does it reduce the odor to a virtual trace, but it also eliminates water pollution and lowers the disease rate for the animals.

John Candler's treatment system relies on ozone to do the bulk of the dirty work. First, the waste is sterilized in a small holding tank by injecting ozone. The ozone breaks down ammonia and hydrogen sulphide and kills all the bacteria. Next, the solids are separated from the liquid. The solid waste, which is now odorless, is ready for immediate use as a dry soil nutrient, while the sterilized liquid can be recycled to the pig barns as clean flush water.

The system is currently in operation at a farm in Clarks Hill, Indiana, that raises 13,600 pigs in 16 barns on just 3 acres of land. The typical lagoon and sprayfield method of treating pig waste, which has sparked so much controversy, requires far more land. The Candler Waste Elimination System is surprisingly compact as it requires only a small holding tank and the sterilization equipment.

Both the initial investment for the Candler system as well as the operating costs are lower than that

of lagoon and sprayfield operations. Another advantage is a cleaner environment for the animals. The hogs do not have to breathe ammonia and hydrogen sulphide, and their barns are cleaner, which means that low-grade antibiotics are not necessary.

These healthier and happier animals reportedly drink more water and plump up faster. And that means the piggies are ready to go to market a week or two early, saving farmers thousands of dollars every year.

—www.greenbiz.com

## THE BOTTOM LINE

For corporations, profits are the name of the game. One way to increase those profits is to reduce waste and improve efficiency. AT&T, one of the world's largest companies, has implemented an array of new policies with both profits and environmental protection in mind, and, in so doing, has earned the Vision of America Award for 2001. The award is presented annually by Keep America Beautiful, a non-profit organization with 500 chapters that educates people about reducing waste.

AT&T has created and actively promoted a "telework" program that allows employees to work from home using their computers. The company estimates that its telecommuters have avoided driving 110 million miles, saved 5.1 million gallons of gasoline, and kept 50,000 tons of carbon dioxide out of the atmosphere.

In addition to these environmental benefits, the company has benefited, too. AT&T credits its telecommuters with \$100 million in increased annual productivity and savings of \$25 million a year related to reduced office space.

The award also recognizes other achievements. The company replaced a company-wide paper newsletter with an intranet Web site, thus reducing its paper usage by 1.4 million sheets and its costs by \$100,000 a year. Personal computers, cell phone batteries, and carpeting are now recycled or disposed of through end-of-product-life agreements with the manufacturers.

The company's growing concern with economic activity and the environment is also expressed through the AT&T Foundation, which awards \$25,000 Industrial Ecology Faculty Fellowships annually to six academic researchers at colleges and universities.

—*Environmental Network News*

## LET IT SHINE

Ranching along the Musselshell River in central Montana has never been an easy way to make a living, but rising power prices, tougher environmental laws, and dropping surface water supplies have made a tough job even tougher. Fortunately, the sun has not stopped shining on this remote western valley, giving rise to hopes for a brighter future through solar energy.

Traditionally, ranchers watered their cattle along rivers and streams, but times have changed. Officials overseeing leased state grazing land have requested ranchers to remove cattle from fragile stream bank areas. Meanwhile, many of the natural springs and small creeks that served as alternative water sources have dried up following two years of drought. About the only option left to ranchers is to pump water from deep wells in remote locations—an expense that could put many out of business. Just stringing the power lines can cost \$20,000 a mile, and the price of electricity in Montana is spiraling upward.

Last June, Nick Schaff started hauling water to his stock after the surface water on his land dried up. It was a solution, but not one he much liked. Eventually, he installed a solar-powered pump that sends a stream of cold, clear water into his stock tank from a 200-foot-deep well. When clouds pile up over the valley, two 1,200-gallon storage basins quench thirsty cows until blue skies return. The solar unit cost \$2,700, including a tracking device that keeps the solar panels focused on the sun. It can pump four gallons a minute, which is more than enough water for his 75 pairs of cows and calves who drink about 25 gallons per pair a day.

At Jim Ballard's place, a windmill that had supplied water to the family's cattle for more than 50 years succumbed to age two summers ago. The cost to install a conventionally powered pump was out of the question, but a solar-powered system was within reach. By Ballard's own calculations, the solar-powered water pump produces 1,000 gallons of water for about \$1.85.

Although valley residents expect to see an end to the drought, they will still need to keep their cattle away from fragile riparian areas. And certainly no one is predicting a drop in the price of electricity anytime in the near future. So, given the alternatives, many ranchers are doffing their straw hats to more sunny days ahead.

—*Billings Gazette*

WHERE RESEARCH AND  
POLICY MEET

# TANGENTS

By Daniel K. Benjamin

**economist**, n. *a scoundrel whose faulty vision sees things as they are, not as they ought to be.*

—after Ambrose Bierce

Many nations, including the United States, base their legal systems on the English common law tradition. Under this tradition, the judiciary acts as a check on both the executive and the legislative branches, limiting their ability to alter property and contract rights. Free market environmentalists view this feature of the common law as essential to the creation of sound environmental policy.

Three decades ago, Friedrich Hayek argued that there is an even broader salutary effect of the common law. According to Hayek, the English common law system reflects a conscious decision in favor of a limited role for government; the French civil law system is much more comfortable with a centralized and activist government. For Hayek, this was enough to favor the English tradition. But if we combine his reasoning on this issue with his earlier work on the use of knowledge in society (Hayek 1945), a clear implication is that the economies of common law nations should be more adaptable to change. One result will be higher levels of economic growth in common law nations.

Recent research confirms this inference: After controlling for other important factors, Paul Mahoney (2001) shows that economic growth in common law nations is at least one-third faster than in civil law countries, and that this difference is di-

rectly attributable to the forces emphasized by Hayek.

Common law systems, as found in England and her former colonies, depend heavily on the judiciary to develop law in opinions that build upon historical precedent. In contrast, civil law systems, as found in

France and her former colonies, depend on the legislature, often working closely with the executive, to write the law in statutes. The judiciary's role is largely limited to ensuring that the will of the government is enforced. Thus, common law nations have a far greater degree of judicial independence, while civil law countries have a lower level of scrutiny of executive actions.

These differences between the two systems are deeply rooted in their historical development. The landed aristocrats in England wanted a system that would provide them with strong protections for property rights and would limit the Crown's ability to interfere in their lives. In the English common law history, judges were seen as heroes who protected the citizenry from state intrusion, as well

as independent policy makers occupying a high-status office.

In the French civil law tradition, judges were viewed as obstacles in the path of the executive and its closely aligned legislature. At best, judges were (and remain) relatively low-status civil servants with-

■

*According to Friedrich Hayek, the English common law system reflects a conscious decision in favor of a limited role for government; the French civil law system is much more comfortable with a centralized and activist government.*

■

out independent authority to create legal rules. The differences between these systems imply that power is much more fragmented in common law nations. This fragmentation of power constrains the ability of government agents to grant preferential treatment to special interests, because it is more difficult to coordinate the actions of multiple government actors. In effect, the strong judiciary in common law nations limits the ability of the executive and the legislative branches to alter property and contract rights.

The creation of a system of secure, enforceable property rights is generally regarded by economists as one of the most important institutional prerequisites to economic growth. The recent spread of command-and-control environmental legislation, such as the Endangered Species Act, has diminished the influence of the common law. Still, the relatively high regard for property rights in traditional common law nations should be reflected in higher economic growth for this group.

In examining this issue empirically across 102 nonsocialist nations, Mahoney finds that there is a strong positive association between common law status and higher rates of real per capita GDP growth. Moreover, he traces the sources of this higher growth to certain key institutional differences. For example, using accepted criteria developed by other scholars, Mahoney finds that the quality of the judiciary (as measured by its integrity and efficiency) is markedly higher in common law nations. Similarly, he presents

evidence that there is greater security of property and contract rights in common law nations.

Mahoney is then able to show that these specific attributes of common law nations have been translated into better economic performance. In particular, over the study period from 1960 to 1992, he shows that, even after controlling for other key growth-determining factors, such as initial education levels, economic growth in common law countries has been one-third faster than in civil law nations. Over the 30-plus years covered by his study, the result was that in common law nations, the standard of living—measured by real per capita income—jumped more than 20 percent compared to civil law nations. If such a pattern persisted over the span of a century, real per capita income would rise a staggering 80 percent in common law versus civil law nations.

Hayek, it seems, got it right.

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Mahoney, Paul G. 2001. The Common Law and Economic Growth: Hayek Might Be Right. *Journal of Legal Studies* 30(June): 503–25.

*Daniel K. Benjamin is a PERC Senior Associate and Professor of Economics at Clemson University. "Tangents" investigates policy implications of recent academic research.*

NOT JUST AN ENDANGERED SPECIES ISSUE

# KLAMATH'S 100-YEAR MISUNDERSTANDING

By John A. Charles

Throughout the summer, the media have reported on a clash between farmers and the federal government in the basin of the Klamath River, which flows through southern Oregon and northern California. The press has painted this dispute as a conflict between protecting endangered species and allowing

farmers to ply their trade. In fact, the problem goes much deeper. Fundamentally, this is a conflict caused by unclear property rights and inappropriate government intervention extending back to 1905.

For most observers, the crisis began on April 5, 2001, when the federal government declared that

## KLAMATH

water stored in Upper Klamath Lake would be used primarily as habitat for a lake fish, the shortnose sucker, and for coho salmon in the Klamath River, both listed under the Endangered Species Act. That meant that water from the lake would not be allowed to reach the 1,400 farmers who normally use it for irrigation, and all four wildlife refuges in the region would lose the water that normally flowed into them.

This decision evoked such resistance from farmers—including several acts of vandalism—that on July 24 Interior Secretary Gale Norton announced that Upper Klamath Lake had sufficient water to protect the sucker and ordered 75,000 acre-feet of surplus water released for irrigation.

Norton's action made headlines but only provided temporary relief for the farmers and did nothing for the bald eagles or the millions of other birds that normally rely on the refuges. It managed to outrage environmentalists, who filed suit against it on August 7 on the grounds that any "surplus" water should be sent to the refuges, not farmers. The next day, two irrigation districts voluntarily agreed to send about 2,700 acre-feet of stored water to the refuges. When combined with about 1,000 acre-feet delivered by Pacific Power, the total was enough to keep the refuges functioning for about one month, a temporary solution to a long-festering problem.

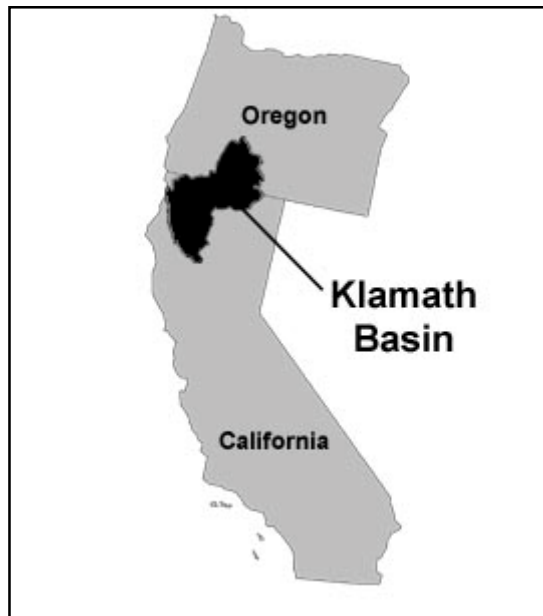
The problem goes back nearly a century. The Klamath basin is an arid area that requires irrigation for virtually all its farming. Irrigation in the Basin started privately in 1882, but in 1905, under provisions of the Reclamation Act of 1902, the Secretary of the Interior authorized the Klamath Project. The primary aim of this federal project was to provide water for agricultural use.

A large canal was begun in 1906, followed by

multiple dams and more than 1,400 miles of canals, which drained thousands of acres of wetlands. This drainage provided land for homesteading—ultimately, more than 235,000 acres were irrigated—but had adverse effects on water quality and wildlife. The creation of four wildlife refuges, including more than 20,000 acres of seasonal and permanent marsh, also set up demands for water that would be difficult to meet.

By luring settlers to the basin with the promise of cheap land and water while creating four national wildlife refuges, the federal government promised too much. The government can no longer deliver on those promises. It took nearly a century for that to become fully clear.

When the Endangered Species Act was passed in 1973—clearly a sign of changing times—most Klamath Basin farmers probably never anticipated the full effects. (In fact, few people around the country did.) They had no idea that in a dry year like 2001 their use of water might harm the coho salmon or shortnose sucker and thus be taken away by the government that had promised them water. Having relied on federal promises for decades, entire communities grew up with a false sense of security in the continuous flow



*This a conflict caused by unclear property rights and inappropriate government intervention extending back to 1905.*

of water for agriculture.

And it is not just the Endangered Species Act that is buffeting these farmers. Klamath Indian tribes, who in an 1864 treaty ceded 20 million acres of land to the U.S. government (including lands now included in the project), gradually saw their treaty rights to customary fishing eroded. The quality of the wildlife habitat declined because of increasing use of water flows for irrigation. They, too, have claims on Klamath water.

Even the farmers themselves, induced to settle there by the federal government, eventually required more irrigation water than is available during many years.

So how to settle this problem? First, the prob-

lem needs to be properly defined.

The problem in the Klamath Basin is that property rights are murky. The federal government has a paternalistic relationship with irrigators, wildlife refuge managers, and various Indian tribes. Access to water is not based on real property rights—legally respected and enforced ownership—but on political compromises and cultural traditions that can be changed at any time.

These cultural traditions are changing. At the turn of the 20<sup>th</sup> century, western settlers thought it was in the public interest to divert water out of lakes and rivers and put it to beneficial use for mining or irrigation. In the arid and semi-arid regions of the country, few people saw any value in letting scarce water flow “unused” to the sea. Diverting the maximum amount of water to grow crops seemed the right thing to do. Today, however, that seemingly “unused” water is valued for the sustenance it can provide fish and birds.

In the 21<sup>st</sup> century, the public interest is increasingly defined to mean leaving water instream for fish and wildlife, recreation, and scenic viewing. For property owners who have secure and well-defined water rights, this change in value offers opportunity. They are in a position to gradually change their practices to survive in this new cultural environment, through such mechanisms as water leasing. By allowing water to be sold to the highest bidder—usually for urban uses but sometimes for instream flow purposes—savvy water rights holders can generate new income, allowing them to invest in better irrigation technologies or to use their land for something other than irrigated agriculture.

But such market transactions—in water or any other commodity—depend on clear definitions of ownership. Several things need to happen to move beyond the status quo in the Klamath Basin.

- The farmers need to be compensated for their short-term losses of water, pursuant to the Fifth Amendment. A number of legal precedents seem to argue for this, the most recent being the Tulare Lake Basin case decided on April 30, 2001. In that case, the U.S. Court of Federal Claims in Washington, D.C., ruled that redirecting water from federal and state irrigation projects in California during the early 1990s to endangered species constitutes a taking of property, and that water customers must be compensated for such a taking. “The federal government is certainly free to preserve the fish; it must sim-

ply pay for the water it takes to do so,” Judge John Paul Wiese ruled.

- It’s time to begin shrinking the role of the federal government in the Klamath Basin and in agriculture generally. Federal planners have managed to alienate virtually every interest group in the basin. The basin is extraordinarily complex, both in terms of the natural environment and the people who live there, and it’s impossible for a small group of bureaucrats to meet all the competing demands. Central planning is a failed paradigm.
- The Bureau of Reclamation should look at privatizing all aspects of the project and allowing a new local economy to emerge. Subduing the Wild West is no longer a relevant national goal, and the farm economy suffers from too many commodities, not shortages. A different economic vision needs to emerge based on dispersed knowledge, secure property rights, and entrepreneurial initiative.
- The Endangered Species Act also needs to be reformed, or preferably repealed. The Act has been an expensive failure, characterized by regulatory takings, perverse incentives, and preemptive habitat destruction by fearful landowners. The only species benefiting from the incessant litigation is a small group of parasitic lawyers.

It’s time to move to an approach based on property rights, incentives, and decentralized decision-making. If we apply these reforms to the Klamath Basin, it’s likely that some farmers will sell their water rights; others will buy more water and expand crop production; Indian tribes may collaborate with selected landowners to convert farm acreage back to wetlands; and wildlife refuges may develop new water sources from wells, financed through a “pay to watch” system for birders and other recreationists. No one really knows, of course, but that’s exactly the point. Let’s get the government out of the way and watch a thousand flowers bloom in the Klamath desert.

*John A. Charles is Environmental Policy Director of the Cascade Policy Institute in Portland, Oregon. He studied the Klamath Basin crisis while he was a Fellow of the Kinship Conservation Institute, a month-long institute for emerging environmental leaders conducted by PERC in Bozeman in June 2001.*

## What's new

# PERC UPDATE

**Carl Palmer** has been working with PERC board chairman **John Tomlin** to explore the feasibility of using capital markets to fund entrepreneurial enterprises that also serve environmental goals. This work is inspired in part by *Enviro-Capitalists*, by Terry L. Anderson and Donald R. Leal. Palmer has been assessing the need for “enviro-capital,” learning about organizations that provide capital to environmental entrepreneurs, and assessing investment opportunities.

*Agriculture and the Environment*, edited by **Terry L. Anderson** and **Bruce Yandle**, has been published by the Hoover Institution Press. The book collects essays by leading experts who look at the major environmental constraints that limit U.S. food production but often fail to improve environmental quality. It can be ordered from PERC's Web site ([www.perc.org](http://www.perc.org)).

**Matthew Brown**, who has been a writer and research associate with PERC since 1998, is teaching this fall at Montana State University in Bozeman.

**Chuck Leavell** is a much-admired keyboardist known for his solo piano skills as well as his dynamic accompaniment for the Rolling Stones, Eric Clapton, the Allman Brothers, and many other musicians and bands. His new book, *Forever Green*, reveals another of his passions, tree farming.

Charlane Plantation in Dry Branch, Georgia, which he manages with his wife, Rose Lane Leavell, is an object of devoted stewardship. “My friends say I am a tree farmer at heart and a musician in my soul,” he writes in his book, which integrates the history and science of forestry with his own experience. Leavell has received numerous environmental awards and is

becoming known as a leading conservationist.

At the conclusion of *Forever Green*, Leavell cites a “wonderful organization”—PERC. “Their approach to stewardship of our natural resources has resulted in many interesting and creative ideas and concepts,” he writes, and urges his readers to contact us.

*Forever Green: The History and Hope of the American Forest* is published by Longstreet Press. See [www.chuckleavell.com](http://www.chuckleavell.com) for more information.

*Recent PERC presentations:* In June, PERC held a forum on “Environmental Policy for the New Century” in Washington, D.C. Moderated by Terry Anderson, the meeting featured representatives of environmental organizations who are exploring market approaches. They were: **Tom Graff** of Environmental Defense, **Hank Fischer** of Defenders of Wildlife, **Bill Hedden** of Grand Canyon Trust, and **Malcolm Green** of the Tar-Pamlico River Basin.

**Holly Fretwell** addressed the Bureau of Land Management Executive Leadership Team in Sheridan, Wyoming, in June. **Clay Landry** discussed free market environmentalism at a meeting of the New Mexico Independent Oil Association. **Terry Anderson** lectured at a Judges' Institute sponsored by the Law and Organizational Economics Center of Chapman University.

**Eric Noyes** spoke on “Conservative Conservation” before the National Pachyderm Convention. **Jane Shaw** lectured to high school teachers in Rio de Janeiro. **Roger Meiners**, **Dan Benjamin**, **Terry Anderson**, **Clay Landry**, and **Don Wentworth** have been speaking at teacher seminars sponsored by PERC and the Foundation for Teaching Economics. **Bruce Yandle** lectured in July on free market environmentalism at the Office of Personnel Management Executive Training Institute in Shepherdstown, West Virginia. **Richard Stroup** keynoted a meeting of the Interdisciplinary Environmental Association in San Francisco.



# letters to the editor

## REACTIONS

502 S. 19th Avenue, Suite 211  
Bozeman, Montana 59718

### Many Values in Antique Apples

Jane Shaw's article, "Heirloom Apples: A Market Taste" (*PERC Reports*, June 2001) continues an interesting dialogue between Carl Pope, Shaw, and myself on the issue of whether coercion is necessary to save biodiversity. Pope had noted the disappearance of a 19<sup>th</sup> century apple, the Stroats or Straat apple, and suggested that its extinction indicates the inability of markets to protect diversity. Shaw concedes that this variety did disappear but notes that many other apples have survived and that the Stroats may have failed a market test.

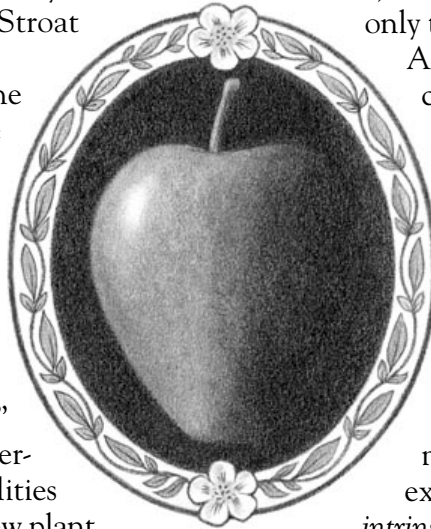
Shaw concedes too much. As she notes, there are vast numbers of apple varieties in specialized collections. This suggests that something more than meeting an immediate market test is afoot. She notes that commercial growers have large orchards of varieties—maintained to ensure a robust genetic pool. These are equivalent to the "seed libraries" maintained for corn and other commercial crops to ensure that desirable qualities can be explored quickly to head off new plant diseases or insect attacks. Such libraries are maintained by both private and public organizations, often working in partnership. The economic motivation here is risk management.

Shaw also notes the extensive role of specialized nonprofit groups seeking to preserve the richness of the apple heritage of America and the world. Heirloom gardeners, she notes, preserve a vast array of noncommercial apple species. We find that private gardeners have preserved many apples feared to be extinct. These gardeners seek to maintain biodiversity not for economic reasons but because of their strong collector/preservationist instinct. As wealth increases,

such activities are likely to attract more heirloom gardeners willing to spend more time, money, and energy on their "hobbies." Thus, we can anticipate a profit-making sector growing up to assist the nonprofit heirloom gardener movement.

Let me suggest that the choice is not between the "market" and "government" but rather between voluntary and coercive approaches to biodiversity. Pope, like most in the modern environmental movement, is skeptical of voluntary approaches, seeing only the destructive impulses of the market. And it may be true that the storms of competition at the end of the 19th century blew Stroats away from the commercial marketplace. But America is vastly richer now, and Americans—the "heirloom gardeners" that Shaw identifies—are far more able now to exercise their concern over nature—and current Stroats. That means that apples which lose their *instrumental value*—their ability to be sold in supermarkets profitably—need not cease to exist. They still have (for some at least) *intrinsic value* and may survive in heirloom gardens throughout a wealthier and more environmentally sensitive world.

Two final points. First, specific varieties of apples survive only if someone continues to care. The genetic information that keeps the Stroats a Stroats is not consistently passed on through seeds but rather by the tree itself. Future "Stroats" can only be preserved by grafting—what some might consider a "nonnatural" act by mankind. Increasingly, the biodiversity of the world will only be preserved if such species are integrated into the value structure of society, which requires that the species be ownable. Preserving biodiversity without private property is impossible.



## LETTERS

Second, we've all been misled by American folklore—the legend of Johnny Appleseed. Johnny, we will recall, did not graft trees but planted apple seeds. The resulting fruit would taste different than the original—possibly better, probably not. Certainly, the “Stroat-hood” qualities would not be preserved. What then was Appleseed doing in his ventures through early America? It turns out he was producing apples that could be turned into cider—especially hard cider. Johnny was ensuring that alcoholic beverages would be available to ease the travails of the settlers when they arrived. A valuable mission, perhaps, but one that would satisfy neither Pope nor other environmentalists.

Exploring the role of private initiative in advancing the complex task of biodiversity deserves much more research—but neither Shaw nor Pope should despair. The record suggests that a free people allowed to produce wealth will divert an increasing portion of that wealth into ensuring that the richness of our planet is preserved. Political solutions require a majority, while private solutions require only a few people who care. Voluntarism is a far more robust approach to environmental protection than anyone—even we free marketeers—had ever imagined.

*Fred L. Smith, Jr., President  
Competitive Enterprise Institute  
Washington, D.C.*

## No Longer Delicious

Jane Shaw (June 2001) missed an important point about how the market has destroyed the Red Delicious apple. The current Red Delicious apples bear no relation in taste to those originally developed. They have been bred for uniform color and thick skin so they can be shipped hundreds of miles with little damage. Unfortunately, this also breeds out the taste.

As I live in East Wenatchee, Washington, I have firsthand experience with how this decision has impacted the local economy. While most orchardists will survive, many will go under. I do believe market forces will help the environment, but policy makers

and individuals will need a better understanding of how people make their choices, and how economies work, for the full benefits to be realized.

*Joe Schmutzler  
East Wenatchee, Washington*

## More on Malaria

Three cheers to Roger Meiners and Andrew Morriss for their excellent article on the little known but enormous and worsening malaria tragedy resulting from environmentalist pressures to prevent DDT use. The only weakness of their paper is that it is too short to adequately document the magnitude of this tragedy, and that they are, if anything, too easy on the major environmental groups and the EPA.

Malaria, spread by anopheles mosquitoes through blood transfer between persons, is one of the greatest scourges of the world. There are between 300 and 500 million clinical cases annually. The ban on DDT use by the EPA in 1972 led to the collapse of the

international spraying effort. This has not only caused tens of millions of deaths in tropical regions of the world but is one of the main reasons for the retarded economic development of Africa. Per capita food production has risen worldwide over the last forty years except in Sub-Saharan Africa, where it has declined since 1972, as the spread of malaria disrupted agriculture.

When the EPA hearings on DDT began in 1971, both the enormous effectiveness of indoor DDT spraying in reducing malaria and the horrible effects of ending indoor DDT spraying were already well known. The international spraying program had been going on for many years. The disease was eliminated in Europe and the southern United States. In India, ten years of DDT spraying reduced malaria contractions from 750,000 to less than 1,500. After 1962, however, several nations stopped spraying, with disastrous results.

Meiners and Morriss cite Sri Lanka (then Ceylon), which by indoor spraying on house walls (mosquitoes rest at night on vertical surfaces) reduced malaria cases from 2.8 million in 1948 to 17 in 1963, when they stopped spraying. By 1969 malaria con-

*The choice is not between the  
“market” and “government”  
but rather between voluntary  
and coercive approaches  
to biodiversity.*

*—Fred L. Smith, Jr.*

tractions in that nation were back to 2.5 million. Similarly, Zanzibar reduced the percentage of its population with malaria from 70 percent in 1958 to only five percent. By 1964, when its spraying program was stopped, the prevalence of malaria immediately began rising, exceeding 50 percent again by 1984.

Neither William Ruckleshaus, the first EPA administrator, who banned DDT against the advice of his own scientists, nor the environmental groups (the National Audubon Society, the Environmental Defense Fund, and others) who pressured for the hearings to ban DDT, could possibly have been unaware of this history. The World Health Organization issued repeated warnings at the time concerning the likely effects of a ban on Third World populations, and so did the Communicable Disease Center of the U.S. Department of Health, Education, and Welfare. No indictment of those who supported this ban, and who continue to cause millions of agonizing deaths by politically suppressing indoor DDT use against malaria, would be too harsh.

*James Rolph Edwards*  
*Associate Professor of Economics*  
*Montana State University-Northern*  
*Havre, Montana*

## A Clear-Cut Issue

Wallace Kaufman (“Clear-Cut’ Revisited,” June 2001) made a very important point about the temporary nature of clear-cuts, but another point needs to be made.

In Oregon we are faced with a “catch 22” regarding the management of public lands. Devastating forest diseases such as Swiss needle cast have been slowly eroding the quality of thousands of acres of coastal forest land. To create viable mature stands of trees, we need to maintain the health and vigor of younger stands through proper management techniques. Some of these techniques include clear-cuts. Without this tool, wildlife habitat declines along with forest productivity—by enormous amounts.

The catch is this: When we are required to promote “hands-off” management of lands, we assure the mutual destruction of habitat values along with forest values. I find it frustrating that public entities will be sued for clear-cutting while at the same time they are sued for not maintaining wildlife habitat. Although I have never been a big proponent of

privatizing public lands, things like this make me wonder.

*John Lindsey*  
*Commissioner, Linn County, Oregon*  
*Board Member, Council of Forest Trustlands*

## Wind Farms and Environmentalists

I’m writing about a little column you published, “Blowing in the Wind” (“Greener Pastures,” June 2001), based on a *New York Times* article.

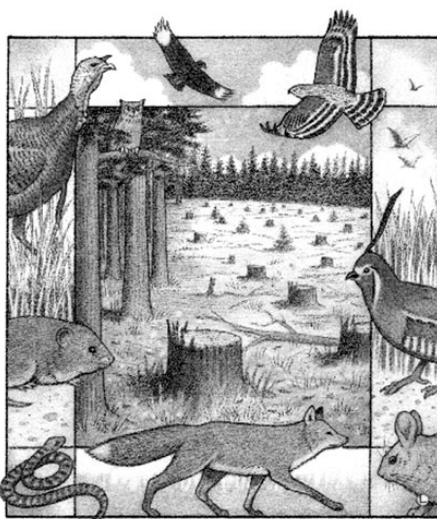
Some years back, our ranch in Sweet Grass County, Montana, aggressively opposed the effort to inundate the Yellowstone Valley with wind farms. We were successful, but the grassroots effort was also very educational. I learned that “environmentalists” and

“environmental organizations” are not really as interested in the environment or conservation as many stewardship ranchers and farmers are. No, they are interested in the “politics of environmentalism.”

I have done years of research on wind energy. When our research revealed that the wind farm industry in northern California had butchered over 600 golden eagles, we foolishly thought that groups like the Sierra Club, the Audubon Society, and the Peregrine Fund would help us resist this environmentally destructive industry’s intrusion into the Yellowstone Valley, which has an annual movement of some 5,000 bald and golden eagles. We were shocked to find that we were asking the “environmentalists” to desert one of their “sacred cows.”

Not only did we learn that the Peregrine Fund had been compromised by a \$100,000 grant from U.S. Windpower, but when we received national media attention, an executive of the Sierra Club was interviewed and quoted by *USA Today* as saying, “we cannot dismantle the whole wind energy industry over the loss of a few birds.” The wind energy industry is not only not “green”; it is dirty, destructive, and dangerous. Furthermore, the industry has survived only on subsidies through forced buying of wind-produced energy.

*Raymond C. Suiter*  
*Sweet Grass Farms, Ltd.*  
*Bozeman, Montana*



OF NOTE

# A NEW FME GUIDE

By J. Bishop Grewell

In 1991, Terry Anderson and Donald Leal issued the first edition of *Free Market Environmentalism*, a book that challenged conventional thinking. In the past, environmental policy had always been viewed as an example of market failure. Anderson and Leal argued that free markets can protect the environment as well as or better than government can, if property rights are defined and protected.

Since the book's release, it has been used as a curriculum in numerous universities, including Stanford, Harvard, Purdue, and Tulane. Many economics professors, however, are not quite sure how to incorporate free market environmentalism (FME) into traditional environmental economics curricula. With the release of a new edition of *Free Market Environmentalism* (Palgrave 2001), PERC has prepared a syllabus to help professors incorporate free market environmental ideas into traditional courses or, alternatively, to create a course based on FME.

The syllabus is available from PERC's Web site at [www.perc.org/syllabus](http://www.perc.org/syllabus). It is a list of readings organized around chapters of the new edition of *Free Market Environmentalism*. The syllabus can be used for an entire course, with *Free Market Environmentalism* as the chief text; or the blocks can be used as individual lessons to supplement a traditional course in environmental economics. (Some readings are repeated because they apply to several topics.)

Several critiques of free market environmentalism are provided as well. PERC hopes this comprehensive syllabus will encourage professors to include free market environmentalism as part of their curriculum.

The revised edition of *Free Market Environmentalism* is available from Palgrave ([www.palgrave-usa.com](http://www.palgrave-usa.com)), an imprint of St. Martin's Press. Both hardback and paperback editions are available.

J. Bishop Grewell, a Research Associate with PERC, is studying at the Yale School of Forestry.

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502 S. 19th Avenue, Suite 211  
Bozeman, MT 59718

ADDRESS SERVICE REQUESTED